JSC NC "KAZMUNAYGAS" ANNUAL REPORT 2016

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#### Distinguished Stakeholders, Dear Colleagues,

JSC KMG NC is facing a world of change. Some of this is externally driven. The international oil price has fallen by more than 50% in under the last two and a half years. Rapid changes in exchange rates pose problems, as does responding to severe cost pressures. In these aspects Kazakhstan faces the same problems as many other countries.

Kazakhstan is also a rapidly modernizing country, and KMG NC has a major part to play in helping the Republic meet its aims. There are therefore the additional challenges of creating a competitive and successful oil and gas company as part of the Republic wide modernization programme.

The key to success is how we tackle the challenges, both the external and those of modernization. These are the central tasks of the Transformation programme

Our overall economic position has been significantly helped by the successful restart of the giant Kasaghan field, the continued expansion of the Tengiz field, and the enhanced expectations we have for Karachaganak. In these resources the Republic and KMG have some of the best oil reserves in the world. But also worldwide they present some of the most difficult operating conditions. Therefore successful exploitation depends on skilled operations, implemented on time and to budget, in a world where international competition is pushing costs down. We are fortunate in having as our partners in these fields the very best international oil and gas companies who bring expertise but also a commitment to train and develop our own people in the best international technical and business processes.

We have also a number of important older fields where the application of modern techniques promises to enhance production at lower costs, and to provide continuity and extended life for the local communities. There is also scope for enhanced exploration in the Republic and we have been encouraged by the approaches of a number of possible partners seeking exploration joint ventures.

To meet local demand for competitively priced oil and gas products, KMG NC has invested massively to upgrade its refineries, notably at Atyrau. These investments are shortly to come on stream, and the refineries are challenged to be competitive in an Eurasian wide market with competition coming from refineries operating just over the borders of Kazakhstan. Competition is welcome as it should give advantages to consumers, households and businesses, but it presents a challenge for KMG's own operations which need to become more competitive, particularly in how they manage the businesses.

One aspect of managing our business well is the priority and focus given to HSE. The Board ranks this highly, a safe operating environment is good for our employees and the commercial success of the business. I am encouraged by how leaders and workers have responded with enthusiasm to the HSE programme which has to become the core culture of the Group.

People make change happen. I want to pay tribute to the wise and perceptive leadership of Sauat Mynbayev who leads KMG NC through these very difficult times. He has been tackling also the need to refresh the management board on which future delivery will depend.

I want also to thank my Board colleagues for their focus, determination and hard work in helping us get through successfully the challenges we have faced, and welcome their commitment to our future success.

Yours sincerely, Chairman of the Board of Directors of JSC NC "KazMunayGas" Frank Kuijlaars

Dear shareholders, investors and partners,

The Annual Report presented covers the year 2016. In the new conditions, we have focused on finding hidden reserves and enhancing the management efficiency.

The majority of objectives set for the KMG group have been accomplished in 2016. The companies operating as part of JSC NC "KazMunayGas" have ensured a significant portion in the domestic oil production volume.

The consolidated uplift of oil and gas-condensate in the KMG group of companies amounted to over 22.6 thousand tons in 2016. The production plan has been implemented in the majority of the Company's operating assets. Natural and associated gas production amounted to almost 7.4 Bln.

We are increasing the transportation volumes in the old directions and developing the new ones.

The volume of oil transportation with trunklines amounted to 56,600 thousand tons, over the sea - 7,082 thousand tons. Gas transportation by trunk gas pipelines amounted to 88.1 bcm.

Undoubtedly, the key event of the last year was first production on Kashagan. Literally, with the beginning of the mega-field development, a new page in the history of development of the country's petroleum industry was turned. Commercial development, started by Head of State N.A. Nazarbayev, commenced on 1 November 2016. Currently, works on commissioning process equipment at the offshore and onshore facilities are underway. In the future, to further increase the oil production level, the project for expansion of the gas re-injection capacity will be implemented.

Furthermore, in July, 2016 TCO Partners made the Final Decision on funding the Future Growth Project (FGP) at the Tengiz field. Implementation of the FGP will render it possible to increase oil production by TCO by 12 mn tons annually, its commissioning is scheduled for 2022. The project cost is estimated at 36.8 bn US dollars, the Kazakh content will amount to 32%. The FGP construction period will create over 20,000 jobs.We have tightened control over the operating expenses, and improved the operational efficiency. In particular, the Company has continued implementation of the program for cost optimization in the production segment by means of boosting drilling efficiency and applying leading-edge enhanced oil recovery technology.

Replacement of reserves is another paramount task KMG coped with during the reporting year. Implementation of the five-year exploration works development program is in progress. Supplementary Exploration Program for 2017-2021 has been developed, which provided for a reserves gain at the existing producing fields, among other things, by means of expanding the oil-drainage boundaries and picking deep unexposed and overlooked horizons.

The total oil and gas condensate reserves gain amounted to 7.2 mn tons in 2016. During the year, a change in the volume of oil remaining recoverable reserves occurred on account of exploration of prospective blocks, supplementary exploration and revaluation of reserves of the existing fields.

The net profit in the KMG group of companies amounted to 360,171 mn KZT.

The KMG group of companies has once again confirmed it status as the biggest taxpayer in the republic: In 2016 the Company paid 456,987 mn KZT in taxes and other obligatory RoK's budget payments, including those for its material subsidiaries.

Within the framework of the Transformation Program, implemented jointly with the "Samruk-Kazyna" Sovereign Wealth Fund, work on improving the corporate business model and organizational structure of the KMG Group of Companies was continued.

In 2016 we proceeded from the plans to positive practice, accomplishing the specific objectives of enhancing the efficiency of operations on our mature fields. 70 projects are being implemented with the framework of the transformation, 29 have been completed, the remaining are planned to be launched. A portion of the projects is oriented towards organizational and methodological changes, they have a systemic nature and are directly related to transition to the new model of "Active Operating Management". Another portion of the projects, "quick wins", are designed to accomplish the immediate vital tasks, they yield quick return and actively engage the operating personnel of various levels in the industrial process optimization system.

We are selling and transferring to the market environment a portion of non-core and other assets. The privatization program list includes 73 companies. Measures on 23 of them, such as Rompetrol Ukraine LTD, Trading and Industrial Company LLP, have already been implemented. It was necessary to transform the holding company, which has become too large and "sluggish", into a more efficient modern industrial structure, targeted at operating activities. In 2016 we initiated the process of liquidating sub-holding companies within the KMG group to ensure direct operational control over our assets.

The three refineries of the republic are implementing investment projects for modernization and revamping - to enable output of the K4 and K5 environmental class oil products, petrochemical feedstocks, and increase

the oil refining capacity and conversion ratio. Modernization and revamping of the processing capacity are at the final stage, the plans are to fully complete this work in 2017.

The reporting year has seen commissioning of the Aromatics Production Complex in the Atyrau Refinery, which makes it possible to increase the yield of high-octane gasolines even today.

Production of the components crucial to petrochemical industry - paraxylene and benzene, high added value products and feedstocks for further petrochemical process stages - has been set up.

Modernization and reconstruction of the three Kazakh refineries will render it possible to technically satisfy the RoK's requirement for oil products in the near future, the surplus will be delivered for exports.

An improvement in a number of key indicators is shown by our European asset – KMG - International (Rompetrol). In line with our strategic goals, we continued the implementation of the program for expansion of the retail network of the KMG-branded filling stations. An essential social function is fulfilled by our subsidiary KazTransGas, delivering gas from our fields to consumers in Kazakhstan's regions. The presented report contains details of the results of these large-scale efforts, most important to the nation.

A central aspect to boosting the efficiency of the Company's operations is optimization of the procurement activities, as part of which steps are taken toward development of the competitive landscape, offering greater access for small and medium enterprises, and implementation of imports phase-out. For the purposes of the instructions of the Head of State for support to Kazakhstan's small and medium businesses, KMG is making comprehensive efforts to support domestic producers of goods and service providers. Following the results of 2016, the volume of local content in KMG's purchases exceeded 76% (1,871 bn KZT). 1,808 long-term agreements with domestic producers of goods, works and services are in place for a total amount of 1,465 bn KZT, joint ventures in the sphere of oil and gas equipment are established.

Common standards in labour relations are being implemented. Common system of feedback between the managers and employees has been adopted, which is implemented in many of KMG's subsidiaries.

Implementation of the common Youth Policy is on: jamborees, master classes, trainings and competitions for the best innovative ideas are held. Currently, Youth Councils operate in 43 of KMG's companies.

During the reporting year, a project for competitive selection to fill up vacant positions commenced in KMG's Corporate Centre. Since day one of the project, 41 people have been employed by KMG based on the results of the competitive selection.

Efforts to form the Common Succession Pool are underway. The Council for Development of Social Partnership and Settlement of Employment Disputes and Conflicts is functioning, and its principal objective is to develop recommendations for preventing social and employment disputes.

Under the 2016 adverse economic conditions we maintained the pre-recession level of social guarantees.

Achievement of the best industry indicators in vocational health, industrial safety and environmental protection, and active application of innovative approaches in this field remains the number one priority and one of the Company's most important objectives. Development of an integrated management system in the sphere of quality, environmental protection, occupational health and safety is one of the steps towards attainment of this objective.

In 2016 KMG continued the implementation of the programs designed to improve the social infrastructure, develop culture, education and sports in the regions of its industrial presence. Every year the Company publishes extensive data on sustainable development in the special Sustainability Report.

I am confident that the accumulated industrial potential, further development of the corporate governance arrangements and great competences of its staff are the basis for the Company's stable operation in the future, for maintaining its positions in the industry and successful implementation of the strategic initiatives.

Faithfully yours,

S.M. Mynbayev

Chairman of the Management Board, JSC NC "KazMunayGas"

# **COMPANY OVERVIEW**

Joint Stock Company "National Company "KazMunayGas" is the national company for exploration, production, refining and transportation of hydrocarbons, representing the state in Kazakhstan's oil-and-gas sector.

JSC NC "KazMunayGas" was incorporated through the merger of National Oil and Gas Company "Kazakhoil" and National Company "Oil and Gas Transportation" based on Decree No.811 dated 20 February 2002 of the President of the Republic of Kazakhstan.

The founding party of JSC NC "KazMunayGas" is the Government of the Republic of Kazakhstan represented by the State Property and Privatization Committee of the Ministry of Finance

Shareholders of JSC NC KazMunayGas:

Sovereign Wealth Fund "Samruk-Kazyna" JSC - 90% of shares; National Bank of the Republic of Kazakhstan – 10%.

#### Mission

Maximizing the profits of the Republic of Kazakhstan from participation in the development of the national petroleum industry through:

- increasing the Company's value and ensuring return on investment;
- focusing on the Kazakh oil and gas market, with looking into potential opportunities for business expansion in the near abroad;
- providing a high level of financial soundness;
- ensuring sustainable development.

#### Vision

KazMunayGas - a highly-efficient national oil-and-gas-producing and oil-and-gas-transportation company, meeting the highest safety and corporate governance standards.

#### Ambitions

Joining the ranks of the world's top 30 oil and gas companies in terms of oil and condensate commercial extraction.

### Strategic Priorities and Goals \*

According to KMG's Strategy until 2025, to ensure sustainable growth taking into account the external and internal environment factors, KMG will focus on the following three top-priority development areas:

- 1. Enhancing the company's short-term and mid-term financial standing though capital restrictions and improvement in the operational efficiency.
- 2. Making KMG's target business model with the privatization programme factored in.
- 3. Strengthening KMG's role as a key player of Kazakhstan's petroleum industry (long-term effect of great importance to sustainable development).

Consistent with the key priorities, the Company's principal goals are:

- increasing the production volumes and the reserves level;
- securing recovery of investment;
- creating value and strengthening financial soundness.

Achievement of the goals within the framework of priorities will make it possible to enhance the overall business efficiency and improve KMG's operating and financial performance.

<sup>\*</sup> In accordance with KMG's Strategy until 2025 as at the end of 2016.

### Target values of performance indicators

,		on performance in		
Name	Unit	2015		2016
			plan	fact
Production of crude oil and gas condensate	'000 tons	22,670	22,450	22,638
Natural and associated gas production volume	ММст	7,255	6,968	7,384
Refining throughput	'000 tons	16,317	16,409	16,621
Volume of oil transportation by trunk oil pipeline	'000 tons	61,001	56,225	56,575
Volume of oil transportation by marine fleet	'000 tons	7,033	7,343	7,082
Oil freight turnover	MMt*km	45,446	42,620	43,130
Gas transportation volume	Мст	102,750	97,875	88,077
Volume of commodity transport works for gas transportation	bcm*km	40,338,668	40,199	40,436

#### Achievement of key production performance indicators (KPIs)

### Government subsidies and guarantees

In 2016 the Company used, resorted to and had obligations in respect of no government subsidies, guarantee and/or security instruments similar thereto.

# Quick Info on Kazakhstan's oil and gas industry and KMG's current position

The Republic of Kazakhstan is one of the key sources of raw hydrocarbons for the global economy. In 2016 Kazakhstan ranked 12<sup>th</sup> globally in terms of proven oil and gas condensate reserves.

	Country	Proven reserves volume, bn tons	Share in global reserves, %	Reserves life (reserves/production ratio), years
1	Venezuela	47,0	17,6%	341,1
2	Saudi Arabia	36,6	15,6%	59,0
3	Canada	27,6	10,0%	105,1
4	Iran	21,8	9,3%	94,1
5	Iraq	20,6	9,0%	93,6
6	Russia	15,0	6,4%	26,6
7	Kuwait	14,0	5,9%	88,0
8	UAE	13,0	5,7%	65,6
9	Libya	6,3	2,8%	310,1
10	USA	5,8	2,8%	10,6
11	Nigeria	5,0	2,2%	49,3
12	Kazakhstan	3,9	1,8%	49,0

BP Statistical Review 2017

	Country	Proven reserves volume, tcm	Share in global reserves, %	Reserves life (reserves/production ratio), years
1	Iran	33,5	18,0%	165,5
2	Russia	32,3	17,3%	55,7
3	Qatar	24,3	13,0%	134,1
4	Turkmenistan	17,5	9,4%	261,7
5	USA	8,7	4,7%	11,6
6	Saudi Arabia	8,4	4,5%	77,0
7	UAE	6,1	3,3%	98,5
8	Venezuela	5,7	3,1%	166,3
9	China	5,4	2,9%	38,8
10	Nigeria	5,3	2,8%	117,7
11	Algeria	4,5	2,4%	49,3
12	Iraq	3,7	2,0%	*
13	Australia	3,5	1,9%	38,1
14	Indonesia	2,9	1,5%	41,1
15	Canada	2,2	1,2%	14,3
16	Egypt	1,8	1,0%	44,1
17	Kuwait	1,8	1,0%	104,2
18	Norway	1,8	0,9%	15,1
19	Libya	1,5	0,8%	149,2
20	India	1,2	0,7%	44,4
21	Myanmar	1,2	0,6%	63,0
22	Malaysia	1,2	0,6%	15,8
23	Azerbaijan	1,1	0,6%	65,8
24	Uzbekistan	1,1	0,6%	17,3
25	Kazakhstan	1,0	0,5%	48,3

In terms of proven natural gas reserves, in 2016 Kazakhstan ranked 25<sup>nd</sup> globally.

\* - over 500 years

BP Statistical Review 2017

A considerable portion of Kazakhstan's hydrocarbon resources is accounted for by the Western part, particularly, the Caspian Oil-and-gas-bearing Basin.

Province	Share in total reserves, %
Atyrau Province	59
Kazakhstan sector of the Caspian Sea	17
Mangistau Province	8.5
West-Kazakhstan Province	7
Aktobe Province	5.6
Other	2.9

In 2016 Kazakhstan ranked 17<sup>th</sup> globally with the production volumes of 79.3 mn tons of oil and gas condensate (2% of the global production).

	Country	Production volume, mn tons	Share in global production volume, %
1	Saudi Arabia	585,7	13,4%
2	Russia	554,3	12,6%
3	USA	543,0	12,4%
4	Iraq	218,9	5,0%
5	Canada	218,2	5,0%
6	Iran	216,4	4,9%
7	China	199,7	4,6%
8	UAE	182,4	4,2%
9	Kuwait	152,7	3,5%
10	Brazil	136,7	3,1%
11	Venezuela	124,1	2,8%
12	Mexico	121,4	2,8%
13	Nigeria	98,8	2,3%
14	Norway	90,4	2,1%
15	Angola	87,9	2,0%
16	Qatar	79,4	1,8%
17	Kazakhstan	79,3	1,8%

BP Statistical Review 2017

The bigger share (about 85%) of oil produced in Kazakhstan is exported. Main foreign trade partners of Kazakhstan on the crude oil market are the European countries - Italy, the Netherlands, France, Austria, Switzerland etc., and China as well.

Export transportation of the Kazakh oil is provided by the oil pipeline transport, marine shipping from the port of Aktau on the Caspian Sea, ports of Batumi and Novorossiysk on the Black Sea, and in the offshore area of the Mediterranean Sea with the oil tankers of "Kazmortransflot" National Maritime Shipping Company, and by rail.

**The CPC oil pipeline** (41 MMtpa throughput capacity) with the total length of 1,510 km (of them 452 km constitute the Kazakhstan section) connects Kazakh oil field "Tengiz" with the oil terminal "South Ozereyevka" on the Black Sea, (Novorossiysk, Russian Federation).

**Atyrau-Samara oil pipeline** (17.5 MMtpa throughput capacity) with the total length of 697 km (of them, 535 km constitute the Kazakhstan section) provides access to the markets across the territory of the Russian Federation through the oil-pipeline system of PJSC Transneft to the ports of the Black and Baltic Seas.

**The Atasu-Alashankou oil pipeline** (20 MMtpa throughput capacity) 965 km in length (of them 962.2 km constitute the Kazakhstan section) provides access to China's market.

**Marine oil transportation** is carried out by the vessels of a subsidiary of JSC NC "KazMunayGas": LLP NMSC "KazMorTransFlot". The main active marine transportation routes are:

- Aktau-Baku (Caspian Sea);
- Aktau-Makhachkala (Caspian Sea);
- Routes from the Black Sea ports.

Kazakhstan's gas-transportation infrastructure was engineered at the time of existence of the USSR, and was intended for transporting the Central Asia's gas to Russia. As a consequence of the transit nature of the gas-transportation infrastructure, a considerable part of the territory of the Republic of Kazakhstan remains without gas supply, especially the North Kazakhstan regions. Meanwhile, the implementation of the Kazakhstan-China trunk gas pipeline construction project at the Beineu-Bozoi-Shymkent section is aimed, among other things, to provide gas supply to the most densely populated regions of Kazakhstan.

The gas-transportation infrastructure of the Republic of Kazakhstan for gas transit is comprised of the following trunk gas pipelines:

- "Central Asia-Centre" around 4,000 km in length, the capacity is 60 bcm (Turkmen and Uzbek gas);
- "Bukhara-Ural" around 4,500 km in length, the capacity is 7.2 bcm (Uzbek gas);
- "Orenburg-Novopskov" and "Soyuz" TGP 760 km in length, the capacity is 10 bcm and 20 bcm (Russian gas);
- "Kazakhstan-China" (1,310 km in length) is a part of the "Central Asia-China" trunk gas pipeline, designed for transporting the gas from the Galkynysh gas megafield (Turkmenistan) to China, with the existing capacity of 37 bcm and an option of expansion to 55 bcm.

The Kazakh refining sector is represented by a number of major oil & gas refining enterprises:

**Atyrau Refinery** (AR): the designed processing capacity is 5.0 MMtpa, the conversion ratio was 65.2% in 2016.

**Shymkent Refinery** (Petro Kazakhstan Oil Products, PKOP): the designed capacity is 6.0 MMtpa, the conversion ratio was 75.4% in 2016.

**Pavlodar Petrochemical Plant** (PPCP): Kazakhstan's most complex technology-intensive refinery. Balanced processing capacity is 5.1 MMtpa, the conversion ratio was 76.6% in 2016. The enterprise is designed to process the oil from West Siberia fields.

**CaspiBitum:** a plant for production of road bitumens from the heavy Karazhanbas crude. The designed oil refining capacity is 1.0 mn tons annually. It was commissioned in late 2013.

3 gas-processing plants are operating in the republic, and they have the total processing capacity of 18.9 bcm of gas annually: Kazakh Gas-processing Plant (KazGPZ) with the natural gas processing capacity of 2.9 bcm, Zhanazhol Gas-processing Plant (ZhGPP) - 4 bcm, Tengiz Gas-processing Plant (TGPP) - 12 bcm.

Furthermore, under the Agreement on Counter-Delivery of Gas between the OAO "Gazprom", NHC "Uzbekneftegaz" and JSC NC "KazMunayGas" of 27 December 2006, the Karachaganak field gas is processed in the Orenburg GPP. In this case, the entire volume of gas imported from Uzbekistan to Kazakhstan is 'swapped' at an equal price and in the equal volumes with the gas delivery from the Karachaganak field to the Orenburg GPP and the Russian gas exports to the international markets.

JSC NC "KazMunayGas" is the biggest company in Kazakhstan's oil and gas sector.

#### Share of JSC NC "KazMunayGas" in Kazakhstan's oil-and-gas industry (%) \*

Business area		20	16	20	15	20	14	20	13	20	12	20:	11	20	10	20	09	20	08
			%		%		%		%		%		%		%		%		%
Reserves <sup>1)</sup>	Year-end A, B, C <sub>1</sub> (proven) oil and gas condensate reserves, <i>mn tons</i>	785.8	20.1	801.2	20.5	818.3	21.0	811.3	20.8	822.7	21.1	793.4	20.7	806.3	21.0	795.4	20.4	706	18.1
	Year-end A, B, C <sub>1</sub> natural gas residual reserves, <i>bcm</i>	480.1	51.3	486.2	51.9	487.6	52.1	475.5	50.5	481.6	58.4	394.9	33.2	395.6	30.0	374.6	28.4	343.2	26.0
Production	Oil and gas condensate production, thousand tons	22,638	29.0	22,670	28.6	22,490	27.8	22,630	27.7	21,390	26.9	21,105	26	21,969	28	18,701	24.5	18,051	25.5
	Gas production (natural and associated), Mcm	7,384	15.9	7,255	16.0	7,025	16.4	6,924	16.4	5,528	13.8	4,850	12.0	4,912	13.1	4,332	12.0	3,786	11.2
Oil transportation	by trunk oil pipelines, mn tons	56.58	58.1	61.0	65	64.01	65	67.22	67	65.79	67	66.87	67	65.83	66	64.18	63	60.65	62
	marine oil transportation from the port of Aktau, mn tons	1.6	72	2.0	64	4.6	77	5.1	81	5.9	77	5.9	74	6.1	64	7.1	63	2.6	58
Natural gas transpo pipelines, bcm	rtation by trunk gas	88.08	91	102.75	94	105.44	95	110.14	94	109.19	90.5	110.6	93.5	101.6	97.9	91.1	100	116.7	100
Processing	of oil, thousand tons	11,892	82.1	12,111	83.3	12,691	82	11,869	83.0	11,837	83.3	11,422	83.2	.1,399	83.3	8,193	80.4	6,079	49.5
Realization	of petroleum products, '000 tons	1,399	16	1,293	16	1,464	16.7	1,266	13.3	1,002	12.3	917	13.6	543	9.0	295.7	9.0	361.7	10.0
	of natural gas, <i>Mcm</i>	16,086	100	14,057	100	12,943	100	10,564	100	10,023	95	8,045	83.6	5,989	100	5,008	100	5,465	100

\* expert estimate

<sup>&</sup>lt;sup>1)</sup> According to the reserves data of the BP Statistical Review 2016 statistical yearbook. Share of KMG's 2016 reserves to the RoK's 2015 reserves

# **RESULTS** Key financial indicators

										mn KZT
	2016	2015 *	2014	2013	2012	2011	2010	2009	2008	2016/2015 %
Income, total including:	3,041,975	2,215,626	3,541,713	3,405,049	3,101,218	2,787,707	2,252,197	1,955,526	2,022,475	37.3
Income from sales of goods and rendering services	1,857,435	1,093,806	3,186,764	3,252,719	2,960,418	2,625,256	2,098,942	1,589,549	1,885,606	69.8
Costs. total including:	3,143,714	2,272,402	3,650,072	3,206,860	2,982,379	2,689,116	2,065,663	1,765,068	1,678,475	38.3
Cost price of sold products and rendered services	1,561,746	1,090,380	2,322,162	2,354,109	2,090,818	1,836,061	1,409,001	1,050,463	1,199,360	43.2
<b>Corporate income tax expenses</b> (including EPT)	163,791	231,528	117,101	193,396	177,131	153,147	132,675	178,603	200,287	- 29.3
Net income after minority interest	305,849	398,326	207,363	440,955	369,420	422,422	305,309	110,904	298,291	- 23.2

\* considerable variance in the 2015 data from the 2014 data is conditioned, inter alia, by the reclassification of the KMG International N.V.'s income and expenses into the income/loss from discontinuing operations

## Key production indicators \*

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Oil and Gas Condensate Production thousand tons	22,638	22,670	22,490	22,630	21,390	21,105	21,969	18,701	18,052	16,689
Gas production (natural and associated) <i>Mcm</i>	7,384	7,255	7,025	6,924	5,528	4,850	4,912	4,332	3,786	3,532
Oil transportation by trunk oil pipelines <sup>1)</sup> , <i>mn tons</i>	56.6	61.0	64.01	67.22	65.79	66.87	65.83	64.19	60.63	50.8
Marine oil transportation <sup>2)</sup> thousand tons	7,082	7,033	9,606	8,878	11,355	9,234	7,082	7,363	2,869	2,280
Gas transportation by trunk gas pipelines, bcm	88.08	102.75	105.44	110.14	109.19	110.6	101.65	91.1	116.7	114.2
Processing of hydrocarbon feedstocks thousand tons	16,621	16,317	17,115	16,050	15,884	15,326	14,766	12,758	10,993	5,734
Retail sales of oil products thousand tons	1,399	1,293	1,464	1,266	1,002	917	543	295.7	361.7	n/a
Natural gas sales Mcm	16,087	12,113	12,943	10,564	10,023	8,045	5,989	5,008	5,465	n/a
Year-end A, B, $C_1$ (proven) oil and gas condensate reserves, <i>mn tons</i>	785.8	801.2	818.3	811.3	822.7	793.4	806.3	795.4	706	615.5
Year-end A, B, $C_1$ natural gas residual reserves, <i>bcm</i>	480.1	486.2	487.5	475.5	481.6	394.9	395.6	374.6	343.2	62.4
Average headcount as of 31 December, pers.	89,909	76,591	84,085	84,411	84,349	83,302	64,660	57,087	54,768	52,829

\* may insignificantly differ when the data of the production units, represented in the appropriate sections of the annual report, are rounded

<sup>&</sup>lt;sup>1)</sup> Includes the volume of oil transportation through the trunklines of JSC "KazTransOil", MunaiTas North-West Pipeline Company JSC (51%), Kazakhstan-China Pipeline LLP (50%), BTL terminal in Batumi (100%).

<sup>&</sup>lt;sup>2)</sup> Caspian, Black, Mediterranean Sea areas. 2) 2007-2008 – 50% share of KMG in JSC "NMSK "Kazmortransflot".

#### **EXPLORATION**

Increase in reserves due to geologic exploration works (GEWs) is one of the priorities for JSC NC "KazMunayGas".

 In 2016, JSC NC «KazMunayGas» continued work on current offshore projects (N block, Zhambyl, Satpayev) and onshore projects (Urikhtau, Kansu, East Bekturly, Samtyr, etc.), and, in accordance with the Geological Exploration Development Program for the period from 2016 to 2020 adopted by KMG's Management Board, carried out the geological assessment and pre-contract preparation of new projects Koskol, Korolevskoye (over-salt), Beyneu, Zhayik, Saraishik, Zaburunye, Buzachi, Karabulak, etc.

As part of execution of the President's order, works on the Eurasia international project continued. In 2016 KMG-Eurasia LLP was established, which together with JSC NC «KazMunayGas» held negotiations and consultations with potential project participants to attract investors for joint implementation of the project. According to the estimates of scientists from Russia and Kazakhstan, in the more deeply explored horizons of the Caspian oil basin, up to 40 billion tons of estimated hydrocarbon resources are concentrated.

In order to achieve the strategic objectives on increasing the resources of raw hydrocarbons and determining the direction of geological exploration in Kazakhstan, JSC NC «KazMunayGas» jointly with the Research Institute of Research and Development of Production and Drilling Technologies carried out their work on two regional projects: the Caspian and Ustyurt-Bozashin & Mangyshlak Basins, as a result of which, at the end of the first stage, the promising blocks were identified and a portfolio of five exploration blocks was compiled. Regional study of two basins will be continued in 2017.

Also in 2016 JSC NC «KazMunayGas» initiated and carried out work jointly with the Research Institute of Research and Development of Production and Drilling Technologies in accordance with the approved schedule of the Program of advanced exploration of old deposits for a five-year period from 2017 to 2021 in the framework of Strategy 2020, which envisages the expansion of oil-bearing contours based on 3D seismic survey and drilling results, picking of deep unexposed horizons, picking of missed horizons based on well logging, and transfer of reserves from C2 to C1 categories.

#### Reserves

KMG's strategy envisages an increase in hydrocarbon reserves by 2025 in the amount of 1 trillion tons. To achieve this goal, KMG follows the position of developing large-scale geological exploration both in the areas of operating fields and exploratory blocks with confirmed prospects, as well as in the new promising blocks.

As of January 1, 2017, the proven residual recoverable reserves of oil and gas condensate of JSC NC «KazMunayGas» (including shares) amounted to 785.8 million tons. At the same time, the total increase in oil and condensate reserves (including shares) amounted to 7.2 million tons.

	As of January 1, 2016	Total increase(+)	Production (–)	As of January 1, 2017
Oil, <i>million tons</i>	755,07	6,8	22,214	739,66
Gas condensate, million tons	46,159	0,37	0,388	46,14
Total oil and gas condensate, million tons	801,2	7,17	22,6	785,8
Natural gas, billion m <sup>3</sup>	486,2	1,37	7,47	480,1

#### Consolidated (proved) hydrocarbon reserves<sup>1)</sup> of the KazMunayGas group of categories A, B, C1

<sup>&</sup>lt;sup>1)</sup> Calculated in accordance with the Instruction on the qualification of the reserves of fields, prospective and forecasted resources of oil and natural hydrocarbon gas (approved by the Order of the Ministry of Energy and Mineral Resources of the Republic of Kazakhstan dated October 27, 2005 No. 283).

### Geologic exploration projects in the Caspian shelf

Further increase in hydrocarbon reserves of JSC NC «KazMunayGas» relates to the resource potential of the Kazakhstani sector of the Caspian Sea.

Geologic exploration projects in the Caspian and coastal areas are one of the priority activities of KMG and its subsidiaries - MNC KazMunayTeniz LLP, KMG-Ustyurt LLP, N Operating Company, Satpayev Operating LLP, Atyraumunaigas JSC, Zhambyl Petroleum LLP.

KazMunayGas together with foreign companies conduct geologic exploration and research work on a group of blocks in the Kazakhstani sector of the Caspian Sea: Zhemchuzhiny, Kurmangazy, Zhambyl, N, Satpayev, Isatay, and in the Russian sector of the Caspian Sea on Khvalynskoye and Tsentralnaya blocks.

#### JSC NC «KazMunayGas»

#### Current Projects

#### N project

In 2016, the work was done on reprocessing of 2D seismic materials, analyzing and summarizing the materials obtained as a result of drilling well AR-1 on the Rakushechnoye-More structure. Works on interpretation of the processed data and clarification of the block's prospects are at the completion stage. The results of work are expected in Q2 2017.

#### Satpayev project

In 2016 the permission of the Ministry of Energy of the Republic of Kazakhstan to extend the exploration period for 2 years was received. The previously obtained 2D seismic data was processed and showed the possible prospects of the Paleozoic (subsalt) complex. Based on the results of this work, preparations began for the construction of a second exploratory well for the study of Paleozoic (subsalt) sediments (design works, engineering-geologic surveys at the drilling block, negotiations with offshore drilling companies, etc.).

In 2017, a second exploration well is planned to be drilled with a design depth of 3,500 meters.

#### Zhambyl project

In 2016, to clarify the boundaries of geologic structures in the Zhambyl area, 3D seismic survey was carried out in the area of 400 full-scale square kilometers. Processing and interpretation of materials are stipulated by the production program of 2017.

#### Ustyurt project

In 2016, Supplement No.1 to the project of prospecting works on the Ustyurt site was developed and approved by the Ministry of Energy of the Republic of Kazakhstan.

On 07 November, 2016, Supplement No. 2 to the Contract was signed in terms of bringing the terms of the Contract (fine reduction) in accordance with the conditions of the model contract.

A strategic partner is now joining the project..

#### Isatay project

In 2016, Supplement No. 1 to the project of prospecting works on the Isatay site was elaborated. The work on joining the strategic partner – the ENI company - to the project is being carried out.

#### New projects

#### Khvalynskoye project

Negotiations were held with the state bodies of the Russian Federation at the level of the Interdepartmental Commission and working groups on the development of subsoil use conditions at the Khvalynskoye field and consideration of the PSA text. Besides, the issue of granting the possibility of selling produced gas from the Khvalynskoye field for export to ensure the economic profitability of the field development was considered.

#### Tsentralnaya project

On September 5, 2016, the Federal Agency of the Russian Federation issued a license for a period of 27 years (7 of which is for geological survey) to Tsentralnaya Oil and Gas Company for geologic exploration, exploration and production of hydrocarbons in the subsoil area in the Caspian Sea where the Tsentralnaya structure is based. The parties started their works on geologic study of the subsoil area in the Caspian Sea where the Tsentralnaya structure is located.

#### Abay project

In 2016, KMG continued its work on attracting partners to the project after attracting a strategic partner to the project. KMG will complete the subsoil use right by concluding a contract with the Ministry of Energy of the Republic of Kazakhstan for combined exploration and production of hydrocarbon raw materials. At the same time, the Ministry of Energy of the Republic of Kazakhstan extended the contractual deadline until the end of 2017.

#### KazMunayTeniz JSC (KMT)

#### **Zhemchuzhiny project**

On December 26, 2016 Supplement No. 6 to the PSA was signed, which provides for the extension of the Exploration Phase and re-registration of the geological allotment in connection with the voluntary return of a part of the Zhemchuzhiny contractual area until December 14, 2017. April 15, 2016 at the meeting of the State Commission for Mineral Resources of the Republic of Kazakhstan, the reports on Calculation of oil and gas reserves and Feasibility Study of the recovery factor for the Auezov field were approved. The reserves of hydrocarbons of the Auezov field are taken to the state balance of reserves of the Republic of Kazakhstan (minutes of State Commission for Mineral Resources of the Republic of Kazakhstan No. 1669-16-Y dated April 15, 2016).

During 2016, the partners of the Zhemchuzhiny PSA and Northern Caspian PSA explored the conceptual issues of joint development of the Khazar and Kalamkas-Sea projects. Also in 2016, the Ministry of Energy of the Republic of Kazakhstan established a working group of representatives of two PSAs and other departments of the Republic of Kazakhstan to address the issues of joint development of the Kalamkas-Sea and Khazar fields.

#### Kurmangazy project

In 2016, the Kazakh side completed the coordination and submitted for approval to the Russian side the draft of Additional minutes to the Interstate Agreement on the delimitation of the Caspian Sea bottom as of September 6, 1998, which provides for the expansion of the contractual territory and the provision of a new period of exploration. In 2017 it is planned to start works on ratification.

#### Atyraumunaigas JSC

#### Makhambet and Bobek projects

In 2016, the geologic exploration period expired, a request to extend the project implementation period was directed to the Ministry of Energy of the Republic of Kazakhstan.

### **Onshore geologic exploration projects**

#### JSC NC «KazMunayGas»

#### Regional projects on Pre-Caspian and Ustyurt-Bozashin and Mangyshlak basins

JSC NC «KazMunayGas» together with the Research Institute of Research and Development of Production and Drilling Technologies carried out works on two regional projects: Pre-Caspian and Ustyurt-Bozashin & Mangyshlak basins, as a result of which, at the end of the first stage, the promising blocks were identified and a portfolio of five exploration blocks was compiled. The work on the regional study of the two basins will be continued in 2017.

#### Eurasia project

As part of the execution of the President's order on the development of geologic exploration to replenish the hydrocarbon reserves of the country, the KazEnergy Association in 2013 initiated an international project of regional geological and geophysical research within the Eurasia Caspian Basin.

According to the estimates of scientists from Russia and Kazakhstan, in the more deeply explored horizons of the Caspian oil basin, up to 40 billion tons of hydrocarbon resources are concentrated.

The main objectives of the Eurasia project are:

• study of the deep geological structure of the Caspian region for the purpose of discovering new and large hydrocarbon deposits and establishing regularities of their distribution at great depths;

 study of tectonics, stratigraphy and sedimentology, paleogeography, paleoclimate, geochemistry of the earth's crust in this region, i.e. obtaining absolutely new information about the history of the formation of the earth, which will be a significant contribution to the solution of the fundamental scientific task of world significance in the field of geology;

 obtaining a spatio-temporal model of the Caspian region for a purposeful and more successful oil exploration;

assessment of potential hydrocarbon resources in the region;

study of the structures and evolution of the Caspian basin.

In 2016, KMG-Eurasia LLP was established, which will attract investors to joint implementation of the project.

#### Current projects

The Bekturly Energy LLP legal entity was formed to manage the geologic Bekturly Vostochnyi exploration project in Mangistau region. In 2016, a technical project was prepared and approved for the field work of 3D-MOGT in the amount of 320 square kilometers envisaged for the implementation of the work program in 2017.

In 2016, during the meeting of the Central Committee of the Republic of Kazakhstan, the Supplements to the Projects of prospecting works in the Isatay, Ustyurt areas were reviewed and approved with a view to transferring obligations under work programs to exploration contracts.

The accumulation of reserves of JSC NC «KazMunayGas» relates to the resource potential of the oil and gas condensate field of Urikhtau. This project is one of the priority activities of JSC NC «KazMunayGas» and a subsidiary organization - Urikhtau-Operating LLP.

#### Urikhtau project

In 2016, the reserves of the East and South Urikhtau were calculated. Reconciliation and interpretation of the new 3D seismic data have been completed, the structure of the main reservoir, and the adjacent structures of the East and South Urikhtau have been refined.

#### Kansu project

In 2016 construction of the geological model of Kansu field was completed. Three-dimensional geological models were constructed and initial geologic reserves on chalk and jurassic deposits were assessed. The work on Audit of the current state of the environment at the site was completed. The total area of work is equal to the area of the contract territory of the Kansu field - 4,375 square kilometers.

Preparation for drilling of R1 exploratory well at the North Kansu site started.

#### Pribrezhnoye project

In 2016, KMG continued to work on the entry of a strategic partner into Contract No. 4216-UWS-ME as of November 26, 2015.

#### Imashevskoye project

On January 18, 2005 an interstate agreement between the Republic of Kazakhstan and the Russian Federation on the Kazakh-Russian state border was concluded, as a result of which the Imashevskoye field acquired the status of a transboundary field.

On September 7, 2010 the Agreement between the Government of the Republic of Kazakhstan and Russian Federation on joint work on geologic research and exploration of transboundary gas condensate Imashevskoye field. The authorized organizations under the agreement are JSC NC «KazMunayGas» - 50% and Gazprom JSC - 50% with an equal distribution of costs during the geologic study of the Imashevskoye field.

In June 2015, the management of 50% of KMG's participatory shares in KazRosGas LLP was transferred to KazTransGas JSC.

On November 21, 2016 a Single Project for geological exploration and exploration of the Imashevskoye field passed state ecological expertise in the committee for environmental regulation, control and state inspection in the oil and gas complex of the Ministry of Energy of the Republic of Kazakhstan.

#### Samtyr project

On July 29, 2015 the contract for the exploration of hydrocarbons in the Samtyr area, located in Mangistau region, was signed between the Ministry of Energy of the Republic of Kazakhstan and JSC NC «KazMunayGas». Registration number 4177- YBC-M3. In 2016, work was carried out to amend the Contract by concluding Supplement No. 1 to the Contract in terms of reducing fines for non-fulfillment of contractual obligations from 30% to 1%.

#### Orken project

On December 12, 2014 a contract for hydrocarbon exploration at the Orken field, located in the Kyzylorda region, was signed between the Ministry of Energy of the Republic of Kazakhstan and JSC NC «KazMunayGas». Registration number 4075-УВС-МЭ.

In 2016, the work was carried out to amend the Contract by concluding Supplement No. 1 to the Contract in terms of reducing fines for non-fulfillment of contractual obligations from 30% to 1%.

#### New onshore projects of KMG

#### Korolevskoye project

In 2016, the Project of prospecting works at the Korolevskoye (over-salt) field in Atyrau region was approved. Registration numbe r08-2-03-1846//las of April, 25, 2016). The work on revising the FEM of the Korolevskoye project was performed, due to changes in oil prices in the world market.

#### Beineu Block project

On June 22, 2016 the Agreement on the Principles of the Beineu project between KMG and SynergizedGasTechnology Kazakhstan LLP was signed.

In October 2016, KMG jointly with SynergizedGasTechnology Kazakhstan LLP conducted survey studies at the Beineu Block in Mangistau region.

In accordance with the Law of the Republic of Kazakhstan On Subsoil and Subsoil Use, KMG sent an application to the Ministry of Energy of the RK for obtaining subsoil use rights in the Beineu area.

#### Mugodzhar project

In 2016, KMG jointly with Total Company conducted survey studies at the Mugodzhar field in the Aktobe region.

#### Koskol project

In 2016 the Project of prospecting works in Koskol area in Aktobe region was approved. Direct negotiations for obtaining subsurface rights were held with the Ministry of Energy.

A draft contract for reconnaissance of raw hydrocarbons in Koskol was developed and sent to the Ministry of Energy. The work on agreeing the draft contract with the Ministry of Energy was carried out.

#### Zaburunye, Zhayik and Saraishik projects

In 2016, the Ministry of Energy sent requests for direct negotiations on Zaburunye, Zhayik, and Saraishyk in the Atyrau region.

#### Karabulak

The Karabulak project was included in the list of KMG's implemented subsoil usage projects. Works on coordination of main cooperation conditions were conducted with Zhan Oil LLP, a potential strategic partner.

#### DataRoom

In 2016, works on attracting investors on a portfolio of geological exploration projects were undertaken with the following companies: Burisma Eurasia LLP, PetroResources Kazakhstan LLP, Chevron Europe, Eurasia, and Middle East Exploration & Production Ltd., Arawak Energy, Total E&P Kazakhstan ENI, GasPromNeft, Rosneft-Exploration and HEOC-GEOC, etc.

#### KazMunaiGas EP JSC (Embamunaigas JSC, Ozenmunaigas JSC)

NC KazMunayGas JSC associates further build-up of raw hydrocarbon reserves with supplementary exploration of license blocks of its subsidiary KazMunaiGas Exploration Production.

Suspension of NSV-1 well (N-E flank of the S.Nurzhanov site) was introduced, processing/reinterpretation of 3D-CMRS seismic data of the block (Karaton-Sarkamys of the Birlestik site) in a volume of 260 sq. km was completed.

With the aim of territorial continuity and optimization of managerial efficiency of geological exploration works of KMG EP JSC, Contracts are being transferred for the exploration: No. 3577 to Embamunaigas JSC and No. 3579 to Ozenmunaigas JSC.

Embamunaigas JSC has completed drilling of 12 prospect wells, 7 of which have hydrocarbons inflow, 2 wells are finished by testing and 3 wells showed negative result. Seismic exploration has been completed at Toisoigan block 2-CDPM in a volume of 500 sq. km, including data processing and interpretation, and fieldworks, processing and interpretation at the Karaton field in a value of 150 sq. km have been completed. Following the seismic works, new prospective sites for further geological explorations were identified.

UralOilGas Llp has completed works on processing and interpretation of 3D-CDPM data in relation to Pavlovskaya and Yanvartsevskaya sites in a volume of 368 sq. km and integrated processing and interpretation of data in relation to the whole Fedorovsky site in a volume of 1 172 sq.km.

Karpovsky Severniy LLP precedes the works on SK-2 well testing in Middle Devonian sediments.

#### Mangistaumunaigaz JSC

Volume of planned geological exploration works was rescheduled from 2016 to 2017 (3D-CMRS seismic survey at Zhetibai field).

#### Kazakhoil Aktobe LLP

#### Kozhasai field

Re-estimation of reserves of oil, gas, condensate, and associated components was carried out and feasibility study of oil recovery factor "Estimation of reserves at Kozhasai field" was created. On 30 June, 2015, no defence was passed in SRC of the RK for the reason that the reserves went beyond the mining allotment, outside the boundaries of CNPC Aktobemunaigas. The issue is being settled due to the initiated procedure of return of the CNPC Aktobemunaigas territory through 2016.

#### Alibekmola field

Re-estimation of reserves of oil, gas, condensate, and associated components and creation of the feasibility study of oil recovery factor of Alibekmola field is carried out by Kaspiymunaigas RI LLP. According to Lukoil recommendations, reeastimation of reserves has been extended through 2016.

#### Kazakhturkmunai LLP

The planned increment in 2015 by emans of reestimation of reserves of the Laktybai field (SRC Minutes No. 1649-16-U as of 29.02.2016) was achieved in 2016, also the reserves of the Saztobe East field were reestimated in 2106 (SRC of the Rok Minutes No. 1712-16-U as of 14.10.2016).

#### AmangeldyGas LLP

Within the framework of implementing the project of field development by Amangeldy group, a complex of geological exploration and seismic work, estimation of reserves, development of pilot operation projects, and projects of construction of recovery wells and field facilities are being carried out.

On the basis of interpretation data, the drilling was started at Sultankuduk structure (Barkhannaya-Sultankuduk site) with the aim of specifying the structure perspective to identify economic reserves of raw hydrocarbons.

#### KazTransGas JSC

Implementation of "Production of coal bed methane of Karaganda coal basin" has been started with the aim of expanding resource base of KazTransGas JSC.

In accordance with the Plan of Measures (Road Map) for implementation of the Coalbed Methane Production, updated in September, 2016, the 1st stage of the Project is in progress i.e. geological exploration works within the R&D under the contract area of NC SEC Saryarka JSC, the subsoil user, in Sherubaynurinsky coal-bearing area of the Karaganda coal-mining field.

Exploratory and experimental production wells were drilled, the first gas was received. According to the obtained core analysis data from the leading international laboratories (USA, China, and Europe), the coal composition of Sherubainurinsky area is the similar to the coal of the largest USA deposits (BlackVarrior - methane production up to 1.5bcm / year).

In order to create favorable conditions for attracting investments and forming the optimal cost of commodity gas for population of the Republic of Kazakhstan, the KTG in cooperation with the state authorities and organizations is working to initiate state support for exploration and production of coalbed methane.

#### **OIL AND GAS PRODUCTION**

### Production of crude oil and condensate

The consolidated uplift of oil and condensate in the JSC NC "KazMunayGas" group of companies amounted to 22,638 thousand tons in 2016, with the plan of 22,496 thousand tons (142 thousand tons higher) or 100.6 % of the plan. As compared to 2015, the consolidated production of oil and condensate by the companies with a participatory interest of JSC NC "KazMunayGas" fell by 31 thousand tons or 0.1% in 2016.

JSC NC "KazMunayGas" accounted for 29.0% of oil and condensate production in the Republic of Kazakhstan as a whole. A total of 78.0 mn tons of oil were produced in Kazakhstan in 2016.

Oil and Gas	Condensate	Production in	Companies	Taking into	Account the	Interest of	JSC NC
"KazMunayGas"	,						

										'n	000 tons
Name	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
KazMunayGas Exploration Production (incl. KazGPZ)	8,396	8,342	8,160	8,058	7,776	7,911	8,780	8,978	9,486	9,548	9,551
KazTransGas (Amangeldy Gas)	21	19	21	22	21	22	24	26	26	26	-
Kazakhoil-Aktobe (50%)	381	401	419	575	626	570	488	468	380	435	509
Kazakhturkmunai (100%)	292	242	140	120	119	118	116	113	111	129	163
PetroKazakhstan (33%)	1,235	1,448	1,612	1,759	1,845	1,951	1,999	2,077	2,109	2,238	-
Kazgermunai (50%)	1,468	1,500	1,500	1,554	1,562	1,500	1,551	1,601	1,570	1,527	-
Karazhanbasmunai (50%)	1,064	1,069	1,066	1,026	1,019	990	970	933	914	-	-
Tengizchevroil (20%)	5,511	5,432	5,336	5,421	4,842	5,168	5,183	4,505	3,455	2,786	2,664
MangistauMunaiGaz (50%)	3,145	3,137	3,137	3,038	2,960	2,875	2,860	-	-	-	-
Karachaganak Petroleum Operating b.v. (10%) *	1,047	1,080	1,100	1,049	1,101	-	-	-	-	-	-
North Caspian Operating Company (16.88%) **	79	-	-	8	-	-	-	-	-	-	-
TOTAL	22,638	22,669	22,490	22,630	21,390	21,105	21,971	18,701	18,051	16,689	12,887

\* production of stabilized hydrocarbon liquids

\*\* since October, 2015, 50% of shares of KMG Kashagan B.V. (owning 16.88% in North Caspian Operating Company) belong to the Samruk-Kazyna SWF JSC

### Gas production

The consolidated production of natural and associated gas in the KazMunayGas group of companies amounted to 7,384 Mcm in 2016, with the plan being 6,968 Mcm (+417 Mcm) or 106.0% of the plan. As compared to 2015, the consolidated production of natural and associated gas in the JSC NC "KazMunayGas" group of companies in 2016 increased by 129 Mcm or 1.8%.

Gas production in the entities taking into account the participatory interest of JSC NC "KazMunayGas"

										n	nn m
Name	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
KazMunayGas Exploration Production (incl. KazGPZ)	806	825	782	797	770	844	890	932	1018	1098	1181

Name	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Kazgermunai (50%)	299	242	251	260	258	259	258	260	262	276	118
Tengizchevroil (20%)	3,016	2,978	2,909	2,910	2,539	2,704	2,724	2,338	1,798	1,445	1,382
Kazakhoil-Aktobe (50%)	307	302	265	283	183	150	141	136	107	140	224
MangistauMunaiGaz (50%)	378	366	311	263	271	256	227	-	-	-	-
Karachaganak Petroleum Operating B.V. (10%)	1,766	1,823	1,825	1,753	1,752	-	-	-	-	-	-
Others	812 <sup>1</sup>	719	682	658	1,078	637	672	666	601	573	319
TOTAL	7,384	7,255	7,025	6,924	5,528	4,850	4,912	4,332	3,786	3,532	3,224

As of the current date, the production volume since the time of commencement of exploitation of the Amangeldy field has amounted to 4.07 bcm of gas and 303.5 thousand tons of condensate.

For the purposes of providing the consumers of Southern Kazakhstan with gas and ensuring energy security, in 2000 JSC "KazTransGas" and the Republic of Kazakhstan signed the contract for combined exploration and production of hydrocarbons at the Amangeldy group of fields, including the Amangeldy, Ucharal North, Ucharal - Kempirtyube, Anabai, Airakty, Zharkum and Kumyrly fields on the territory of the Moiynkum and Talas regions of the Zhambyl Province.

In August, 2012 the contract was sold to a subsidiary - the Amangeldy Gas LLP.

Under the contract, commercial development of the Amangeldy field and test production of the Zharkum fields are carried out; further, within the contract area of the Amangeldy group of fields a package of exploration works is being implemented, which includes seismic surveys, reserves calculation, development of designs for exploration works and construction of development wells, construction and testing of prospecting and appraisal wells.

#### Natural gas and gas condensate production on the Amangeldy field

Name	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Gas, Mcm	327	301	328	321.8	324.1	326.5	344.1	354.2	338.3	280.0	279.7
Gas condensate, thousand tons	20.8	18.6	20.7	21.8	21.3	22.0	24.1	26.0	26.2	26.2	24.6

### Participation in Major Oil and Gas Projects

#### **Tengiz Project**

Discovered in 1979, the Tengiz field is one of the largest in the world.

Agreement on the Tengiz Project was signed on 2 April 1993 between the Republic of Kazakhstan and the Chevron company. The hydrocarbon exploration and production licence was issued to the Tengizchevroil LLP in 1993 for a term of 40 years.

TCO's core business is exploration, production and sales of hydrocarbons from the Tengiz and Korolevskoye deposits in the Atyrau Province.

TCO partners are: Chevron (50 %), ExxonMobil (25 %), JSC NC "KazMunayGas" (20 %) and LUKArco (5%).

<sup>&</sup>lt;sup>1</sup> PetroKazakhstan Inc. (33%), Amangeldy Gas LLP (100%), Kazakhturkmunai Ltd. (100%), North Caspian Operating Company n.v. (8.44%)

#### **TCO's production**

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Oil and gas condensate production, <i>thousand tons</i>	27,555	27,158	26,679	27,105	24,212	25,839	25,912	22,526	17,274	13,931	13,319
Gas production, <i>Mcm</i>	15,081	14,888	14,544	14,550	12,698	13,522	13,620	11,691	8,977	7,254	6,910

The actual oil production by TCO in 2016 amounted to the record amount of 27.555 mn tons with the plan of 26.466 mn tons, which is 1.089 mn tons higher than the planned target. TCO's oil production plan for 2017 is 27.570 mn tons.

Currently, TCO has begun the implementation of the Well-head Pressure Control Project / Future Growth Project (WPCP/FGP), which provides for construction of a new oil processing plant with the capacity of 12 mn tons annually and sour gas re-injection facilities with the capacity of 9.4 bcmpa, construction of a new production stream gathering system, pressure increase facilities, infrastructure and auxiliary facilities.

In July, 2016 TCO Partners announced the making of the Final Decision on funding the project. Within the framework of the WPCP/FGP, it is planned to create over 20,000 jobs in Kazakhstan, measures on personnel education and training are envisaged, and about 700 permanent jobs will be created for the operation of the new WPMP/FGP production facilities. Currently, the cost of the WPCP/FGP is estimated at 36.8 bn US dollars, taking into account the contingency price escalation reserve. First oil is scheduled for 2022.

#### North-Caspian Project

The North Caspian Production Sharing Agreement (NCPSA) was signed on 18 November 1997. The following companies are the parties to the NCPSA: JSC NC "KazMunayGas" - 16.88%, ENI, Total, ExxonMobil, Shell - 16.81% each, China National Petroleum Corporation - 8.33%, Inpex - 7.56%.

On 13 June 2015 the merger into a sole Operator and transition to a new management operating model of the North-Caspian Project (NCP) was completed. The Operator's duties are performed by North Caspian Operating Company N.V., acting on behalf of the NCPSA Partners.

The following fields are located on the NCP PSA contract area: Kashagan, Kalamkas-Offshore, Aktoty, Kairan, Kashagan South-West.

The Kashagan field, one of the biggest and most complex offshore fields discovered to date, is a single hydrocarbon accumulation with the in-place reserves estimated at 4.6 bn tons and takes up the area of about 820 km<sup>2</sup>. Development of the Kashagan field is at the stage of Pilot Commercial Development (PCD).

On 31 August 2016 works for replacement of the 18" and 28" pipelines were fully completed and the pipelines officially transferred to the Operation Department. The pipeline recovery works were completed 40 ahead of the scheduled date - October, 2016, and almost 4 months ahead of the initial plan - December, 2016. All pre-commissioning (hydraulic pressure tests and drying) have been completed at the both lines of the oil and gas pipelines.

The Kashagan field production was resumed on 28 September 2016 with the opening of development well at the "A" Island, hub of the "D" Island and facilities of the "D" Island, and "Bolashak" IOGTU have been commissioned.

The Ministry of Energy of the Republic of Kazakhstan announced the first Kashagan field oil export delivery on 14 October 2016.

On 17 November 2016 the Government of the Republic of Kazakhstan officially recognized the first commercial oil of the Kashagan field from 1 November 2016.

	2016	2015	2014	2013
Oil and gas condensate production, thousand tons	957	-	-	46.8
Gas production, <i>Mcm</i>	588	-	-	28.7

#### **NCP's production**

### Karachaganak Project

The Karachaganak field was discovered in 1979.

The Karachaganak project is being implemented within the framework of the Final Production Sharing Agreement, signed on 18 November 1997 for the duration of 40 years, which became effective on 27 January 1998. The participatory interest is distributed among the contracting companies as follows: Shell (29.25%), Agip (29.25%), Chevron (18%),Lukoil (13.5%) and KMG - 10%.

Shell and Agip are the single operator of the project.

In 2016 Shell took over BG, which results in Shell owning BG's interest in the Karachaganak Project.

Currently, the 2M Commercial Development Stage is being implemented at the Karachaganak field, as part of which about 11 mn tons of liquid HCs and about 18 bcm of gas are annually produced. The primary goal of the 2M Stage is to maintain the liquid HC production plateau at the achieved level through drilling new wells, increasing the gas capacity and modernizing the process units for HC treatment.

Upon completion of the 2M projects, for further maintenance of the HC liquids plateau, implementation of the Karachaganak Growth Project (KGP) is planned. KGP is intended to be carried out in several stages to ensure efficient completion of the project. The first stage of the KGP (KGP-1) contemplates drilling of new and workover of the existing wells, construction of gas treatment facilities and installation of additional compressors for increasing the gas re-injection volumes, construction of the necessary ancillary facilities etc.

Launch of KGP-1 is planned for after 2024 and should provide an additional production gain of about 45 MMt of hydrocarbon liquids. At present the project is at the stage of concept selection.

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Production of stabilized hydrocarbon liquids, <i>thousand tons</i>	10,466	10,795	11,004	10,492	11,013	10,854	10,247	10,695	10,450	10,429
Gas production, Mcm	17,659	18,234	18,248	17,531	17,519	16,868	15,009	15,564	15,004	14,233
of which are used for re- injection, Mcm	8,039	8,652	8,818	8,570	8,667	8,129	6,437	6,589	6,372	6,016

#### Total production of HC liquids (stabilized) at the Karachaganak field

### **OIL AND GAS TRANSPORTATION**

### Oil transportation by main oil pipelines

Oil transportation via trunk oil pipelines is carried out by a subsidiary, JSC "KazTransOil" (total length: 5.4 thousand km).

Furthermore, JSC NC "KazMunayGas" owns a 20.75% shareholder's equity in the Caspian Pipeline Consortium oil pipeline.

As of today, the main existing export routes of the Kazakh oil transportation are:

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

The largest volume of the Kazakh oil in 2016 was exported by the oil pipelines of CPC - 40.8 mn tons and "Atyrau-Samara" - 15 mn tons. 10.1 mn tons were transported in the Chinese direction. Marine exports amounted to around 2.2 mn tons.

### Development of oil supply export directions

Diversification of the Kazakhstan oil transportation directions is of particular concern to JSC NC "KazMunayGas", since it enables the company to select the most cost-effective routes of hydrocarbon resources transportation to the world markets and serves as a safeguard to ensure energy security.

#### Atyrau-Samara oil pipeline

Atyrau-Samara oil pipeline provides access to the markets across the territory of the Russian Federation through the oil-pipeline system of PJSC Transneft to the ports of the Black and Baltic Seas.

Following the results of 2016, the volume of oil transportation though the Atyrau-Samara oil pipeline amounted to 15 mn tons.

#### Caspian Pipeline Consortium

CPC oil pipeline ensures exit of the Kazakh oil from the marine terminal located in the township of South Ozereyevka (the city of Novorossiysk) to the worldwide markets.

44.3 mn tons of oil were transported by the CPC oil pipeline in 2016, of which 40.8 mn tons is the Kazakh oil.

The CPC members are: Russian Federation (Transneft PJSC - 24% and CPC Company - 7%) - 31%; Republic of Kazakhstan (JSC NC "KazMunayGas" - 19% and Kazakhstan Pipeline Ventures LLC - 1.75%) - 20.75%, producing companies:

Chevron Caspian Pipeline Consortium Company - 15%, Lukarco B.V. – 12.5%, Mobil Caspian Pipeline Company - 7.5%, Rosneft-Shell Caspian Ventures Ltd. - 7.5%, Eni International N.A. N.V. - 2%, BG Overseas Holdings Ltd. - 2% and Oryx Caspian Pipeline Ltd. - 1.75%.

Efforts to expand the CPC oil pipeline's capacity are currently underway, which involve a phased increase in the oil pipeline capacity from 28.2 to 67 mn tons annually, which includes 52.5 mn tons annually for the Kazakh oil.

The CPC Pipeline Expansion Project contemplates replacement of 88 km of the pipeline on the territory of the RoK, reconstruction of the five existing PSs (two on the RoK's territory and three in the RF), construction of ten new PSs (two in the RoK and eight in the RF), and construction of the third single point mooring and six 100,000 m3 tanks at the offshore terminal.

The plans are to complete the project for expansion of the CPC oil pipeline throughput in 2017.

### Kazakhstan-China Oil Pipeline

The "Kazakhstan-China" Oil Pipeline is among the export directions of oil transportation, which made it possible to enable hydrocarbons deliveries from the fields of Western Kazakhstan to China's promising market.

In 2006 the "Atasu-Alashankou" oil pipeline was commissioned, with the throughput capacity of 10 mn tons annually In 2009 construction of the "Atasu-Alashankou" oil pipeline was completed, with the throughput capacity of 10 mn tons annually.

Currently, work is in progress on expanding the "Kazakhstan-"China oil pipeline, which is to involve a phased increase of its capacity at every section from Atyrau to Alashankou to 20 MMtpa, as the requirement for growth in the export capacity and the domestic market requirement increase, and includes the following measures:

Expansion of the Atasu-Alashankou oil pipeline capacity to 20 mn tons annually - completed in December, 2013.

Reverse and expansion of the Kenkiyak-Atyrau oil pipeline.

Expansion of the Kenkiyak-Kumkol oil pipeline.

Reconstruction and expansion of the Kumkol-Atasu oil pipeline section.

Following the results of 2016, oil transportation through the Atasu-Alashankou oil pipeline in the direction of China amounted to 10.1 mn tons.

In 2016, as part of implementing the second phase of the Kazakhstan-China oil pipeline construction project, revamping and expansion of the 663 km PS, to perform the function of the head PS of the Kenkiyak-Atyrau oil pipeline in the reverse mode, was completed.

### Marine oil transportation

As of today, the main existing routes of marine oil transportation are:

- Routes in the Caspian Sea area;
- Routes in the Black and Mediterranean Sea areas.

#### **Oil Transportation by Marine Fleet**

		'000 tons
	2016	2015
Caspian Sea	2,875	2,724
Aktau-Baku	33	915
Aktau-Makhachkala	1,611	1,115
Turkmenbashi-Baku	1,072	694
Makhachkala <sup>*</sup> (Y. Korchagin)-Baku	159	-
Black Sea	2,968	2,175
Mediterranean Sea	1,238	2,133
TOTAL	7,082	7,033

### Transportation and delivery of natural gas

JSC "KazTransGas" is a member of the group of companies of JSC "National Company "KazMunayGas", and controls the main network of gas transportation pipelines with the length of over 17,000 km and the annual capacity up to 160 bcm, a network of gas-distributing gas pipelines with the length of over 40,000 km; it ensures uninterrupted operation of 31 compressor stations, where 322 gas compressor units are installed, and maintains 3 underground gas storage facilities.

field named after Y. Korchagin of the LUKoil PJSC in the Caspian Sea

#### Trunk gas pipeline gas transportation volumes

											DCITI
Transit type	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
International transit	58.3	75.0	79.1	85.3	84.7	89.04	79.7	73.2	97.7	97.9	107.6
Kazakh gas transportation for exports	13.3	12.7	11.2	12.0	11.9	11.89	13.5	10.0	9.6	8.3	7.8
Gas transportation for domestic consumers	16.5	15.0	15.1	12.9	12.6	9.6	8.5	7.9	9.4	8.0	6.5
TOTAL	88.1	102.8	105.4	110.2	109.2	110.6	101.7	91.1	116.7	114.2	121.9

Transit of natural gas from Turkmenistan and Uzbekistan to China and Russian Federation is carried out across Kazakhstan. Natural gas transportation by trunk gas pipelines was 88.1 bn cubic meters in 2016.

The RoK's southern regions and Kostanai Province are supplied with Gas by means of SWAP operations with the Gazprom PJSC, out of the Uzbek gas resources via the BGR-TBA and Gazli-Shymkent gas pipelines, Uzbek or Turkmen gas via the Turkmenistan-China TGP, Kazakh gas via the Bozoi-Shymkent gas pipeline, and the Russian gas via the Bozoi-Shymkent gas pipeline.

Gas supply to Kazakhstan's western regions is covered by the gas resources of Kazakhstan subsoil users.

Export gas deliveries are made to the RF and Kyrgyzstan.

### Gas pipelines development projects

#### Increasing the capacity of the Kazakhstan-China TGP (section 1)

On 27 July 2011 Protocol No. 2 "On amending the Agreement between the Governments of the RoK and PRC on cooperation in construction and operation of the Kazakhstan-China gas pipeline of 18 August 2007" was signed, under which the Parties agreed to carry out an increase in the capacity of the first section of the "Kazakhstan-China" TGP by 25 bcm annually, of which 20 bcm annually are intended to be used by the China party for the purposes of transit of the Turkmen and Uzbek gas to the PRC, and 5 bcm annually - for the Kazakhstan party, for the purposes of satisfying the requirement for gas of the RoK's domestic market, and possible gas exports to the PRC.

The Project contemplates construction of a 1,308 km trunk gas pipeline with the capacity up to 25 bcm annually.

Project implementation period: 2012-2017.

On 26 September 2011 Heads of Agreement on Organizing Engineering, Finance, Construction and Operation of "C" Line of the First Section of the Kazakhstan-China Gas Pipeline were signed by and between KMG, KTG and TAPLine.

As at 31 December 2016, the following capital works have been carried out within the project:

- On 9 July 2015 the linear part of the gas pipeline was commissioned.
- On 16 July 2015 compressor station No. 6 was commissioned.
- On 23 July 2015 compressor station No. 2 was commissioned.
- On 3 August 2016 compressor station No. 4 was commissioned.
- On 10 August 2016 compressor station No. 8 was commissioned.

Currently, the designed capacity of up to 20 bcm annually has been reached; taking into account further construction of compressor stations No. 1, No.3, No. 5, No. 7 in 2017, an increase in the gas pipeline capacity to 25 bcm annually is in the works.

Since the gas pipeline was commenced, 21 bcm of gas have been transported as at 5 February 2017.

### Construction of the Beineu-Bozoi-Shymkent Trunk Gas Pipeline

For the purposes of sustainable satisfaction of the requirement for gas of the RoK's southern regions, lowering the dependence on the imported gas and ensuring the RoK's energy security, the "Beineu-Bozoi-Shymkent" trunk gas pipeline construction" project is continued.

I- - ----

The gas pipeline route (length - 1,477 km, diameter - 1,067 mm in the single-line design) runs across the territories of Mangistau, Aktobe, Kyzylorda and South-Kazakhstan Provinces and has the following technical specifications:

Stage I - 2012-2017, the capacity up to 6 bcm annually;

Stage II - 2013-2017, the capacity up to 10 bcm annually.

In late 2013 gas transportation via the Beineu-Bozoi-Shymkent TGP at the Bozoi-Shymkent section (311-1,453 km) with the capacity up to 2.5 bcm of gas annually was commenced. On 30 December 2016, the Acceptance Committee Certificate on Commissioning of the linear part of the "Beineu-Bozoi" section (0-311 km), with the capacity of up to 5 bcm of gas annually, was signed.

### Projects for provision of gas supply to the regions

JSC "KazTransGas" carries on provision of gas supply and modernization of the RoK's settlements.

Works on the following projects were completed in 2016:

- "Shymkent GDS Modernization" (Phase I of the "South Kazakhstan Province Gas-Distribution System Modernization" project);
- "Provision of gas supply to the Kyzylorda Province settlements".

The following projects are at the implementation stage:

- Modernization of the gas distribution network of the city of Taraz";
- Provision of gas supply to the settlements and modernization of the gas-distribution networks of the Aktobe Province";
- Modernization, revamping and new construction of gas-distribution networks of the Mangistau Province's settlements";
- "Expanding provision of gas supply to the Kostanai Province's settlements";

### REFINING

### Oil refining

-					-		-			thousa	and tons
Name	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Atyrau Refinery	4,761	4,868	4,920	4,430	4,423	4,471	4,300	4,004	3,925	3,701	3,746
Shymkent Refinery	2,251	2,247	2,533	2,429	2,377	2,302	2,292	2,004	2,154	1,011 <sup>1)</sup>	-
PPCP	4,590	4,810	4,926	5,010	5,037	4,649	4,807	2,185	-	-	-
Petromidia Refinery	4,708	4,205	4,426	3,781	3,806	3,730	3,367	3,878	4,237	-	-
CaspiBitum	312	188	312	-	-	-	-	-	-	-	-
Total	16,621	16,318	17,117	15,650 <sup>2)</sup>	15,643	15,152	14,766	12,071	10,316	4,712	3,746

#### Oil Refining Volumes in the Refineries of the KazMunayGas Group

### Atyrau Refinery

Atyrau Refinery (AR) was commissioned in 1945. The oil refining capacity is 5.0 mn tons annually.

99.49% of the interest in the AR are owned by JSC "KazMunayGas - Refining & Marketing".

In 2015 the catalytic reforming unit (CCR) with the capacity of 1.0 mn tons annually (first start-up complex) was commissioned.

In 2016 the PX Aromatics Production Complex with the capacity of 496,000 tpa of paraxylene (second start-up complex) was placed in operation.

During 2016 the APC was operating according to the fuel variant.

The Atyrau Refinery's conversion ratio amounted to 65.2% in 2016, which is 10% higher than the 2015 figure.

	·											nd tons
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Gasoline	643	605	614	505	507	568	601	553	493	470	493	509
Diesel	1,391	1,207	1,344	1,222	1,217	1,330	1,259	1,191	1,175	1,019	995	958
Jet fuel	20	21	23	38	54	46	66	51	47	21	5	21
Fuel oil	1,362	1,650	1,510	1,512	1,585	1,786	1,953	1,698	1,566	1,096	1,343	1,345
Other products	1,075	1,044	1,113	893	847	489	254	205	330	747	569	466
TOTAL	4,491	4,525	4,604	4,170	4,210	4,220	4,133	3,698	3,611	3,353	3,405	3,299

#### Production of main oil products \*

 $^{st}$  amounts may be at variance when rounding up to integer values

Within the framework of the Government Program for Industrial-and-innovation-based Development, the "Deeper Oil Conversion Complex Construction" project was implemented. The project is designed to enhance the Atyrau Refinery's capacity to 5.5 mn tons annually, it will render it possible to refine residual heavy oil

<sup>&</sup>lt;sup>1)</sup> Consolidated figure - taking into account the 49.72% interest and the refining volume in the Shymkent Refinery over the period since the acquisition in July, 2007.

<sup>&</sup>lt;sup>2)</sup> Does not include 400 thousand tons of heavy cuts of RHC in the Petromidia Refinery.

products into high quality motor fuels meeting the requirements of K4 and K5 environmental classes, and increase the oil conversion ratio

### Shymkent Refinery

Shymkent Refinery was commissioned in 1985. The refinery is under control of the PetroKazakhstan Oil Products LLP, in which 49.73% are owned by JSC "KazMunayGas - Refining & Marketing".

Currently, the refinery's balanced capacity is 5.25 mn tons of oil annually.

The PKOP's conversion ratio amounted to 75.4% in 2016, which is 0.5% higher than the 2015 figure.

thou												
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Gasoline	1,032	988	1,126	1,038	1,046	996	978	811	843	853	837	843
Diesel	1,203	1,192	1,346	1,376	1,336	1,338	1,337	1,276	1,408	1,381	1,287	1,276
Jet fuel	236	254	279	231	275	218	234	240	275	159	183	133
Fuel oil	869	889	1,013	968	977	989	931	694	635	552	565	767
Other products	932	939	1,026	975	943	888	947	765	886	853	905	656
TOTAL	4,272	4,263	4,790	4,588	4,577	4,348	4,343	3,785	4,047	3,798	3,777	3,675

#### Production of main oil products \*

\* amounts may be at variance when rounding up to integer values

As part of the Government Program for Industrial-and-innovation-based Development, the Shymkent Refinery Revamping and Modernization project is being implemented, whose primary goals are to ensure production of the K4 and K5 environmental class motor fuels as per the requirements of the CU's Technical Regulations, increase the crude oil refining capacity to 6 MMtpa, and increase the oil conversion ratio.

### Pavlodar PCP

Pavlodar PC Plant was commissioned in 1978. 100% of the shares are owned by JSC "KazMunayGas - Refining & Marketing".

Currently, the refinery's balanced capacity is 5.1 mn tons annually.

The refinery processes the blend of the Urals crude delivered by means of the Omsk-Pavlodar oil pipeline.

The PPCP's conversion ratio amounted to 76.6% in 2016, which is 5% higher than the last year's figure.

	the								thousa	nousand tons		
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Gasoline	1,225	1,249	1,259	1,117	1,302	1,194	1,314	1,225	1,155	1,287	1,015	996
Diesel	1,524	1,457	1,509	1,473	1,576	1,395	1,478	1,328	1,314	1,425	1,107	1,056
Jet fuel	-	11	125	133	92	123	190	82	80	77	80	90
Fuel oil	560	822	668	763	977	885	887	747	794	752	1,242	1,251
Other products	727	788	852	1,003	701	635	598	438	392	371	218	316
TOTAL	4,036	4,327	4,413	4,489	4,648	4,232	4,467	3,820	3,735	3,912	3,662	3,709

#### Production of main oil products

As part of the Government Program for Industrial-and-innovation-based Development the Pavlodar PC Plant Revamping and Modernization project is being implemented, whose primary goal is to ensure output of the K4 class motor fuels, as per the requirements of the Customs Union's Technical Regulations.

### CaspiBitum (Road bitumens production plant in the APP \*)

The road bitumens production plant was commissioned in late 2013. The oil refining capacity is 1.0 mn tons annually.

50% of the interest in Caspi Bitum are owned by JSC "KazMunayGas - Refining & Marketing".

In compliance with the Production Program, in 2016 crude oil is processed in a sustained way and to the full extent, which includes volumes processed with the designed capacity in July and August - 94,000 per month, confirming technical readiness of the equipment for operations.

Since January, 2016 a new standard for polymer-modified bitumen has been applied, instead of the former one.

	2016	2015	thousand tons 2014
Road bitumen	111	70	153
Other products	502	299	450
Total	613	369	603

#### Production of main oil products

### International operations in the oil refining sector

In 2007 KMG acquired the controlling block of shares (75%) of the Romanian oil and gas company The Rompetrol Group. In 2009, KMG purchased the remaining 25% of The Rompetrol Group.

In 2014, in an effort to strengthen KMG's market positions, The Rompetrol Group was renamed into KMG International N.V. (KMGI). Carrying on business under the common brand promotes awareness of the trademark of all the companies in the JSC NC "KazMunayGas" group, and makes it possible to focus on promoting the common national brand of Kazakhstan and the nation as a whole.

The new shareholder has directed considerable investment to revamping of the oil-processing capacity, development of the logistics infrastructure and expansion of the retail network, which enabled the group of companies to acquire the status of "energy bridge" connecting Central Asian resources with Europe's promising markets. With the acquisition of KMGI, the shareholder, represented by JSC NC "KazMunayGas", has gained access to the European market, estimated at over 300 million of potential customers.

As of today, KMGI runs operations in the oil refining and oil products sales sector on 11 markets. Its headcount is around 7 thousand people. Major operations of the group companies are concentrated in the Black Sea region, in particular, in Romania, where the company owns high-technology oil refining capacity, including the Petromidia Refinery. Strategic location on the coast of the Black Sea renders it possible to carry out prompt delivery of oil and shipment of the produced oil products, making the refinery an important regional fuel hub, and KMGI - one of the biggest regional players on the crude oil and oil products market.

In Europe, KMGI has over 1,100 fuel sale points on the key markets - Romania, Moldova, Bulgaria, Georgia, France and Spain, which operate under the Rompetrol and Dyneff brands.

KMGI conducts trading operations on the international markets via its subsidiary company, KMG Trading AG, which is the common exclusive operator for crude oil exports from the resources of JSC NC "KazMunayGas" and jointly-controlled companies.

KMGI, alongside its activity in Europe, plays an important role in the development of the oil refining industry in Kazakhstan as well. The engineering divisions of its subsidiary – KMG Engineering (Rominserv) – actively participate in the revamping of the nation's refineries: the Atyrau, Shymkent and Pavlodar Refineries.

KMGI's goal is to maximize the economic added value for JSC NC "KazMunayGas" from oil refining, petrochemistry, sales of crude oil and oil products on the overseas markets:

• Ensuring access of JSC NC "KazMunayGas" to the international markets through the development of the European divisions and promotion of the Kazakh national petroleum brand;

<sup>\*</sup> Aktau Plastics Plant

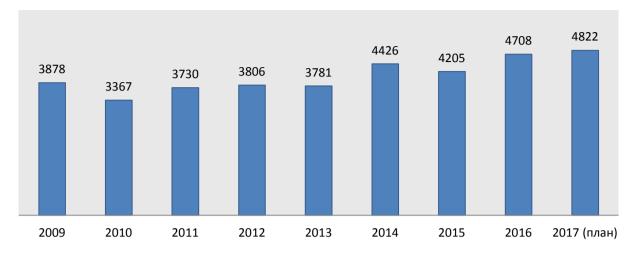
- Enhancing the operational efficiency and equipment capability for the purpose of maximizing the use of the internal resources of JSC NC "KazMunayGas" in the sphere of oil refining and petrochemistry;
- The making of KMG as an integrated and diversified oil company on the international markets, competitive in the crude oil and oil products sale segment;
- Provision of consumers with high quality oil products and services by means of building an efficient supply chain and developing controlled sales channels.

Following the 2016 results, KMG International achieved the best results since the time of acquisition. EBITDA reached the level of 203.6 mn US dollars. KMGI's net profit for 2016 before the minority interest exclusive of adjustment for the acquisition amount was 14,021 thousand US dollars. The 2016 improvement in the financial performance became possible thanks to the increase in the crude sales and increase in the Brent crude oil market quotations by 46% on the average, development of the entire business chain, and transformation initiatives, designed to improve the operating efficiency and reduct production costs across the entire group of companies.

Rompetrol Rafinare, KMGI's subsidiary, is comprised of two refineries, Petromidia and Vega, and the Petrochemicals petrochemical complex.

**Petromidia Refinery** is KMGI's key asset, the biggest and most complex refinery in Romania. It is located on the coast of the Black Sea, 225 km from the country's capital Bucharest and 20 km from Romania's biggest port, Constanţa. The refinery's oil refining capacity is 5 mn tons annually – around 40% of the country's entire refining capacity. Built during 1974-1979, modernized in the 90s, 2005, and 2010, today the refinery is capable of processing high-sulfur and heavy grades of the Urals crude oil. The last modernization of the Petromidia Refinery, completed in 2013, provides the basis for the next phase of the European strategy of JSC NC "KazMunayGas" as the results of the significant technological improvements and enhancement in the refinery's economic performance. Thanks to the investment in the refinery's modernization, and the initiatives of the transformation program – Change for Good, today the Petromidia Refinery has set up output of products meeting the European Union standards. 100% of the produced diesel and petrols comply with the Euro-5 regulations.

	2016						
Oil products output, thousand t.	Plan	Fact					
Gasoline	1,325	1,416					
Jet fuel	247	237					
Diesel	2,602	2,521					
Fuel oil	133	152					
Gases	241	257					
Propylene	125	125					
Liquefied gas	248	237					
Petroleum coke	237	244					
Sulphur	53	53					
Total	5,211	5,242					



#### Petromidia Refinery's throughput, thousand tons

**Vega Refinery** is a specialized plant on a 70 ha area in the city of Ploiesti. The refinery was built in 1905 and upgraded in the 1970s. The designed refining capacity is up to 500 thousand tons annually. Vega Refinery is the only enterprise in Romania which is specialized in processing alternative feedstocks (naphtha, heavy hydrocarbon fractions, fuel oil). The refinery's technology allows producing a wide range of solvents according to the specified properties, various bitumens and other specialized products. The Vega Refinery's bitumen production facility is the only one of its kind in the country.

In 2016, the refining throughput in the Vega Refinery amounted to 354 thousand tons. The products turned out are used in the chemical, petrochemical, rubber, textile and footwear industry.

**Petrochemical complex (PCC)** is integrated with the Petromidia Refinery. The existing facilities of the complex with the rated capacity of 220 thousand tons produce polypropylene, high-density and low-density polyethylene of various brands. The source of feedstock is propylene produced in the refinery. A portion of ethylene required for the production is purchased from other suppliers. The refining throughput of PCC amounted to 189 thousand tons in 2016.

#### **Retail segment**

KMGI, via its Rompetrol brand, is an influential trademark of the national network of fuel-filling stations and fuel-distribution points of other types, known for the high quality of the range of fuel products presented, the accompanying service, the network of HEI restaurants and a comfortable filling system utilizing Fill&Go cards. The "Efix" fuel (Euro 5), produced in the Petromidia Refinery, is the most famous and well-proven brand of fuel in the Black Sea region.

Romania is the key market for KMGI, with high return on sales channels. The Romanian retail sale market is marked not only by the high level of fuel sales, but by a considerable profit margin as well, compared to other Black Sea region markets. Economic growth and rapidly-changing infrastructure open up opportunities for quick and profitable expansion.

KMGI's strategy is in strengthening the company's positions as a major player ranking among the top three in the Black Sea region, through seamless development of all sale channels, including the development of the own network of FFSs and re-branding of the existing stations. Strengthening positions in the vicinity of the city of Bucharest is in the centre of this strategy. Furthermore, KMGI's trading operations for distribution of liquefied petroleum gas will be expanded.

#### Company's share on the key target markets

Key figures		units	2016	2015	2014	2013	2012	2011	2010
Downstream Romania		thousand tons	1766	1486	1653	1568	1426	1486	1398
	Market share	%	26.7%	25%	27.4%	27%	24%	25%	24%
GAS Romania		thousand tons	221	274	282	260	289	274	263
	Market share	%	29.5%	34%	39%	37%	41%	34%	41%
Georgia		thousand tons	205	151	206	158	145	151	140
	Market share	%	18.9%	18%	23.43%	19%	15%	18%	18%
Moldova		thousand tons	308	58	188	128	76	58	56
	Market share	%	37.2%	7.3%	29%	20%	10%	7.3%	7.2%
Bulgaria		thousand tons	448	206	206	156	165	206	180
	Market share	%	17.2%	6%	8.75%	6%	6%	6%	5%

#### **Company's Development Outlook**

The KMGI business development strategy is based on the idea of vertical integration – "well-to-wheel". Using the resources of the parent company in crude oil production, the KMGI group flows organically from the chain, which realizes oil refining and further sales of oil products with value added.

Geographically extensive business development of KMGI is focused in the regions of the Black Sea and the Mediterranean Sea. The logistic potential gives an opportunity to penetrate in the Black Sea market, where the market of the Republic of Turkey is the largest one. Therefore KMGI is studying the penetration way to the Turkey oil products market.

Also, as part of the KMGI business development, all penetration ways to the perspective markets of Europe, including the markets of Greece, Italy and Spain are being intensively analyzed

#### Process improvement and costs optimization

In short and mid-term KMGI will continue working on the operational costs reduction at Petromidia Refinery. In this regard the projects aimed at cost saving and improving the operational energy efficiency will be implemented. To reduce the electric power and steam consumption cost and to secure uninterrupted supply of electric power for Petromidia refinery, the company considers a possibility of constructing a cogeneration electric station at the facilities of Petromidia refinery with the capacity of 75 MW.

At the same time, within the framework of the programme on increasing the efficiency and optimization of operational units, in 2015 the refining costs were reduced by 27%, and the capacity of Petromidia refinery increased to 98%.

#### **Investment Projects to Develop the Refineries**

Following the Government programme on industry and innovation development of the Republic of Kazakhstan investment modernization and reconstruction projects are being implemented at the three refineries of the Republic.

Updating of the refineries will allow producing petroleum products of the K4, K5 emission standards, raw materials for the petrochemical industry (benzene, paraxelene). Modernization of plants is designed to provide an ability to produce petroleum products of the K4, K5 emission standards, raw materials for the petrochemical

industry (benzene, paraxelene), as well increasing the capacity and depth of oil refining, and reducing harmful impact on the environment.

### Reconstruction and modernization of the Atyrau Refinery

EPC contract on the project "Construction of Complex for the production of aromatic hydrocarbons" (CCA) was entered into with the company "Sinopec Engineering Group" (China).

Project's objectives:

- Output of products with high added value benzene (up to 133 thousand tons per year) and paraxelene (up to 496 thousand tons per year).
- Production of K3 motor fuels, in accordance with the requirements of the Technical Regulation of the Customs Union.
- Reduction of the harmful impact on the environment by reducing emissions of pollutants into the atmosphere.

Commissioning of catalytic reformer (CCR) with the capacity of 1.0 million tpa (the first starting complex) was carried out in December of 2015.

Guaranteed indicators of the licensor for the CCR installation have been achieved. Commissioning of the CCR unit allowed:

- to obtain a component of motor gasoline with an octane rating of 103 (research method);
- to increase the production of high-octane gasoline from 259 thousand tons (in 2014). to 604 thousand tons;
- to reduce the content of benzene in gasoline to 1%;
- to obtain benzene with a purity of 99.9%;
- to process additional straight-run gasoline from the market up to 200 thousand tpa.

Production of 100% environmentally friendly diesel fuel was accomplished with the appearance of additional amount of hydrogen from the CCR, and the share of diesel fuel with low (-35°C) pour point was increased from 13% to 28%.

The commissioning of the Construction of Complex for the production of aromatic hydrocarbons was completed in 2016. Currently, the system operates on fuel options with the increase in output of high-octane gasoline, because of the need for delivery of gasoline to the domestic market.

EPC contract on the project of "Construction of an advanced oil refining complex" was signed with a consortium of contractors: "Group Sinopec Engineering" (PRC)/ "Marubeni Corporation" (Japan) and JSC OGCC "KazStroyService" (Kazakhstan).

Project's objectives:

- Production of K4 and K5 motor fuels, in accordance with the requirements of the Technical regulations of the Customs Union;
- Increase of the plant's capacity up to 5.5 million tpa;
- Increase of oil refining depth.

Construction and installation works are in the process of completion at 12 process units and 51 off-plot facilities.

After completion of the project, CGAP, AOR on the recruitment of process plants will meet European standards.

# Reconstruction and modernization of the Shymkent oil refinery plant (LLP "PKOP")

EPC contract on the project "Reconstruction and modernization of the Shymkent oil refinery plant " was signed with the company "CPECC" (PRC).

Project's objectives:

- Production of K4 and K5 motor fuels, in accordance with the requirements of the Technical regulations of the Customs Union;
- Increase of the refinery's capacity up to 6 million tpa;
- Increase of the processing depth.

The project includes 2 stages:

✓ The  $1^{st}$  stage is aimed at production of K4 and K5 motor fuels in accordance with the requirements of the Technical regulations of the Customs Union. It includes reconstruction of the existing hydro treatment unit for diesel fuel and construction of the sulfur recovery unit. These projects are completed in 2015. Construction and installation works on the isomerization unit with the capacity of 600 thousand tonnes per year are additionally being completed under the  $1^{st}$  stage. Commissioning of the plant is expected in 2017.

 $\checkmark$  The 2<sup>nd</sup> stage is aimed to increase the refinery's capacity up to 6 million tons of oil annualy and increase the conversion ratio. This stage is the most difficult in the technological plan and includes the construction of a complex of catalytic cracking units. The second stage also includes the development of operational documentation, placing of orders for the equipment, manufacturing of earthworks, foundations for the equipment.

# Modernization and Reconstruction of the Pavlodar PC Plant

EPC contract on the project " Modernization and Reconstruction of the Pavlodar PC Plant" was signed with Rominserv S. R. L. (Romania) and NFC (PRC).

Project's objective: production of K4 motor fuels, in accordance with the requirements of Technical regulations of the Customs Union.

In May 2015 project optimization was performed, reducing work scope and cost of the project. 26.05.2015 – the decision was coordinated with the Intergovernmental commission for development of the oil and gas and energy industry.

Isomerization plants, the sulfur recovery complex, and other facilities are under construction and installation works: installation of metal structures, piping, utilities, electrical equipment, control and measuring instrumentation. The project will be completed in 2017.

# **Operations in Gas Refining**

According to the Agreement between the KazRosGas LLP and Gazprom Dobycha Orenburg LLC, processing of crude gas of the Karachaganak field in the volume of over 8 bcmpa is performed at the Orenburg gas processing plant. The commercial gas is transported to the internal market of Kazakhstan and for export as well.

The Orenburg gas processing plant of Gazprom OJSC was created on the basis of the Orenburg gas condensate field opened in 1966. The main processing products are stripped gas, stable condensate and stable oil, technical sulfur, broad fraction of light hydrocarbons, odorant, liquefied gas, fuel gas.

### MARKETING AND SALES

# Oil and oil products

Retail sales of petroleum products on the domestic market of Kazakhstan are carried out through a network of petrol stations under the brand name of "KazMunayGas" (KazMunaiGas Onimderi LLP), located in all regions of Kazakhstan, cities of Astana and Almaty.

The Company's share in the retail oil market of Kazakhstan in 2016 is around 16%. By 2018, it is planned to increase the market share by at least 20%, and by 2022 – up to 32%.

The expansion programme of personal network sales under the brand name of KazMunayGas is carried out both due to construction of new filling stations and acquisition and re-equipment of existing filling stations. By the construction of filling stations of KMG the best world practices are used, module constructions, up-to-date fuel-dispensing units and progressive software are installed. As of December 31, 2015 KMG-RM owned 321 filing stations, 305 of them – were own, 1 – leased, 3 – combined (fuel filling stations/gas filling stations), 12 gas filling stations, including 1 ACSGF, and also 11 petroleum depots and 2 camping grounds. In addition, in the fourth decade of 2015 implementation of the CODO program was started – outsourcing of management in 151 filling stations to sole proprietors.

KMG, as a national operator in the oil and oil products segment, makes shipment of socially important oil products at a reduced price in accordance with the schedules of the Ministry of Energy. Annually KMG RM at sowing and harvesting times supplies dizel fuel at a reduced price to the agricultural producers, and as heating season sets in, makes shipment for heating of social and production facilities and institutes. In 2015 for the need of agriculture 120 thous tons of dizel fuel, and 24 thous tons of mazut were offloaded.

In addition, following Decree of the Government of the RoK as of 12.12.2014 No. 1304 sole oil supplies operators to the Military Establishment of the Republic of Kazakhstan, the Frontier Service of the National Security Committee, the National Guard of the Republic of Kazakhstan, an authorized body in civil protection and an authorized body in state material reserve have been determined:

1) gasoline and diesel fuel - KazMunaiGas Onimderi LLP;

2) aviation fuel -KazMunayGas - Aero LLP;

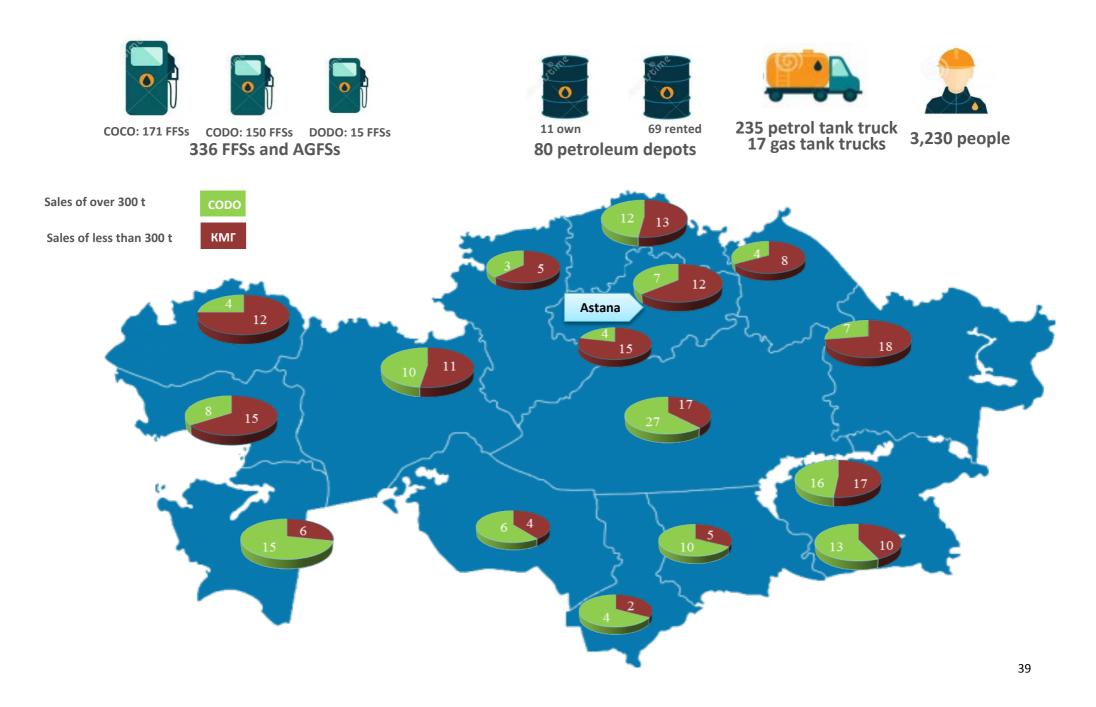
3) mazut –KazMunaiGas – processing and marketing JSC.

In 2016, KMG-RM delivered fuel oil in the amount of 32 thousand tons by the rail/truck transportation to the Armed Forces of the Republic of Kazakhstan and the Border service of national security Committee of the Republic of Kazakhstan.

A competitive company is developing in the market of aviation fuel supply of air transportation of Kazakhstan, within one of the strategic objectives of its activities in the sector of marketing of petroleum products – KMG-Aero, created in 2014.

By the end of 2016 sales volume of the KMG-Aero aviation fuel was 55.7 thousand tons, or about 10% of the market.

# The network of "KazMunaiGas" fuel filling stations: distribution by regions and volumes of sales



# Gas

Marketing of natural gas on the domestic market is carried out by subsidiaries of JSC "KazTransGas" – JSC "KazTransGas Aimak" and JSC "KazTransGas-Almaty". The functions of these companies include wholesale purchase of natural gas for the domestic market, gas transportation through regional gas-distributing networks, operation of gas-distributing facilities and networks and sales of natural gas on the domestic market.

Gas exports to external markets and sales of gas for Kazakhstan's domestic market requirements, including swap operations, are carried out by LLP "KazRosGas", established on a parity basis by JSC NC "KazMunayGas" and "Gazprom" PJSC in 2002. LLP "KazRosGas" receives volumes for sale under the "15 Years Karachaganak Deposit Sour Gas Purchase Agreement".

The RoK's southern regions and Kostanai Province are supplied with Gas by means of SWAP operations with the Gazprom PJSC, out of the Uzbek gas resources via the BGR-TBA and Gazli-Shymkent gas pipelines, Uzbek or Turkmen gas via the Turkmenistan-China TGP, Kazakh gas via the Bozoi-Shymkent gas pipeline, and the Russian gas via the Bozoi-Shymkent gas pipeline.

Gas supply to Kazakhstan's western regions is covered by the gas resources of Kazakhstan subsoil users.

	2016	2015	2014	2013	2012	2011	2010
Domestic market	11,763	11,469	11,141	9,351	10,495	8,284	7,245
Exports	4,323	2,588	1,802	2,378	1,089	2,845	2,750
TOTAL	16,086	14,057	12,943	11,729	11,584	11,129	9,995

# Natural gas sales

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## **DEVELOPMENT OF SUPPORT-SECTOR PROJECTS**

# "Jack-Up Floating Drilling Rig Construction" Project

KMG Drilling & Services LLP is implementing the "Jack-up Floating Drilling Rig (JUR) Construction" project. Within the framework of this project, the agreement on construction of the JUR with the consortium of the Keppel Kazakhstan LLP and the Ersai Caspian Contractor LLP was signed on 5 July 2012.

During 2016 the JUR was inspected, inventory taking of equipment and materials carried out, and training of the operating personnel was given. Efforts for preliminary acceptance of the JUR are underway.

# KMG Drilling & Services LLP's project for implementation of the Tengizchevroil LLP's drilling programme, performed jointly with Nabors Drilling International Ltd.

Implementation of the project was initiated within the framework of the Memorandum between the RoK's Government and the Tengizchevroil LLP "On cooperation for the purpose of promoting investment, education and training, and employment in the RoK through implementation of the Tengizchevroil LLP's Future Growth Project and Wellhead Pressure Control Project" of 14 November 2013.

On 21 April 2015, the agreement on establishment of the KMG Nabors Drilling Company LLP joint venture was signed by the KMG Drilling & Services LLP and Nabors Drilling International Ltd. Creation of a centre of competences on the premises of the KMG Nabors Drilling Company LLP will make it possible to adopt Nabors' experience, technology and management system, train highly-knowledgeable staff in drilling services in compliance with the world's best practice. In the long-term, efficient operations on major oil-and-gas projects in the RoK as a drilling contractor.

Since October, 2015 the KMG Nabors Drilling Company LLP has been performing drilling work at the Tengiz field within the framework of the service order signed with the Tengizchevroil LLP.

In 2016 KMG Nabors Drilling Company LLP conducted operating activities without incidents using 4 drilling rigs. In October, 2016 the new drilling rig, owned by KMG Drilling & Services LLP and manufactured in the USA, was put into operation.

In a matter of 2016, 11 wells were drilled with a total length of 66,042 meters.

# Ship-building/ship-repairing yard construction project jointly with Eni S.p.A. Company (Italy)

On 16 May, 2014 a Cooperation Agreement of the Second Phase upon the Project of "Shipyard" was signed between JSC NC KazMunayGas and Eni, wherein the companies agreed upon the main technical and commercial terms of its implementation.

The "Sudoverf" ("Shipyard") project involves the construction of a ship-building/ship-repairing yard in Kuryk village, Mangistau oblast. Production capabilities of the new yard will allow building and repairing of sea vessels of various applications in Kazakhstan, so as to maintain maritime operations as well.

Front-end engineering design (FEED) and design and estimate documentation for the project were drawn up by Royal Haskoning (Dutch company) together with such Kazakhstani companies as NIPINeftegas JSC and Research and Design Institute KASPIMUNAIGAS JSC.

All required approvals and permissions with respect to the project have been obtained, and land parcels are registered. In 2016 the positive conclusion of Gosexpertiza RSE for the project design and estimate documentation was received.

JSC NC KazMunayGas jointly with Eni addresses organizing of international tenders to choose contractors for construction and operation of the yard.

# "The Route of Cargo Transportation" Project

On March 11, 2014 the KMG Investment Committee made a decision to approve of implementation of investment project "Cargo transport route". The main objective of the project is development of the offshore transportation junction in the Northern part of the Caspian Sea to meet future demand of Tengizchevroil, LLP (TCO) in transfer of large-size modules and other cargos necessary within the framework of the project of future expansion (FEP).

On May 15, 2014 a Contract between TenizService, LLP and TCO on construction and operation of the object was signed.

The development of design and estimate documentation for the construction of onshore and offshore facilities of the project was completed. Positive conclusions of Gosexpertiza RSE for the design and estimate documentation were received.

In 2016 the works on dredging the Seaway Channel were continued. Within the scope of preparatory works on onshore facilities pit operation, construction of service access roads and builders' rotation camp are underway. Works on harbor wall installation, Turning basin excavation and 4.5 km and 14 km causeway construction are carried out. Additionally, works on the excavation of coastal area of the Seaway Channel, driving of concrete piles and pad work are performed.

# AktauOilMash LLP JV establishment project

Within the framework of creating new oil and gas equipment production facilities, in 2013 KMG entered into a Memorandum of Cooperation with the Russian company Sputnic-Integratsia Ltd., under which the AktauOilMash LLP (AOM) joint venture was established. AOM is specialized in producing various types of equipment, including the following: oil/gas fiscal metering units, liquid/gas rate measurement units, modular cluster pump stations, oil/gas treatment facilities, pump and compressor unit oil supply systems, integrated power supply systems and some others. A 10 ha land plot in sub-zone No. 1 of the Aktau Seaport SEZ has been registered for construction the plant, AOM has also leased out production shops on the APP's territory, owned by the KPI JSC, with the total area of 17,500 m<sup>2</sup>, around 200 engineering employees and blue-collar job workers are employed, the administrative and management personnel has been formed, CT-KZ certificates for all types of output products obtained. Currently, agreements on production and delivery of various types of oil and gas equipment are in place between the AktauOilMash LLP and KMG's subsidiaries for the amount of around 6 bn KZT. The JV should reach its full capacity and range of products by 2018.

# KMG's Innovation-and-Technological Development

#### Implementation of the 2014-2018 Innovation-based-and-technological Development Strategy

As a result of seamless implementation of the Innovation-based-and-technological Development Strategy of JSC NC "KazMunayGas", approved by KMG's Board of Directors on 20 February 2014, the Company has managed to achieve considerable growth in the ITD key indicators:

ITD's KPIs	units	2013	2016
Infrastructure expenses share in the company's proceeds	%	0.51	4.48
Share of staff engaged in innovations, in the total headcount	%	0.29	1.1
Number of innovative projects / rationalization proposals introduced after approval by the STC	units	28	38
R&D expenses share in the company's proceeds	%	0.01	0.7
Share of investment in innovation-based projects in the company's proceeds	%	0.06	11.69

The Company's scientific and innovation infrastructure is based on the KazMunayGas Research and Development Institute of Production and Drilling Technology LLP (KMG RDI PDT) and the Scientific-and-Technical Center of KazTransOil Joint-Stock Company. Construction of additional innovative infrastructure

facilities for the scientific research Institute "Caspimunaigas" (Atyrau) and "KazNIPImunaygas" (Aktau) continued in 2016.

A Visualization Center was established on the basis of SRI TPD KMG and equipped with advanced equipment and software for real-time visualization, online drilling support, work with databases and geological and hydrodynamic models of the Company's oil fields.

Works on creation of the intelligent field monitoring systems, GPS monitoring system, intelligent well control stations and other systems are continued at the Company's fields. The company is introducing the technology of polymeric and cyclic water flooding, horizontal drilling, CNL technology with polymer coating, sacrificial-anode protection, simultaneous separate injection and disposal of oil contaminated soil, decontamination of radioactive scrap metal and etc. Works on construction of the desulphurization unit of associated petroleum gas at KMG's Prorva group of fields are continued.

Application of the technology of Anode earthing switch of complete graphite formation type upon repairing works, modernization and new construction at the facilities of electrochemical protection of gas transportation system are recommended in the sector of the oil and gas transportation. Enhancement of corrosion protection of pipelines, automation of remote control systems by the parameters of electrochemical protection of gas pipelines are introduced in the company. Modern cleaning systems and oil heating during transportation are embedded in the production. The company considers issues on the use of unmanned and/or pilot aircrafts for monitoring of the condition of pipelines, as well as the issues on implementation of advanced fiber-optic monitoring systems for pipelines' technical condition. Testing of gasification of settlements by compressed natural gas is also carried out.

Modernization of three Kazakhstani oil refineries projects for the installation of equipment based on membrane bioreactors for wastewater treatment, stationary systems of vibration monitoring of the oil refinery's compressor equipment, survey projects on water recycling unit with the development of the program of chemical water treatment, automatic dosing and control of the concentration of the reagent, the projects of recycling of bottom sludge and other projects are implemented in the processing sector. Works on the promotion of measures for State support of motor fuel development are continued.

Implementation of Kazakhstan's first project of coalbed methane production in Karaganda coal basin is being held.

The RTD, held in 2016, is aimed at the improvement of exploration efficiency, intensification of production, cleaning of oil pipelines and reservoirs, increasing of pipelines' anti-corrosion resistance, development of methods of increasing the refineries' overhaul cycle, increasing of energy efficiency of production processes, development of new catalysts for refineries and etc.

#### Development of the technical and engineering employees' corporate culture

The Rules of valuation of employees' ideas for innovative-technological development were developed and brought into action in 2016 in the framework of implementation of the Company Policy in the field of rationalization and inventive activities as well as the Strategy of innovative-technological development, works on testing of a new evaluation methodology and selection of ideas, automation of the "Fund of Ideas" project and the creation of a unified database of ideas on the intranet portal of the Company were completed. Innovation competition was held among young workers of the Company, the results of which allowed the ideas of the twelve authors to be qualified for the finals, three of which became winners of the contest and were awarded with diplomas and financial reward at the solemn meeting devoted to the 25th anniversary of independence of the Republic of Kazakhstan. Out of 12 ideas qualified for the finals of the competition, eight ideas were recommended for implementation in SDEs, 5 of which have already been introduced, and 3 are planned to be implemented in 2017.

The "Bank of ideas" project was also launched in 2016 on the corporate website of JSC "KazMunayGas – Refining and Marketing", which registered more than 1,500 users, and received nearly 200 proposals, 41 of which were approved.

The company further intends to continue work on the development of mechanisms for stimulation of innovations, invention and rationalization activities, and the creation of favorable conditions for boosting creative potential of KMG's employees and its SDEs.

### SUSTAINABLE DEVELOPMENT

Since February 7, 2006 JSC NC "KazMunayGas" has been the member of the UN's Global Compact and has consistently supported the commitment to 10 principles of the Global Compact and 17 goals of sustainable development.

Sustainable development in the modern world of business is becoming the main focus of organizations and communities. Combining economic, environmental and social issues, sustainable development becomes an integral part of strategic management for many organizations.

With the approval of the Corporate Governance Code of SWF Samruk-Kazyna JSC (Fund), KMG considers the sustainable development as one of the strategic goals along with growth of the company's long-term value . Integration of sustainable development values into key business processes, operations and decision-making processes becomes the main priority.

In September 2016, Kazakhstan ratified Paris Agreement on Climate Change, and as a leading company in the oil and gas industry KMG also understands the importance of its contribution to the initiative of global sustainable development.

KMG's Sustainable Development Report for 2015, which reveals the main achievements and managerial approach for the improvement of economic, social and environmental activities, is prepared in accordance with the "extended" version of the reporting guidelines for the Global Reporting Initiative (version G4) and was ranked third among 137 reports of other Kazakh companies in the category of the "Best Sustainable Development Report" in the annual reports competition held by the "Expert RA Kazakhstan" rating agency.

The formation of a control system in the field of sustainable development began in 2016 under the management of the Fund. The competence of the Governing Board, the Board of Directors, Committee of the Board of Directors on strategy and investments in the context of sustainable development was expanded. A working group on management of the integration process of sustainable development at the top management level of the Company was created.

Interaction with stakeholders on the issues of sustainable development, regular meetings and training courses on sustainable development are held on a quarterly basis in order to enhance the culture of sustainable development. Additionally, the Reference model for sustainable development for the portfolio companies of the Fund is in the preparation process.

The JSC NC "KazMunayGas" has published a separate Sustainability report for the year 2016, which discloses the information on non-financial aspects of the company, reflecting its interest in providing transparent and open information. The report was prepared in an extended version and in accordance with GRI GR international sustainability reporting guidelines.

The sustainability report also constitutes a message about KMG's progress in the framework of the UN Global compact. The information presented in the report is balanced, reflects challenges of the companies and challenges in international and regional context, and also the priority guidelines for further development.

The report structure is consistent with the strategic directions of KMG on sustainable development: our employees and workplaces, with an emphasis on a culture of safety and environmental performance. Examples of practice initiatives, implemented in the regions of our activities, are provided for local communities and joint projects with our partners.

KMG's Sustainable Development Report is posted on the corporate website <u>www.kmg.kz</u> and on the UN Global compact website <u>https://www.unglobalcompact.org/participation/report/cop/create-and-submit/active/307791</u>.

### **Personnel Policy**

The goals of the shareholders of KMG for 2016 include the qualitative implementation of the meritocracy principles through specific mechanisms and tools of personnel policy.

To this end, in 2016 KMG continued the policy of implementing a rigorous competitive selection in the KMG group of companies in the recruitment for administrative positions through the mandatory publication of vacancies on the company websites and selection of the best candidates. Thus, competitive selection

procedures were implemented in the corporate centers of KMG subsidiary dependent entity Exploration&Production KazMunayGas, KazMunayGas Refining&marketing, KazTransOil, KazTransGas.

KMG continues training and development of personnel to achieve the set strategic goals and objectives. To this end, in 2016, the KMG group of companies were funded for a total of KZT 4.5 billion for the training and development of personnel, with an average cost of training - KZT 46,000 per employee, which is 17.2% more than in 2015.

The number of workers trained include 12% women and 88% men. At the same time, 89.4% of the trained are production personnel, 10.6% - administrative and managerial personnel. A high percentage of trained production personnel is associated with the mandatory training of employees employed at hazardous production facilities in accordance with the legislation of the Republic of Kazakhstan. The average number of academic hours per one trained employee of KMG is 33.6 hours.

As part of the implementation of the new training model for KMG personnel (70/20/10), which involves 70% of the training in the workplace, 20% - internal training, 10% - external training, in 2016 a project was launched for the KMG group of companies – the Institute of Internal Trainers.To this extent, in 2016, internal trainers of KMG held seminars, in which 202 employees of the KMG corporate center and 132 employees of the subsidiaries were trained. The institute of internal trainers consisted of 22 workers of KMG, who are the experts in the field of their activity possessing the high personal and business competences. All of them completed the training programme "Training for Trainers". Among the internal trainers, the "Best Trainer of the Year" contest was held, following the results of which the winners were awarded with registered certificates for training.

In 2016, 803 citizens of the Republic of Kazakhstan (employees of KMG Corporate center, KMG subsidiary dependent entity and unemployed citizens of the Republic of Kazakhstan) were trained at the expense of contractual obligations for the "Satpayev", "N", "Zhambyl" and "Kurmangazy" projects for a total of KZT 413 million.

The Company creates all the necessary conditions for training and development of the personnel reserve, the main principle of which is targeted and systematic training of the leading employees to ensure continuity of management, as well as providing employees with an opportunity for development and career growth in the KMG group of companies.

So, in order to implement individual development plans for the "personnel reserve" of the KMG group of companies, in 2016, in cooperation with KBTU, special modular training programs were developed, within the framework of which 11 seminars were held for 29 succession candidates.

In 2016, succession candidates were trained by the Executive MBA dual degree program. Within the framework of this program in May 2016, allof them completed an internship at Robert Gordon University, Aberdeen.

In order to train the leaders of the new format with leadership competencies in 2016, it was decided to send 9 candidates of the KMG group of companies to study the Executive MBA program, specially developed in cooperation with the Kazakh-British Technical University and State University of Oil and Gas named after Gubkin.

KMG continues to implement the training activities envisaged by the plan for the development of the personnel reserve of the KMG group of companies.

In order to exchange and study best practices, acquire professional knowledge and skills, a project is being implemented from 2016 to send employees of the KMG group for internships in partner companies. So, in 2016 an agreement was reached on cooperation in organizing internships with 7 international oil and gas companies, such as Oil Company Rosneft OJSC, Nabors Industries Ltd, Schlumberger company, PJSC Gazprom, Royal Dutch Shell, PJSC Tatneft, CNPC.

Based on the agreements concluded in 2016, 18 employees of the KMG group of companies completed an internship at the Karamay Xinjiang field of the China National Petroleum Corporation (CNPC) in the sphere of drilling, 3 KMG employees and 5 employees of the subsidiaries completed an internship at the subsidiaries of PJSC Rosneft, in such areas as:

- Health, safety and environment, fire safety;
- Geology and geologic exploration works;
- Refining;
- Automation of production processes.

In addition, in order to expand the project on sending workers for internships, in 2016 a Memorandum on cooperation in the field of education and training of personnel in the oil and gas industry was signed with JSC Center for International Programs.

In order to train young qualified personnel for the oil and gas industry and in KMG's desire to develop human capital in the regions of operation, pilot projects for the organization of dual training in Pavlodar Refinery, ICA and EMG were launched earlier, and continue in 2016. The main principle of organizing the dual training is enterprise-based training - 60% of the time, training in the college - 40% of the time.

So, 33 students of the Pavlodar Chemical and Mechanical College passed training at Pavlodar Refinery: 17 students specializing in "Technology of oil and gas processing" and 16 students specializing in "Maintenance work and repair of equipment". As a result, 26 students were employed.

39 students were trained at Embamunaigas JSC: 34 students of the Atyrau Institute of Oil and Gas, specializing in the "Development and Operation of Oil and Gas Fields" and 5 students of the APEC Petrotechnic Higher College, specializing in the "Exploitation of Oil and Gas Fields". As a result, 4 students were employed.

26 students were trained at Intergas Central Asia JSC, the branch of the "Taraz" Gas Pipeline Authority": 25 students from the Zhambyl Polytechnic College, specializing in the "Exploitation of Oil and Gas Fields", and 1 student from the South Kazakhstan Polytechnic College specializing in "Automation and management of technological processes of the oil refining and chemical industry".

Besides, KMG is carrying out targeted work to train young specialists. Agreements on the practice of students at specialized universities of the country were concluded (KBTU, KazNRTU after K.I. Satpayev, Atyrau University of Oil and Gas, Aktau State University named after Sh. Yessenov, KIMEP, ENU named after L. Gumilev, etc.). Every year university students undergo industrial or pre-diploma practice, both in the central offices of organizations and in production branches of the KMG group of companies. One mentor from among experienced workers is assigned to each student to transfer experience and knowledge.

The personnel evaluation procedure has been in place in KMG since 2004 and is aimed at determining the effectiveness of the activities and stimulating adequate material and non-material remuneration.

The procedure is regulated by the Rules for evaluation of administrative personnel of KMG and is based on two types of evaluation: professional development and performance evaluation.

According to the recognized international practice of effective human resources management, this procedure is based on assessing the business and leadership competencies of employees, taking into account the evaluation of performance during the reporting year.

Performance evaluation is carried out quarterly on the basis of goals set for the year and has specific quantitative results from 0 to 1.5 of salaries as a quarterly bonus payment.

The evaluation of professional development is conducted annually and pursues the goal of non-material incentives - the evaluation commission can recommend enrollment in the personnel reserve, promotion, rotation in the group of companies of KMG, individual training or other opportunities for professional development.

In 2016 an annual assessment of employees' performance for 2015 was conducted, according to which 13% of employees of the KMG corporate center received a recommendation for enlistment in the personnel reserve, 5% - an increase in the position, and 29% - a revision of the official salary. Based on the results of the assessment, individual development plans (IDPs) are formed for each employee.

In addition, in 2015, a Standard Model of the personal (business) competencies of managers, management and administrative personnel for the KMG group of companies was adopted, which was approved as part of the project on management evaluation of the KMG group of companies, which resulted in an assessment of 286 people, including 177 employees of SDE and 109 employees of KMG's corporate center.

Based on the results of the evaluation, the Individual Development Plans (IDPs) and the Succession Plan for key positions of KMG and SDEs of CEO, CEO-1,2 levels were formed, namely the level of the first head of the organization and his deputy.

In December 2016, by the decision of the Board of Directors of KMG, the Personnel Policy of JSC NC KazMunayGas for 2017-2021 was approved, which is based on the achievement of the following goals:

1. creation of a single HR function and a unified model of personnel management across the entire KMG group of companies;

2. continuous development and increase of transparency of the HR managing function;

3. development of corporate culture, enhancement of social stability and development of leadership skills among managers of various levels.

These goals will be achieved through the implementation of the following tasks:

- standardization of HR processes, policies, methodologies, tools, templates across the entire KMG group;

- standardization of approaches to building organizational structures for HR across the entire KMG group;

- automation of HR processes;

- output of HR processes that do not bring added value to HR General Service Center;

- creation of mutual respect, trust, unity and cohesion within the HR function of KMG;
- regular monitoring and improvement of HR functions;
- conducting regular communications and providing feedback from the HR function.

### Social policy

At the end 2016 collective agreements were concluded and effective in more than 38 KMG's SDEs, where the signatories are the employers on one side and trade unions or employees' representatives on the other side.

The proportion of the Union members for 2016 is 51,957 persons (69.5%) in the total headcount of 89,909 people in KMG's group of companies.

In order to ensure a single standard approach for the creation of the labor and social conditions, improving social well-being of employees of KMG's SDEs, KMG's Management Board adopted a Standard Form of Collective Agreement that includes such issues as basic rights and obligations of the parties, the organization of labor remuneration, social support of employees, working time, rest time, guarantees of activity of the Trade Union or employee representatives, safety and labor protection, consideration of labor disputes and conflicts, responsibility of the parties for breach of the collective agreement, and etc.

KMG's group of companies is provided with the financial support in connection with the birth/adoption of a child, social benefits on maternity leave, adoption of newborns, financial assistance to large and needy families, payment to the employees on live for childcare of children aged up to one and a half years, organization of holidays for children of employees from 7 to 14 years.

Financial assistance for rehabilitation, payment for medical treatment/surgery, compensation for work incapacity on the basis of preferential conditions, compensation for disability and organization of health insurance for employees and their families are also provided.

Currently, all obligations of KMG's SDE under the collective bargaining agreements are fully executed.

Therefore, the KMG Management Board decided to agree with the KMG obligations of the employer accepted in the collective agreements of the organizations of KMG's group of companies before their signing by the employer.

A pension program for retired employees is implemented in KMG's group of companies, under which the employees after retirement may receive some material support from the organization. Besides, under the program of KMG's SDE in cooperation with the non-working pensioners, our retirees receive financial assistance on holidays, upon reaching the jubilee age, for the provision of medical aid, sanitary-resort treatment and etc.

In order to provide employees with the possibility of early retirement in 2016, a pilot project of the program is implemented, according to which employees are provided with the compensation upon termination of the employment by the agreement of the parties with employees of preretirement age and the compensation upon termination of the employment with employees who have reached the retirement age in 5 KMG's SDE.

However, the Council for Development of Social Partnership and Settlement of Labour Disputes and Conflicts of JSC NC "KazMunayGas" together with the representatives of employees (trade unions) from all KMG's SDE, has made a decision to preserve the existing types and sizes of social support at the current level, and prevent the increase in the level of social support during the crisis.

# Social stability

KMG constantly carries out work on prevention of labor disputes and conflicts in the organizations of KMG's group of companies. Constant monitoring and adoption of measures to prevent social tension allowed maintaining stability and reducing social tensions in the KMG's SDE during the year 2016.

The number of recourses (complaints) decreased in 2016 against 2015 (2016 - 25, 2015 - 29).

KMG implements the following set of measures:

- Standard rules of the Unified Internal Communication System of KMG's SDE have been approved in order to establish a unified system of the Employer's feedback with the workforce to enhance the socio-psychological climate.

- Rules on Proceedings of the Meetings (conferences) of employees on the territory of KMG's SDE have been adopted and stipulate the reciprocal actions and responsibilities of employers and workforce. This is currently important for prevention of disruption or harm to the production process of the enterprise.

- selective conference meetings (audio conference) with hearing the information from deputy managers, supervising social sphere and staff relations, are held for immediate solution of questions affecting the social climate in the KMG organizations.

- meetings on such issues as, wages, rendering of social support to employees, establishing feedback between the administration and labor groups, creating a unified system of internal communications and other matters of interest to employees have been held since the establishment of the Council

# Tools of internal communications in KMG and its SDEs

Today, the Rules of a Unified System of Internal Communications (Regulations) have been introduced in 32 KMG's SDEs for which the following tools are applied:

- reporting meetings between the first leaders and work community;
- meetings of supervisors with work community;
- reception of employees by a chief executive on personal matters;
- chief executive's blog, a corporate information site;
- monitors for video ads, billboards, boxes for collecting complaints and suggestions;
- questionnaire;
- work community consolidation (contests, sports events, corporate events).

By using these tools, employees can communicate their questions to executives; introduce initiatives and suggestions to improve the efficiency of the company.

### Reporting meetings between chief executives and work community

According to the Rules, a reporting meeting between the chief executive with labor collective is held twice a year, (prior the first of March at year-end and prior to the first of September at mid-year).

In 2016, 80 reporting meetings (at year-end and at mid-year) between chief executives and work community were held at 40 KMG's SDEs.

### Meetings between supervisors and work community

A meeting between a supervisor and work community is conducted on a quarterly basis. This type of tool is designed to remove the burden from business leaders in terms of addressing many issues of employees by the supervisors at local levels or for timely notification of the company's management about the issues that arise in the workplace.

Overall in 2016, about 700 meetings with supervisors were held at KMG's group of companies.

#### Reception of employees by a chief executive on personal matters

Reception of employees by a chief executive on personal matters is held in all KMG's SDE, in accordance with the established schedules.

### Corporate information site and chief executive's blog

All KMG's SDEs have corporate information sites and chief executives' blogs

# Monitors for video ads, billboards, boxes for collecting complaints and suggestions

Information booths for employees with weekly updated relevant information are available in all KMG's SDEs, as well as monitors for video ads.

In addition, all KMG's SDEs (foyer, dining room, dorms) have suggestion boxes in public areas.

# Questionnaire

Questionnaire is one of the tools of internal communication for revealing problematic issues in the company.

### Work community consolidation:

#### KMG Championship

In 2016 leaders of the trade unions and work community of the KMG's SDE proposed an idea of the championship under the unified KMG flag. Thus, sporting events at the KMG's SDE, including JSC "Exploration Production "KazMunaiGas", JSC "KazTransOil", "KazTransGas", JSC "KazMunayGas" - Refining and Marketing" and JSC "Mangistaumunaygas" were conducted independently.

The decision to hold a two-stage Spartakiad at the KMG level with the involvement of subsidiaries was made in order to promote a healthy lifestyle, involvement in physical culture and sports, and establish communication between the employees of KMG's SDE.

Therefore, qualifying stages of the Spartakiad were held from March to July, 2016 in 10 groups formed of the KMG subsidiaries

It was attended by about 50 KMG's SDE on such business areas as exploration - mining, oil transportation and marketing of gas, refining and marketing of oil, oilfield services, drilling and service projects, with a total amount of 2 500 thousand employees, the winners were sent to participate in the final competition of the Spartakiad.

Six sports complexes of the city of Astana hosted the Final stage of the Spartakiad of KMG's group of companies, dedicated to 25-anniversary of Independence of the Republic of Kazakhstan, and held on the eve of the Day of Employees of the Oil and Gas Industry - on September 4-6, 2016.

More than 500 competitors from 30 organizations of KMG's group of companies participated in the Spartakiad, including the Central Office.

Within 3 days the competitors competed in a competitive and friendly atmosphere in 9 sports: mini football, basketball, volleyball, billiards, running and mixed relay, table tennis, chess, checkers and togyz kumalak.

At the end of the competition all the winners were awarded with medals and diplomas, as well as cash prizes of the respective dimensions according to the taken places.

Championship will be held annually.

#### Professional skills contest "Uzdik Maman/Best in profession"

The professional contest "Uzdik Maman" was held in 2016 for the first time at the KMG level with the participation of 24 organizations of KMG's group of companies among 20 professions. The competition was organized at six production sites with the participation of 126 contestants, who took first places in the internal competitions conducted in their companies.

JSC "Mangistaumunaigas" demonstrated their skilled oil and gas operators, operators of maintaining reservoir pressure, operators of wells' research, mechanics for repair and maintenance of technological equipment.

On the basis of "Oil Transport Corporation" LLP such transporters competed as: car drivers, drivers of trucks, motorists who operate 320 cementing unit.

Drilling crews, CWO and WPM crews, as well as lathe operator competed on the basis of the "Oil Services Company" LLP.

Educational and training center of "KazTransOil" JSC combined commodity operators, instrumentation technicians, electric and gas welders, electricians, technicians, lab assistants for chemical analysis from different KMG subsidiaries.

The strongest workers of four professions were identified among three oil refineries (Atyrau Refinery, Pavlodar Petrochemical Plant, PetroKazakhstanOilProducts) on the basis of the Atyrau Refinery in Atyrau. The winners, who took the 1<sup>st</sup> places at the first stage of the contest held company's SDEs, took part in the competition.

The contestants went through two stages of examination of theoretical knowledge and practical skills; testing was conducted online, participants had to answer 50 questions chosen by the computer automatically.

Those, who successfully passed the testing of the theoretical part of the competition, did some practical assignments in the second stage of the competition in accordance with the approved regulations on wells, facilities, vehicles and equipment, where live production processes existed.

Official results of the competition were announced on October, 7 in Aktau, a solemn awarding ceremony of the winners was held as well. The best of the best were awarded with the medal "Uzdik Maman", cash awards and valuable prizes.

## Youth rally

The 3<sup>rd</sup> KMG Youth rally on the "Work of KMG's Youth Council for 2016 and the challenges ahead" was held on the 24 - 25 October of 2016 in Aktobe. Around 100 young employees of KMG's group of companies and about 100 representatives of youth organizations of Aktobe region took part in the rally.

Additionally, a contest for the best innovative ideas among young workers was held in 2016, that was attended by 50 young employees from 15 subsidiaries and affiliates of KMG. The winners were awarded with certificates and diplomas of KMG according to the results of competition.

# Social Climate Monitoring

Tools of "Social Climate Monitoring" (SCM) have been developed in order to prevent tension and respond in a timely manner, as well as for optimization of the works according to the Rules of the Internal Communication System in KMG's SDE.

The SCM was developed for solving the following tasks: obtain relevant information about the level of social tension in the required period of time; tracking of symptoms and precursors of social conflicts in advance; obtaining the statistics by problem groups (fields).

According to the obtained results, it is possible to form the project activities (the response plan).

The SCM system was tested in 2016 in a pilot mode at 6 KMG's SDEs.

# Social Stability Rating (SSR)

Since 2013 the Samruk-Kazyna JSC's Social Partnership Centre has conducted a sociological survey in KMG's SDEs to determine the Social Stability Rating (SSR) on an annual basis.

According to the surveys administered, KMG's SSR grew from 61% to 74% during 2013-2016 and is sustainable at the "above the average" level.

Following the results of the SSR survey, appropriate Action Plans are developed for all identified areas of concern on an annual basis.

# Social Partnership

KMG representatives are full members of the sectoral commission of the Ministry of Energy of the Republic of Kazakhstan "Branch Commission on social partnership and regulation of social and labor relations of the oil and gas industry", which includes representatives from the employers - members of the "KAZENERGY" Association and representatives of oil and gas trade unions, refining and petrochemical industries.

For the development of the Sectoral Agreement in 2016 proposals were made by the KMG representatives on the following issues:

- overtime;

- termination of the employment contract with the employee, in the absence of the possibility of a transfer to easy work;
- social benefits granted to employees for rehabilitation;
- other types of social support, social guarantees, compensations and benefits;
- required certification, after reconstruction, modernization, establishment of new equipment and technology;
- conduction of additional medical examinations at the workplace, if necessary, determining the health condition of the employee;
- conduction of additional medical examinations for long-term refuse from eating of employees working in shifts;
- compulsory meals, provided by the employer, for employees working in shifts,;
- prevention of termination and reduction of rate of work, strikes and other disturbances initiated by workers.

KMG has also signed the Branch agreement in the oil and gas, refining and petrochemical sectors of the Republic of Kazakhstan for 2017-2019.

KMG representatives have participated in the Working group for development of the new Labour code of the Republic of Kazakhstan, they made proposals and recommendations to the new project.

A final meeting on the implementation of a social policy with the participation of Deputy CEOs and heads of departments in charge of social affairs was held in December of 2016, with an invitation to the meeting of representatives of the Trade Union Organizations of the KMG's SDE.

# LOCAL CONTENT DEVELOPMENT

By the end of 2016, the total volume of procurement of goods, works and services in the group of "KazMunayGas" companies amounted to KZT 1 trillion 871 billion. Herewith, the local content amounted to 76%, including for goods - 83%, works and services - 71%.

	Frocurement of goods, works and services in the group of companies							
	Go	Goods		Works/services		otal		
	KZT bln.	local content%	KZT bln.	local content %	KZT bln.	local content%		
2014	636	73	937	78	1 573	76		
2015	621	81	1048	74	1 669	77		
2016	722	83	1149	71	1871	76		

#### Procurement of goods, works and services in the group of companies

The share of local content in the group of companies of JSC NC "KazMunayGas" for 2016 was 76%, which is 1% lower than in 2015. This is due to the accession of the Republic of Kazakhstan to the world Trade Organization which caused coming into force of the updated Rules of procurement of goods, works and services of JSC SWF "Samruk-Kazyna" from April of 2016, which are used by organizations of JSC NC «KazMunayGas».

All the provisions on measures to support domestic manufacturers of goods, works and services, except for procurements within the framework of contracts on subsurface use, are excluded in the updated document.

Moreover, the JSC NC «KazMunayGas» and its subsidiaries have carried out extensive work on the transition of procurement of goods, works and services to a long term basis.

Thus, as of December 31, 2016, taking into account the agreements concluded in previous years, 1 808 long-term contracts with domestic companies for the purchase of goods, works and services are operating, with total of KZT 1 trillion 465 billion, 279 contracts, that worth KZT 320 billion, were concluded in 2016.

#### Existing long-term contracts with Kazakhstani companies \*

	Goods	Works	Services	Total
Number of contracts	881	86	841	1 808
KZT bln.	451	313	701	1 465

Notwithstanding the significant decrease in global oil prices, which caused reduction of a number of budget and investment programs of the government and the subsoil users, KazMunayGas as a national operator in the oil and gas industry continues supporting the local producers, and also participates in the industrialization of the country through establishment of enterprises.

In particular, a joint venture AktauOilMash LLP with participation of the Russian OOO "Sputnik-Integration" has been established and is already operating now.

Units of pressure combs, complete transformer substations for oil production, separation and measurement units, rod rotators, automated group metering stations are already manufactured in the newly established company. It is planned to reach the full capacity and production of the entire range of products by 2019.

.A joint venture between KazMunaiGas and the American "Nabors Drilling International Ltd" - the world leader in oil and gas drilling, was created to increase the local content, adopt the experience, technologies and "Nabors" management system, and also to work effectively on large oil & gas projects in the long term as a drilling contractor.

The KMG Automation enterprise was established in cooperation with the international "Schneider Electric" and successfully operates for maintenance and production of automated control systems and control of technological processes and instrumentation. Its major challenge is to develop local staff capacity and deploy local system assembly in Kazakhstan in the field of industrial automation, software and energy management.

Special key performance indicators for the development of local content have been developed and established at the KMG subsidiaries in order to strengthen work to support local producers of goods, works and services

As of 31.12.2016

# Local content in major oil and gas projects

### Payments for the purchase of Kazakh goods and services for the Tengiz project

			mn US dollars
2016	total	local content	local content, %
Total procurement	4,891	1,942	40
Goods	448	26	6
Works	1,295	577	45
Services	3,148	1,340	43

# Payments for the purchase of Kazakh goods and services for the Karachaganak project

2016	total	local content	mln. US dollars local content, %
Total procurement	1,027	529.7	51.6
Goods	235.5	15.5	6.6
Works	340.4	187.3	55.0
Services	450.6	326.9	72.5

### Payments for the purchase of Kazakh goods and services for the North-Caspian project

			mlrd. tenge
2016	total	local content	local content, %
Total procurement	911.0	253.4	27.8
Goods	68.4	9.0	13.2
Works	604.7	155.8	25.8
Services	237.9	88.7	37.3

#### CORPORATE SECURITY

A complex of organizational and legal measures has been implemented in 2016 in order to implement the main strategic business areas of KMG, including in the field of corporate security group, maintenance of the continuity and high business profitability on a scheduled basis. It is aimed at solving the following tasks:

- Arrangement of cooperation with law-enforcing and control and supervision government bodies to prevent and repress any law offences, directed against the interests of KMG and its subdivisions, implementation of joint and mutually agreeable events on prevention and repression of security threat, their mitigation with regards to KMG and SDEs;
- Organizational and methodical support and expert coordination of the activity of the corporate security subdivisions of SDEs,;

- development of standardized documents regulating management and control in the field of corporate security;

- organizational and methodological support and expert coordination of divisions' activity of corporate security subsidiaries;

- coordination and collaboration with the security organizations that provide protection of KMG facilities from illegal encroachments on the basis of contracts;

- development and maintenance of information security processes through the implementation and support of specialized national and international standards in KMG;

- monitoring and response to potential threats aimed at stable and effective development of KMG;

- risk analysis of the taken measures and means, used to its management in order to ensure an appropriate level of corporate security;

 elaboration of expert proposals for improving KMG corporate security, including by unifying business processes within the ongoing transformation in order to create a unified security management system in KMG's group of companies.

Continuity of the KMG Information trust system (ITS) is provided during the whole year. Relevant checks were organized and carried out for all received complaints and statements in the ITS during the year, with the restoration, if required, of the violated rights of persons seeking or giving clarification on the settlement in the manner prescribed by law.

The system of regular monitoring, analysis, control and inspection of the corruption risks was organized in more than 100 organizations of KMG's group of companies in the framework of the anti-corruption prevention in KMG's group of companies in accordance with the requirements of the KMG legislation and internal documents.

To prevent the risk of harming the KMG business interests and the state, as well as damage to business reputation of the company in the framework of implementation of KMG's Economic Security Policy, the following measures were carried out on a regular basis:

- assessment of the civil solvency of partners and potential partners, as well as

- measures to identify conflicts of interests and interrelated transactions on concluded contracts upon the procedures of procurement of goods, works and services.

A set of organizational, legal and practical measures was adopted, which is aimed at prevention of corruption and other offences among the employees of KMG and its SDE, including the assessment of candidates for vacant posts and staff of the company.

Consistent organizational-practical measures for further improvement of the system of information security have been implemented. The analysis of functioning of the system of information security management (SISM) has been carried out within the framework of the integrated management system and the management system of information security, planned activities for the SISM development have been implemented as well.

A new Information Security Policy has been approved, on the basis of which the processing of more than 20 SISM documents is provided. The transition to the international standard for information security ISO/IEC 27001:2013 is also ensured.

# **KEY EVENTS OF THE YEAR**

#### JANUARY

A unique domestic IT product "Analytical System of Control Center" of KMG-PM was developed in order to allow online tracing and control of the production, movement and sales on the territory of Kazakhstan, monitoring the the situation on foreign markets.

On January 19 the eighth redemption of indexed coupon bonds of the second issue was implemented by KMG in the amount of 8 million pieces in accordance with the terms of the prospectus of bonds issue, totaling KZT 20.1 billion.

#### FEBRUARY

On February 19, the Standard & Poor's rating Agency announced the downgrade of the KMG credit rating from "BB+" to "BB" with a "negative" forecast. The ratings were revised as a result of changes in the sovereign credit rating of Kazakhstan on February 17, 2016 from "BBB" to "BBB-".

#### MARCH

On March 30, "Intergas Central Asia" JSC completed a deal on partial reverse repurchase of bonds issued in 2007 with maturity through 2017. The redemption was carried out on the total nominal amount of \$142.2 million. USA.

On March 31, the KMG group signed a 4-year contract for the supply of crude oil and liquefied gas, produced by the "Tengizchevroil" LLP, "Mangistaumunaygas" JSC, "Karazhanbasmunay" JSC that approximately amounted to 30 million tons and 1 million tons respectively. Under this agreement, the KMG group has received a deposit of \$3 billion.

#### APRIL

On April 29, the Moody's rating agency affirmed the rating of KMG's group of companies at the level of "Baa3" with a "Negative" forecast.

#### MAY

On May 2, 2016 the Law of the Republic of Kazakhstan "On amendments and additions to some legislative acts of the Republic of Kazakhstan on the issues of state regulation of production and turnover of separate types of oil products" dated 9 April, 2016 No. 500-V ZRK became effective.

Main innovations are as follows:

- limits in the part of non-exceeding the 35 % share of the total market for one retail seller of oil products on the territory of the population area, with the population exceeding 10 thousand persons, were excluded due to systematization of the issue of competition of the market entities in the Business Code;

- amendments gave an opportunity to sell petroleum products at filling stations on the basis of the contract orders for the development of small and medium business;

- the issue of recycling as oil and gas condensate so their derivatives (oily fractions) at large refineries was resolved;

- the rules on the ban to use a tank by two or more persons were repealed;

- the issues on determination of regional operators of petroleum products' distribution were resolved, which allows to transparently regulate the supply of petroleum products in the region, with the participation of NGOs.

On May 5, the Fitch Ratings agency downgraded the rating of KMG from "BBB" to "BBB-" with a "Stable" forecast after downgrade of the sovereign rating of Kazakhstan.

On May 18, KMG made full repayment of the debt balance of the syndicated loan (total loan amount is USD 1 billion).

#### JUNE

On June 30, the Fitch Ratings agency affirmed the long-term issuer default rating of KMG in foreign currency at "BBB-" with a "Stable" prospect.

#### JULY

The first industrial batch of benzol was exported from the Atyrau Refinery.

On July 19, KMG implemented the ninth partial redemption of indexed coupon bonds of the second issue in the amount of 8 million pieces in accordance with the terms of the prospectus of issue of bonds totaling to KZT 18 billion.

#### AUGUST

Compressor stations No.4 and No.8 of line "C" of the Kazakhstan-China MG were commissioned, the capacity increased to 20 billion m3 of gas per year.

JV CASPI BITUM LLP received a national certificate of conformity and declaration of conformity according to CU TR 014/2011 "Road Safety" for the modified bitumen produced by the company.

#### SEPTEMBER

On September 1, a debt from KC Kazakh (carry funding on Zhambyl project) was written off in accordance with the Agreement on Termination of the Financing Agreement.

#### NOVEMBER

The KazMunayGas brand won in the national project "Choice of the year №1 in Kazakhstan".

On November 28, the Standard & Poor's rating agency confirmed the KMG rating at the level "BB" with a "Negative" forecast.

#### DECEMBER

The construction of a linear part of the Beineu-Bozoy site (0-311 km) of the Beineu-Bozoi-Shymkent MG was completed, the site commissioned on December 30, 2016;

A system of manufacturing control (SMC) was implemented at Atyrau Refinery and Pavlodar Petrochemical Plant in order to coordinate, analyze and optimize the production of industrial products, which allows managing the production processes more effective.

# **INTERESTED-PARTY TRANSACTIONS**

In accordance with sub item 19) of Item 2 of Article 53 of the RK Law "On joint stock companies (hereinafter – Law on JSC) unless otherwise provided by Law and (or) company's Charter, adoption of a decision on conclusion of interested –party transactions falls within the exclusive competence of the Board of Directors.

Besides, article 21 of the RK Law "On the Sovereign Welfare Fund" establishes that the transactions between entities entering the Fund's group in relation of which the JSC Law set up the special terms are concluded without their observance in accordance with the procedure specified by the Fund's Board of Directors.

Thus, pursuant to Item 3 of the Rules of conclusion of transactions between the entities entering the Samruk-Kazyna JSC Group in relation of which the JSC Law set up the special terms approved by the resolution of the Fund's Board of Directors as of April 27, 2009 (Rules), the resolution on conclusion of interested-party transactions between the entities entering the Fund's group, are adopted by collegial executive bodies of the relevant entities at the meeting in praesentia.

That is the resolutions on conclusion of the considered transactions, may be adopted by:

- 1. The KMG Board of Directors (with other entities, which do not enter the Fund's group);
- 2. KMG Management Board (with the entities entering the Fund's group).

Besides, Item 9 of the Rules stipulates the right of the Board of Directors, on its discretion, to adopt a resolution on conclusion of the interested-party transactions between the entities entering the Fund's group.

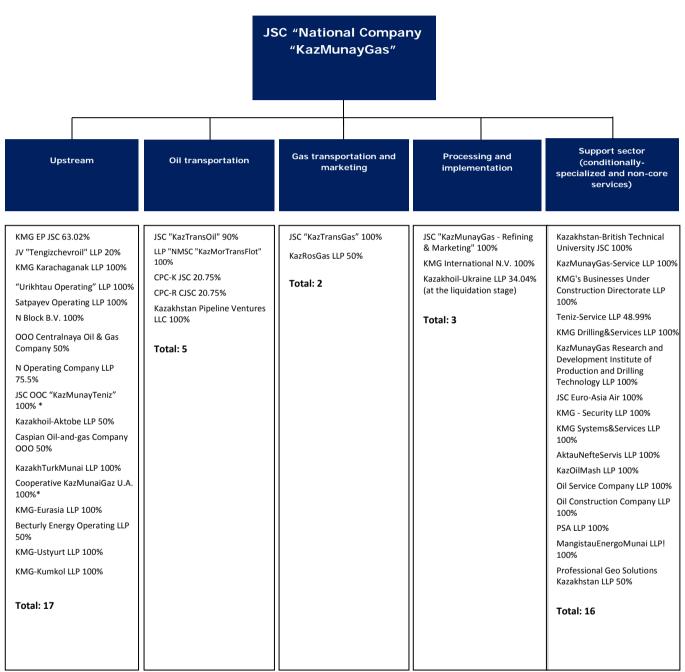
In accordance with the Rules of conclusion of transactions between the entities entering the Samruk-Kazyna JSC Group in relation of which the JSC Law set up the special terms, 51 resolutions were adopted within the reporting period with regard to the interested-party transactions.

Besides, in 2016 the Management Board submitted to the Board of Directors 28 issues on conclusion of the KMG interested-party transactions and/or those which are of strategic nature.

# **ASSET STRUCTURE**

as at 31 December 2016

The KMG group is comprised of 201 companies, including the corporate centre JSC NC "KazMunayGas".



\* Consolidated size of the block of shares/participatory interest of JSC NC "KazMunayGas"

# List of subsidiary and dependent entities of JSC NC "KazMunayGas"

Entity	First and second-tier subsidiary, dependent and other entities	Entity in relation to the parent (SE, DE, JCE, ME) *	Ownership %
KazMunayGas EP JSC		SE	63.02 %
· · · · · · · · · · · · · · · · · · ·	Embamunaygas JSC	SE	100%
	Ozenmunaygas JSC	SE	100%
	Embaokuortalygy LLP	SE	100%
	OzenMunayService LLP	SE	100%
		SE	
	Ken-Kurylysservis LLP		100%
	KMG EP Catering LLP	SE	100%
	KazGPZ LLP	SE	100%
	UDTV LLP	SE	100%
	KazMunayGas-Service LLP	fin. investment	4.80%
	Kazgermunai JV LLP	JCE	50%
	APP LLP	fin. investment	2.2%
	Drilling Works and Well Servicing Administration LLP COÖPERATIEF KMG EP U.A.	SE	100%
	KMG EP NETHERLANDS ENERGY COÖPERATIEF U.A.	SE	95.1%
	KMG EP Exploration Assets LLP	SE	95.1%
	Support Service Vehicles and Well Servicing	SE	100%
	Administration LLP (UTTIOS)	SE	100%
			100 /0
Tengizchevroil LLP		JV	20%
	Tengizchevroil Finance Company S.ar.L	SE	100%
	Tengizchevroil International Bermuda Limited	SE	100%
	Tengizchevroil Finance Company International Ltd	SE	100%
JSC "KazTransGas"		SE	100%
	JSC "KazTransGas Aimak"	SE	100%
	Intergas Central Asia JSC	SE	100%
	KazTransGas Onimderi LLP	SE	100%
	Beineu-Shymkent Gas Pipeline LLP	JCE	50%
	Asia Gas Pipeline LLP	JV	50%
	KazTransGas-Bishkek LLC	SE	100%
	KazTransGas-Tbilisi OOO	SE	100%
	Saryarka Gaz Damu LLP	JCE	60%
	Amangeldy Gas LLP	SE	100%
	Intergas Finance B.V.	SE	100%
	AstanaGas KMG JSC	SE	100%
	KMG-Kansu Operating LLP	SE	100%
JSC "KazTransOil"		SE	90%
	MunaiTas North-West Pipeline Company JSC	JCE	51%
	Kazakhstan-China Pipeline LLP	JCE	50%
	Batumi Terminals Limited	SE	100%
JSC "KazMunayGas - Refining & Marketing"		SE	100%
	KazMunayGas-Onimderi JSC	SE	100%
	Atyrau Refinery LLP	SE	100%
	TH KazMunayGas N.V.	SE	100%
	TH KazMunaiGaz A.G (Lugano)	SE	100%
	JSC Kaskor-Transservice	AC	13%
	Karagandy CCI LLP	AC	25%
	KazMunayGas-Aero LLP	SE	100%
	PPCP LLP	SE	100%
	APP LLP	SE	98%
	JV "Caspi Bitum" LLP Air Liquide Munay Tech Gases LLP	JCE DE	50% 25%
LLP NMSC "KazMorTransFlot"	An Elyside Wonay Feel Cases LEI	SE	100%
	Kazmortransflot Ltd.	SE	100%
	Kazmortransflot UK Ltd.	SE	100%
	Altai Shipping Ltd	SE	100%

ompany B.V. Branch A.S." pass LLP SC	SE SE JCE SE JCE SE SE SE SE	99.1% 100% 40% 100% 50% 34.1% 95.20%
A.S." pass LLP	SE JCE SE JCE AC SE SE SE	100% 40% 100% <b>50%</b> <b>34.1%</b>
A.S." pass LLP	JCE SE JCE AC SE SE SE	40% 100% <b>50%</b> <b>34.1%</b>
A.S." pass LLP	SE JCE AC SE SE SE	100% <b>50%</b> <b>34.1%</b>
A.S." pass LLP	SE JCE AC SE SE SE	100% <b>50%</b> <b>34.1%</b>
pass LLP	JCE AC SE SE SE	50% 34.1%
pass LLP	AC SE SE SE	34.1%
pass LLP	<b>SE</b> SE SE	
pass LLP	SE SE	95.20%
pass LLP	SE	1000/
pass LLP	-	100%
pass LLP		100%
pass LLP	SE	100%
pass LLP	SE	75%
	AC	40%
	SE	100%
50	-	
	SE	100%
ng and Information	SE	100%
el, Catalysis and	SE	100%
emical Science JSC	SE	100%
	SE	100%
	SE	99.8%
	JCE	48.996%
	JCE	51.004%
	SE	100%
	SE	99%
ny LLP	JV	49%
	SE	
		100%
	SE	1%
	fin. investment	0.9%
J.A.	fin. investment	0.253%
	SE	100%
erating B.V.	ME	10%
	SE	100%
	JV	50%
	SE	100%
	SE	99.747%
	SE	100%
	SE	100%
3.V.	SE	100%
ance Company LTD	SE	100%
	JV	50%
s LLC	JV	50.1%
-	JV	50%
	SE	100%
	SE	100%
		100%
S.A. (former Rompetrol S.A.)	SE	54.6339%
S.A. (former Rompetrol S.A.)	SE	100%
S.A. (former Rompetrol S.A.)	SE	100%
S.A. (former Rompetrol S.A.)	SE	100%
S.A. (former Rompetrol S.A.)	JV	50%
S.A. (former Rompetrol S.A.)		49%
、 · · /	JV	1000
、 · · /	SE	100%
former Vector Group)	SE SE	100%
former Vector Group)	SE	
	· · · · ·	(former Vector Group) JV

Entity	First and second-tier subsidiary, dependent and other entities	Entity in relation to the parent (SE, DE, JCE, ME) *	Ownership %
	TRG Petrol Ticaret JSC KazMunayGas Engineering BV KMG ROMPETROL SERVICES CENTER SRL (formber Rompetrol Exploration & Production) KMG ROMPETROL DEVELOPMENT SRL	SE SE SE	51% 100% 100%
		SE	100%
Caspian Pipeline Ventures LLC		JV	49.9%
	CPC-K JSC CPC-K JSC	fin. investment fin. investment	1.75% 1.75%
CPC-K JSC		AC	19%
CPC-R CJSC		AC	19%
Centralnaya Oil & Gas Company LLC		JV	50%
N Block B.V.		SE	100%
	"N Operating Company" LLP	JV	24.5%
"N Operating Company" LLP		SE	75.5%
AktauNefteServis LLP		SE	100%
	Oil Transport Corporation LLP Munaitelecom LLP AktauOilMash LLP Aktau Oil-and-Gas Equipment Plant LLP	SE SE AC JV	100% 100% 25% 49%
KMG Systems&Services LLP	Akiau Oli-and-Gas Equipment Flant EEF	SE	49 <i>%</i>
Kivig Systemsa Services LLF	KMG Automation LLP	JV	49%
"KMG's Businesses under Construction Directorate" LLP		SE	100%
Urikhtau Operating LLP		SE	100%
PSALLP		SE	100%
BeineuMunayGas LLP		SE	100%
Satpayev Operating LLP		SE	100%
KazMunayGas Research and Development Institute of Production and Drilling Technology LLP		SE	100%
	KazNIPImunaigaz JSC "Caspimunaigas" RI LLP	SE SE	100% 100%
KazOilMash LLP		SE	100%
Professional Geo Solutions Kazakhstan LLP		SE	50%
KMG-Eurasia LLP		SE	100%
Oil Construction Company LLP		SE	100%
Oil Services Company LLP		SE	100%
Mangistauenergomunai LLP		SE	100%
KMG-Ustyurt LLP		SE	100%
Becturly Energy Operating LLP		SE	50%

\* SE – subsidiary entity DE – dependent entity JV - joint venture

JCE – jointly-controlled entity

ME - miscellaneous entity

AC – associated company

# **KEY AREAS OF DEVELOPMENT**

# **COMPANY'S PLANS FOR 2017**

Under KMG's Development Plan, KMG's key production performance indicators for the medium-term were approved:

Name	unit	2017	2018	2019
Oil and gas-condensate production, incl.:	'000 tons	23,374	24,059	25,543
condensate	- " -	29	406	<i>529</i>
Hydrocarbon refining throughput	'000 tons		15,483	15,983
Volume of oil transportation by trunk oil pipelines	- "-	55,197	54,326	52,891
Volume of oil transportation by marine transport	- "-	7,088	7,088	7,088
Natural gas transportation volume	ММст	11,268	116,148	115,934

# **INVESTMENT PORTFOLIO**

# Ongoing investment projects by business area

	Draft	Estimated	Brief description of the project	Source of funds
		implementation period		
	North-Caspian Project	2001-2041	Group of fields: Kashagan, Kalamkas Offshore, Aktoty, Kairan, Kashagan South- West (this structure is at the stage of return in favour of the RoK). Development of the Kashagan field is at the Pilot Commercial Development (PCD) stage.	Equity and debt funds
Major projects	Tengizchevroil LLP's Well-head Pressure Control Project/Future Growth Project	2014-2022	Construction of a new oil processing plant and sour gas re-injection facilities, construction of a new production stream gathering system, pressure increase facilities, infrastructure and ancillary facilities.	Equity and debt funds
	Karachaganak Project	1998-2037	The Karachaganak project is being implemented under the Final Production Sharing Agreement, signed on 18 November 1997 for the duration of 40 years. The project is at the stage of crude oil and gas condensate production.	Own funds
	Construction of the unit for desulphurization of the associated petroleum gas of the Prorva group of fields.	2014-2017	In order to implement the Associated Gas Disposal and Associated Gas Flaring Elimination Program developed as per the requirements of the RoK's laws.	Own funds
	Abai	2014-2020	Increasing the resource base and the	Own funds
*	'N' Project	2007-2027	growth in HC reserves	Own funds and funds of the partners
u o	Urikhtau	2008-2026		Equity and debt funds
ncti	Satpayev	2010-2032	1	The partners' funds
rod	Zhambyl	2008-2031		The partners' funds
Exploration and production <sup>*</sup>	Zhemchuzhiny	2005-2025		The partner's funds, debt and own funds
tior	Ustyurt	2016-2038		The partners' funds
lora	Pribrezhnoye	2016-2031		The partners' funds
Exp	Bekturly East	2015-2027		The partners' funds
	Samtyr	2016-2026	-	The partners' funds
	Issatai	2015-2034	-	The partners' funds
	Development of the Rozhkovskoye gas condensate field of the Fyodorovskiy block	2015-2017		Own funds
	Smart field	2016-2036		Own funds
L	Karabulak	2016-2033		The partners' funds
ream	Atyrau Refinery modernization - construction of the aromatics production complex	2007-2016	Construction of the aromatics production complex. Construction of the deeper oil conversion complex. Development of the transportation infrastructure	Equity and debt funds
Downstream	Reconstruction and Upgrading of the Shymkent Refinery	2009-2016	Production of petrols and diesel meeting the requirements of the Euro-4, 5 environmental classes. Increasing the refining volumes to 6 mn tons of oil annually. Increase in the crude processing depth up to 90%.	Equity and debt funds

\* pre-production investment period

	Draft	Estimated	Brief description of the project	Source of funds
		implementation period		
	Pavlodar PP Modernization	2011-2016	Ensuring production of K4 class motor fuels, as per the requirements of the Customs Union's Technical Regulations.	Debt funds
	Development of the oil products retail sales network in the Black Sea region. Phase I – Romania (16 fuel filling stations during 2014- 2015)	2014-2017	Increasing KMG International N.V.'s retail market volume	Debt and own funds
	Rehabilitation of the bioethanol production industrial complex for the use in factories when producing ETBE	2015-2016	Production of ethanol-based octane- increasing components (ETBE, TAEE), for their further use in the RoK's refineries to increase the yield of K4/K5 class high- octane gasolines meeting the environmental requirements of the Customs Union's Technical Regulations	Debt funds
	Making production of industrial gases in the refineries of JSC "KazMunayGas - Refining & Marketing" outsourced	2016-2017	Establishment of a joint venture which will engage in buyout of and investment in hydrogen and nitrogen production units	Equity and debt funds
Gas projects	Construction of the Kazakhstan- China Gas Pipeline (line C)	2013-2017	Provision of natural gas transportation from Turkmenistan to China across the RoK's territory.	Equity and debt funds
	Construction of the Beineu- Bozoi-Shymkent gas pipeline	2011-2017	Provision of the RoK's southern regions with natural gas, export gas deliveries to China, ensuring the RoK's energy security.	Debt and own funds
	Increasing the capacity of the BGR-TBA trunk gas pipeline (TGP) and construction of the boosting compressor station at the TIP-02 crossover pipeline for supply of gas to the "Kazakhstan-China" TGP	2016-2017	Increasing the volume of natural gas transportation from Uzbekistan to the RoK's southern regions and ensuring gas supply to the "Kazakhstan-China" trunk gas pipeline	Debt funds
	Provision of gas supply to the settlements and modernization of the Aktobe Province's gas- distribution networks	2015-2017	Expanding the volumes of gas transportation and sales, creating conditions for connection of new consumers.	Debt funds
	Provision of gas supply to the Kyzylorda Province settlements	2016	Expanding the market, increasing the volumes of gas transportation and sales, creating conditions for connection of new consumers.	Debt funds
	Modernization of gas- distribution networks Taraz	2011-2019	Ensuring uninterrupted gas supply, increasing volumes of gas transportation and sales, reducing gas losses, extending the the useful life of gas pipelines.	Own funds
	Modernization of the SKP's gas- distribution system (phase I – Shymkent)	2009-2016	Ensuring uninterrupted gas supply, increasing volumes of transportation and sales, reducing gas losses, extending the useful life of gas pipelines, increasing the throughput capacity of the system.	Own funds
	Modernization, reconstruction and new construction of gas- distribution networks of the Mangistau Province's settlements	2015-2017	New construction, modernization and reconstruction of the GDNs with the total length of 1,217 km, installation of AGDS, block-type gas control units, cabinet-type gas distribution units	Equity and debt funds
	Expanding provision of gas supply to the Kostanai Province's settlements	2016-2017	Provision of 8 settlements of the Kostanai Province with natural gas: development of design-and-estimate documentation, construction and assembly works	Equity and debt funds

	Draft	Estimated	Brief description of the project	Source of funds
		implementation period		
	Construction of the gas pipeline "Kozhasai Gas Treatment Unit - No. 12 "Bukhara-Ural" Compressor Station"	2016-2017	Construction of a high pressure gas pipeline with the length of 168.1 km, diameter of 325*7 mm in the Aktobe Province with a view to increasing the resource base, disposing of associated gas, increasing the natural gas transportation volumes and income	Own funds
	Construction of the Karaozek compressor station	2016-2017	Improving performance of the "Beineu- Bozoi-Shymkent" trunk gas pipeline to 10 bcmpa	Own funds
	Kansu	2013-2019	Resource base increase, reserves gain and provision of provision of Zhanaozen's residents with jobs, provision of the region with commercial gas and infrastructure development	Own funds
	Development of the Amangeldy group of gas fields	2012-2017	Provision of the RoK's southern regions with an alternative natural gas supply source	Own funds
	Production of coal bed methane of the Karagandy Coal Basin	2014-2018	Carrying out exploration and production of coal bed methane of the Karagandy Coal Basin. Project objectives: - provision of gas supply to the southern and central regions of the republic; - development of a new alternative energy source; - replenishment of the resource base of JSC "KazTransGas"	Equity and debt funds
Transportation infrastructure	Revamping of the loading racks with a view to enhancing the efficiency of fuel oil drain from railroad tank cars	2015-2016	Providing the technical capability of transshipment of the planned and additional black oil volumes through the Batumi Oil Terminal Ltd.	Own funds
	Second train of the second stage of the Kazakhstan-China oil pipeline construction. Increase in the capacity up to 20 MMtpa.	2013-2018	Reconstruction and expansion using own resources of the Kazakhstan-China oil pipeline system from Atyrau to Alashankou of the corresponding sections: MunaiTas NWPC JSC - the Kenkiyak-Atyrau oil pipeline, Kazakhstan-China Pipeline LLP - Kenkiyak-Kumkol and Atasu-Alashankou oil pipelines, JSC "KazTransOil" - oil pipelines on the Kumkol-Karakoin-Atasu section.	Own funds
	Construction of Caspian class barges for TCO's Future Growth Project	2016-2018	Construction of 3 Caspian class barges for rendering large-size module transportation services in the Caspian Sea within the framework of TCO's Future Growth Project.	TCO's funds
	Cargo Transportation Route	2012-2018	Development of the marine transportation hub in the Northern part of the Caspian Sea in order to satisfy Tengizchevroil's requirement for transshipment of large-size modules and other cargoes required as part of the future growth project (FGP).	TCO's funds and debt funds
	Construction of a ship- building/ship-repair yard in the township of Kuryk of the Mangistau Prov.	2018-2021	The shipyard is designed for construction, repair and maintenance of various-purpose sea vessels.	Own and debt funds, partner's funds

	Draft	Estimated implementation period	Brief description of the project	Source of funds
Support-sector projects	Construction of Jack-Up Rig	2011-2016	Expanding the volume of offshore drilling operations in the Caspian Sea. Construction of a jack-up floating drilling rig to ensure economic benefit from offshore petroleum project on the Caspian Sea	Equity and debt funds
	Construction of gas reciprocating power plants (GRPPs) at the Embamunaygas JSC's fields	2017-2018	Phased construction of gas reciprocating power plants (GRPPs) at the Prorva, Zaburunye, Kamyshitovoye South-West, Makat East fields of the Embamunaygas JSC, that will be gas-fired and generate electric power for EMG's needs, which will make it possible to reduce the cost price of oil and gas production at the fields with large reserves of associated gas.	Own funds, the Investor's funds

# Socially important projects

	Project	Estimated implementation period	Brief description of the project	Source of funds
Socially important projects	Construction of the golf club of the city of Schuchinsk	2013-2017	Construction of a PGA "Champion" class 18-hole golf course, a training golf course, club-house and administrative-and- technical infrastructure. The project is being implemented within the framework of the Plan for Development of the Schuchinsk-Borovoye resort area of the Akmola Province.	Equity contribution, own funds and financial assistance
Socially	Construction of a kindergarten in Astana	2014-2017	A 240-children kindergarten in Astana. The project is being implemented according to the RoK's President's instruction.	Own funds

# **RISK MANAGEMENT**

#### Enterprise Risk Management System

The Enterprise risk management system (ERMS) is the key component of the corporate governance arrangements, aimed to identify, assess, monitor and mitigate in a timely manner potential risk events that may adversely impact the achievement of the strategic and operating goals by the Company, understood as KMG and its SDEs.

In 2016 KMG's Board of Directors approved the Company's restated ERMS Policy (the Policy), which constitutes the management's general vision of improvement and development of the Company's ERMS, and contains the statement of:

1) development areas and intents, risk management principles;

2) the need for implementation and functioning of the vertical process of managing industrial and non-industrial risks, ranging from the top level (KMG) and to the line level (an SDE's industrial structural unit).

KMG's Management Board approved the developed mechanisms of implementation of the Company's ERMS Policy in 2016:

- Model Rules of Organizing the Process of Management of Industrial and Non-industrial risks in the Company;

- Methodology for identification and assessment of risks, selection of method of managing the Company's risks;

- Rules of Amending the Unified Risk Classifier of the Company.

The Policy, Rules and Methodology have been submitted to KMG's SDEs for development of similar documents within the framework of implementing a vertical risk management process.

In 4Q 2016 KMG's Internal Audit Service carried out independent approval of the ERMS performance in the company, in compliance with the approved KMG's Performance Appraisal Methodology, developed based on the similar Methodology of the Fund.

KMG has the ERMS performance independently appraised in compliance with the approved KMG's ERMS Performance Appraisal Methodology developed based on the similar Methodology of the Fund. Specifically, in 4Q 2016 KMG's Internal Audit Service carried out independent appraisal of the ERMS efficiency in the Company. The aggregate valuation of the ERMS efficiency amounted to 75%. Based on the results of the appraisal made, the plan for further improvement of the ERMS' every component was developed.

The Company's risk culture is being developed through the involvement of all structural subdivisions of KMG and KMG's SDEs in the risk management process, and on account of regularity information exchange between the Board of Directors, Management Board, KMG's Risk Committee and the Company's employees.

### Operations to foster risk culture in 2016

Round tables, working meetings and workshops were held for the SDEs, with discussion of the matters related to the implementation of the vertical process of managing industrial and non-industrial risks, and draft methodological documents with the new approach factored in.

The employees of KMG's Risk Management Department visited industrial units of SDEs for the purposes of giving coverage to the need for implementation of the vertical risk management process, testing the new approach to industrial risk management through holding interviews with the industrial personnel with a view to identifying and assessing industrial risks and risk factors. The results of these visits later formed the foundation of the approved risk management methodology.

Using the resources of KMG's risk managers, trainings in the ERMS were given to KMG's employees.

Presentation of the new approach to risk management within the framework of implementing vertical risk management process was made for the members of the Audit Committee under KMG's Board of Directors and the members of KMG's Risk Committee

#### Company's key risks and actions to minimize them

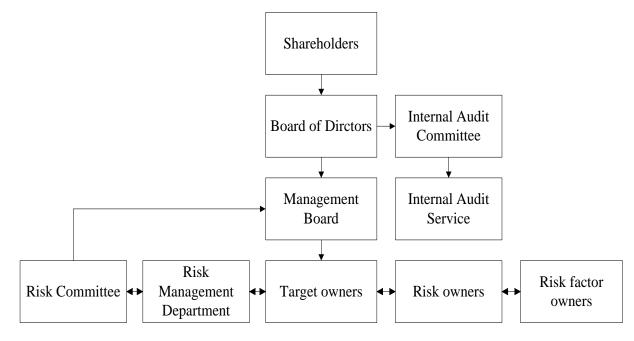
The Company's operations are exposed to various risks in the following areas:

- industrial risks related to the industrial process;
- non-industrial risks related to the non-industrial business processes;
- external environment risks, hardly manageable or non-manageable.

KMG's Board of Directors approves the Company's Risk Register and Risk Map on an annual basis.

According to the Company's Risk Register and Map, 26 risks have been identified and assessed for 2016. For each risk actions to manage have been developed, and the risk owners determined. Dynamics of the key risks and performance of the actions to mitigate them are monitored through submission of quarterly reporting on the risks to KMG's Management Board and Board of Directors.

#### ERMS's organizational structure



#### Industrial risks related to the industrial process

The key operational risk is reduction in the production volumes at the fields, which are at the final stages of development, and their high production cost,

and the risk of failure to implement new exploration projects. Meanwhile, wildcat drilling is complicated due to the hard-to-recover nature of hydrocarbons, it requires more advanced technology solutions – virtual reality-aided simulation and geologic-and-hydro dynamic 3D/4D-simulation, cutting-edge drilling technology, integrated well service (IWS).

To reduce the exploration risk, KMG is using new technology in processing and interpretation of seismic data. Liaising with the world's leading companies makes it possible to actively introduce the modern exploration and oil production technology.

The Company's production operations are potentially hazardous and bear the risks of damage to the life and health of the employee, and harm to the environment. In order to minimize these risks, the Company is implementing the Action Plan of the Comprehensive Programme in Occupational Health and Safety of JSC NC "KazMunayGas" for 2012-2016. The company on a phased basis introduces modern engineered safety features and carries out optimization of the security activities on the most crime-prone sections of oil pipelines. Being a part of KMG's Oilfield Service Assets Development Program, headcount optimization may lead to social discontent of the employees, and accordingly, to wildcat strikes. The main areas of mitigating the wildcat strike risk are monitoring and analysis of the social climate, timely development of measures to address the problematic issues. In this context, KMG has adopted internal documents and implemented internal communications between the employer and employees, including: obligatory reporting meetings of the chief executive officers with the staff, quarterly meetings of line managers with the employees, meetings of the industrial organizations' management with trade unions and youth councils, which render it possible to perform monitoring of the social climate, jointly address the issues raised and educate the staff.

#### Non-industrial risks related to the non-industrial business processes

Key risks for KMG are the risks related to liquidity and financial soundness. Absence of sufficient financial resources may lead to failure to comply with the debt liability covenants, and endanger the implementation of strategically important projects and maintenance of high development rates. To overcome these risks, alongside with technology, the Company is focused on enhancing the efficiency of its operations, clear assignment of priority to capital expenditures, and rationalization of the Company's asset and project portfolios.

The Company is exposed to the tax risk, whose key external risk factor is varying interpretation of the RoK's tax Legislation. In order to minimize tax risks, the Company improves the tax administration processes.

Distribution of resources not in the Company's best interests, inflicting damage on the Company for the purposes of obtaining personal benefit, any instances of fraud and corrupt practices are entirely unacceptable in the Company's activities irrespective of the amount of financial harm.

As part of the implementation of the 2013-2017 Security Program of JSC NC "KazMunayGas", the Company makes consistent efforts on the implementation of and strengthening internal control systems, establishment of a common policy for preventing unlawful or unfair acts, both on the part of third parties, and on the part of the Company's employees, establishment of the procedure for conducting internal investigations on instances of unlawful or unfair acts on the part of the Company's employees. There is a hotline operating in the Company for messages about threats to KMG's facilities.

A set of anti-corruption measures was adopted, which helped to prevent the facts of illegal actions of a corrupt nature on the part of the employees of the group. In particular, the following measures were taken:

- 1. adaptation courses for newly recruited young staff;
- thematic workshops for employees who have a working experience in a group of companies and are responsible for specific areas of activity on anti-corruption policies and methods, in which representatives of government bodies and political parties take part.

It should be noted that according to the requirements of the anti-corruption law and internal principles of KMG, the order of the Chairman of the Board of KMG on January 16, 2017 No. 9, the "Anticorruption standards for KMG employees" were approved. Their aim is to achieve zero intolerance to any manifestations of corruption among employees, maintaining a system of values based and moral norms. The document is posted on the corporate website of KMG and brought to the attention of all employees of KMG and SDEs.

Currently, a number of other internal rules and regulations that regulate the issues of conducting anticorruption monitoring and internal analysis of corruption risks in KMG is carried out in strict compliance with the requirements of the anti-corruption and international law.

The share of employees' involvement in training policies and specific anti-corruption procedures, the requirements of the Codes of Corporate Ethics for today, constitute 100%.

Similar work was organized in terms of informing partners and counterparties of KMG and SDEs of the basic anti-corruption principles used in the group of companies.

So, if in 2014 about 70% of suppliers of goods, works and services were informed of relevant anticorruption policies in the group of companies, and in 2015, despite the growth in the number of counterparties, 85% of employees were already involved in the information processes, and at the end of 2016 almost 100% or more than 21.5 thousand business partners, investors, etc. became aware about those measures.

To this end, the standard contracts for the procurement of goods, works and services of KMG/SDEs, as well as other documents establishing legal relations between the parties, included sections on compliance with the anti-corruption requirements and standards set by KMG and SDEs to business partners and employees. This issue is strictly controlled by all units concerned.

#### External environment risks, hardly manageable or non-manageable

The Company is sensitive to the market risks: volatility of the oil prices, exchange rates and floating interest rates on loans.

A reduction in the oil prices will considerably deteriorate the Company's financial performance. KMG carries out mathematical simulation of the price risk and benchmarking of the obtained results against the figures planned. The company is capable of prompt optimization of costs and capital expenditures when the oil price reduces, and does not exclude the possibility of acquiring financial instruments for protection against a material fall in oil prices.

Changes in interest rates may negatively impact the cost of placing temporarily free cash (TFC) and, accordingly, the Company's financial performance. To minimize this risk, the Company carries out diversification of placement of the treasury investment portfolio in financial instruments within the set parameters, and regular monitoring of TFC placement in the KMG group of companies. As a result of risk management, the Company ensures the required return on TFC. Furthermore, for the purpose of managing the financial risks, the Company has adopted the practice of limiting them through setting the balance sheet and off-balance sheet liability limits on its agency banks

The principal source of borrowings is the international lending market. The bulk of the Company's debt portfolio is US dollar-denominated loans. The interest rate for servicing a portion of these loans is based on the LIBOR and EURIBOR interbank lending rates. An increase in these interest rates may lead to appreciation in the Company's debt servicing cost. Growth in the cost of the Company's borrowings may have an adverse effect on its solvency and liquidity ratios.

The company conducts operations in foreign states, such as placement of cash on current/correspondent, and deposit accounts in financial entities of foreign states, acquisition of foreign state issuers' securities, implementation of investment projects overseas through creation of affiliated legal entities, joint ventures, acquisition of participatory interest in foreign companies. Any changes in the economic and political situation of a recipient country (a foreign state KMG (or) its subsidiary and dependent entities cooperate or plan to cooperate with), military actions or interstate conflicts, may negatively affect the Company's financial performance. The company limits the level of country risks through setting country limits based on analysis of the recipient country (from the economic, political, strategic, social and other perspectives).

Due to negative publication in the mass media, the Company is exposed to the reputational risk impacting its business reputation and relations with investors, pars and other stakeholders. The Company takes a package of measures to manage this risk, which includes daily monitoring of media publications on the Company's operations, arrangement of briefings, press conferences, public addresses of the management for the purpose of providing sufficient coverage to various aspects of the Company's operations, and timely response to negative mass media publications.

On the whole, the efforts planned to manage the Company's key risks in 2016 have been exerted in full. The Company has taken appropriate measures of response to the key risks with a view to reducing the probability of their realization and minimizing/preventing possible financial losses.

As part of KMG's transformational processes and further improvement of the ERMS, in 2017 the efforts on development and implementation in the KMG group companies of the internal control system (process-level risk management), and development and implementation of the continuity of operation management system (management of risks leading to business interruption) will be continued.

# **CORPORATE GOVERNANCE**

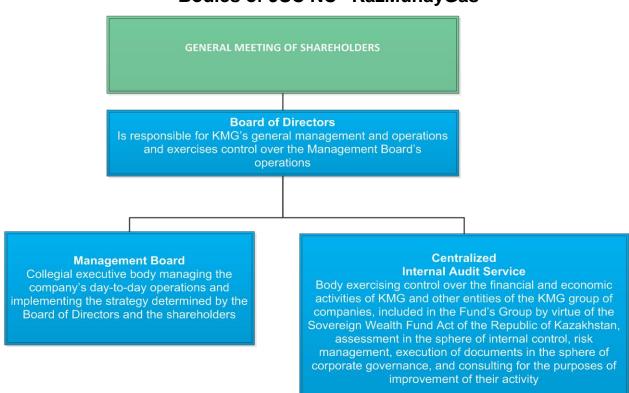
The system of corporate governance of JSC NC KazMunayGas is based on the respect to the rights and legitimate interests of the shareholders and the key stakeholders - the state, strategic partners, employees of KMG, and is oriented to lowering investment risks, increasing investment attractiveness, decreasing the cost of debt and own capital and increasing the Company's value.

The corporate governance structure existing in KMG is continuously improving in light of the achievements of the Kazakh and international corporate governance practice. Diagnostics of KMG's corporate governance arrangements is carried out on an annual basis by outside companies and the Internal Audit Service (IAS), in rotation.

In 2015 the diagnostics of KMG's corporate governance was carried out on the instruction of the Sovereign Wealth Fund "Samruk-Kazyna" JSC (the Fund) by the external consultant, the PricewaterhouseCoopers LLP.

Based on the results of the diagnostics, KMG's corporate governance score in 2015 was 79.0% (4.0% more vs 2014), achieved thanks to the purposeful efforts made since the introduction of the diagnostics in 2009 by the Company's Board of Directors, Management Board, Corporate Secretary and IAS. Furthermore, the Asset Management Department and the Corporate Secretary carried out work for the company's self-assessment for compliance of the current practices with the provisions of the new Corporate Governance Code of the Fund, developed with due regard to the best corporate governance practices.

In compliance with the Corporate Governance Code of JSC NC "KazMunayGas", the Report on application of its principles and provisions was prepared. The report is an appendix to this Annual Report.



#### Distribution of competence between KMG's Board of Directors and Management Board

• The Board of Directors performs general management of KMG's activities, and exercises control over the efficiency of the corporate governance practices in the company; in addition, it tracks and, when possible, eliminates potential conflicts of interest at the level of officials and the shareholder, including misuse of KMG's property and abusive practices in interested-party transactions.

• The Management Board performs management of KMG's day-to-day operations.

# Bodies of JSC NC "KazMunayGas"

**Board of Directors** of JSC NC KazMunayGas is responsible to the shareholders for effective management and proper control over the company's operations and for ensuring a proper dialog with the shareholders. The Board of Directors, in accordance with KMG's Charter, determines the priority areas of KMG's development and approves KMG's Development Strategy, considered and adopts resolutions on the matters of potential acquisitions and other important matters of financial nature, including terms and conditions of KMG's bonds and derivatives, adopts the resolution on making material transactions and interested-party transactions for obtainment, transfer (assignment) of a subsoil use right (after obtaining approval from the Competent Authority in conformity with the laws), making joint operation contracts (agreements) with the strategic partners for joint implementation of subsoil use contract projects and other matters, stipulated by the legislative acts of the Republic of Kazakhstan and/or KMG's Charter.

The Board of Directors of JSC NC "KazMunayGas" does not only make management decisions, but keeps track of the development dynamics of corporate governance processes as well. For example, the Transparency Report and Report on Adherence to the Corporate Governance Code Principles and Provisions are submitted for consideration of the Board of Directors of JSC NC "KazMunayGas".

**Corporate Secretary** is directly subordinate and accountable to KMG's Board of Directors in the Company's organizational structure and corporate governance system. In accordance with its status, the Corporate Secretary is:

1) a person responsible for implementing the corporate governance procedures established by the laws of the Republic of Kazakhstan, and for implementing recommendations of the 'corporate governance best practices' adopted by the Company and recognized in its internal documents approved by the Board of Directors or the shareholders;

2) a person ensuring maintenance of systematic communications between the Company and the shareholders, between the shareholders and the Board of Directors, the Internal Audit Service, the Management Board, and other bodies of the Company, between the Company and its stakeholders;

3) a person performing systematic monitoring of the laws of the Republic of Kazakhstan in the sphere of corporate governance (corporate legislation), and the trends of 'the corporate governance best practices'.

The Management Board is responsible for the implementation of the strategy and for the current activity of KMG. The Management Board reports to the Board of Directors about the performed work for the achievement of KMG's objectives.

In compliance with clause 94 of the Charter of JSC NC "KazMunayGas", Chairman of Management Board makes decision on the matters of KMG's direct activities, in particular, on purchases of services, creation of working groups and committees on KMG's projects, hospitality, staff appointments and penalties, social support to employees, corporate governance, and other matters of the production, administrative and regulatory nature.

The Management Board of JSC NC KazMunayGas has five following Committees: Investment Committee, Committee on Major Oil-and-gas Projects, Planning Committee, Credit Committee. The Committees preliminarily consider and analyze the issues within the competence of business directions and SDEs, which are to be submitted for consideration of the Company's Management Board, in order to make justifiable and effective decisions on business planning, investment projects, on the matters of asset management, on major oil-and-gas projects, on SDEs' matters etc.

**Centralized internal audit service** (IAS) reports and is accountable to the Board of Directors of JSC NC KazMunayGas and is supervised by the Audit Committee of the Board of Directors of JSC NC "KazMunayGas".

In its operations, the IAS relies on the laws of the Republic of Kazakhstan, KMG's internal documents and the International Standards for the Professional Practice of Internal Auditing.

Among the 29 employees os the IAS, 23 employees have certificates and diplomas, including: Certified Internal Auditor (CIA) – 7; Diploma in International Financial Reporting (DipIFR) – 5; RoK's Professional Accountant – 8; Certified Accounting Practitioner/Certified International Professional Accountant (CAP/CIPA) – 5; Diploma Certified Professional Internal Auditor (DipCPIA) – 14; Certified Fraud Examiner (CFE) – 2.

The main goal of the IAS is to provide to the Board of Directors independent and objective information, intended for ensuring effective management of JSC NC "KazMunayGas" and its SDEs, by means of

employing a systemic approach to the improvement of the risk management, internal control and corporate governance processes.

Carrying out its activities in accordance with the annual audit plan, the Service is to accomplish the following objectives:

- evaluation of the reliability and efficiency of the internal control and risk management procedures applied;

- evaluation of the accuracy, completeness, objectivity of the accounting system and compilation of financial reporting in KMG and its SDEs based thereon;

- evaluation of the rationality of the use of resources by KMG and its SDEs, and the methods applied for ensuring security of assets;

- control over compliance with the RoK's statutory requirements, corporate norms and the regulations of the operating, investment and financial activity.

Reports of the Service on the results of the internal control system efficiency evaluation in KMG and its SDEs are submitted to consideration of the Board of Directors on a quarterly basis. The Annual report of the Service was considered and taken note of at the meeting of the Board of Directors in February, 2017.

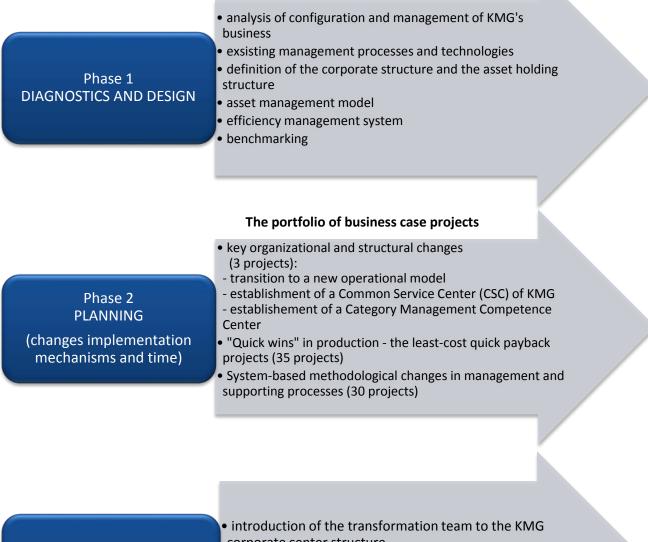
In order to eliminate the identified inconsistencies, the audited entities develop Plans of Corrective Actions on the inconsistencies found. The Internal Audit Service constantly monitors implementations of the recommendations issued during audit checks.

To boost the efficiency of operations of the JSC NC "KazMunayGas" group of companies, monitoring of and control over timely provision of audited entities' reports on following audit recommendations and implementation of the Plans of Corrective Actions have been included in the KPIs of Chairman of Management Board of JSC NC "KazMunayGas", and Managing Directors supervising the company's SDEs.

### **Transformation Project (Business model)**

The KMG Transformation Program has been developed and is being implemented from 2015 as an initiative aimed at increasing the efficiency of KMG Group's activities, the elasticity of reaction to market turbulence and competitiveness. Transformation is aimed at structural transformations in the company, on profound system improvements, and simplification of business processes.

For practical implementation, a transformation team was formed in the KMG's branch office of KMG Global Solutions B.V. FCS in Kazakhstan (KMG GS) – the subsidiary of KMG - which includes leading employees of the KMG group of companies, as well as external experts with experience in major international oil and gas projects.



Phase 3 IMPLEMENTATION (launching of projects)

- corporate center structure
- appointment of particular functional executives in all business areas as the heads of all projects
- operation of the CSC on the basis of KMG Global Solutions

#### Key organizational and structural changes

One of the key transformation results is development of a new operating model of the company. According to it, JSC NC "KazMunayGas" is shifting from being a strategic holding which manages a number of sub-holdings through the boards of directors to an active operational management of production assets

(operating holding). The number of management levels as a result of integration of sub-holdings should be reduced to two (now there are 3 or more levels of hierarchy of organizations).

In the new business model the first management level is represented by a single national company joined by all the sub-holdings.

Subsidiaries working in the field belong to the second level. Their task is the effective implementation of current production activities, in accordance with the goals set by the national company, without diverting resources to the functional that is concentrated in the parent company. Thus, for example, the oil companies of the KMG group will concentrate exclusively on the implementation of the production plan within the approved budget and the standards of labor and environmental protection.

#### "Quick wins" in production

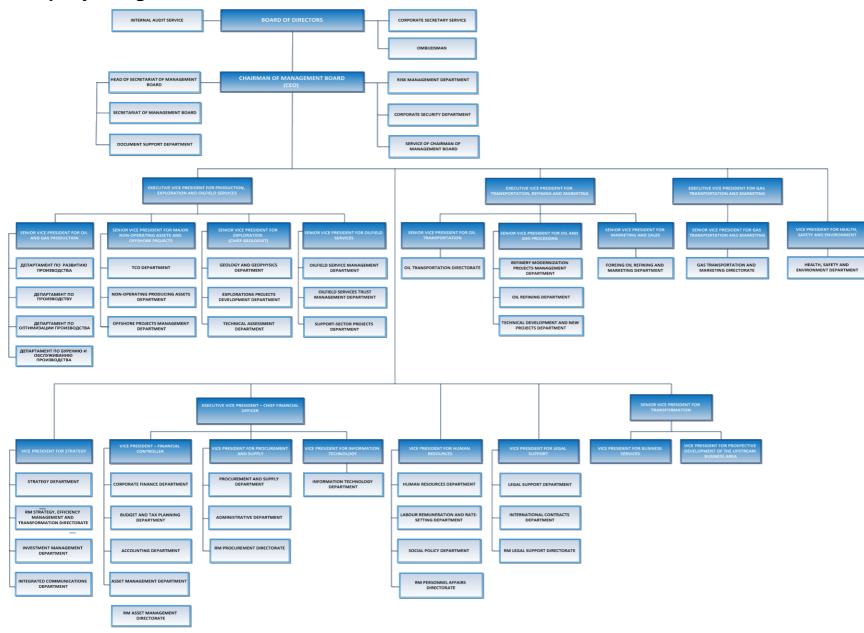
Improving the production processes (exploration and production, refining and marketing of oil products, oilfield services), the company is moving towards the implementation of the so-called "quick wins" - non-capital-intensive, fast-payback projects at a separate enterprise followed by replication of successful experience in other companies.

#### System-based methodological changes in management and supporting processes

Transition to a new organizational structure of KMG within the new operating model, allocation of routine support functions to the Common Service Center require changes in the methodological basis of the management and support processes in various areas (business and tax accounting, investment management, budgeting and business planning, treasury, strategic planning and performance management, information technologies, personnel management, procurement management). Introduction of developed reference models (templates of standard processes, compiled on the examples of the best practices) has started in all the portfolio companies of Samruk-Kazyna JSC. At the same time, all changes in the methodological base can be fully implemented through automation of all the above areas within these 30 projects

## Company's Organizational Structure as at 31 December 2016

RM ECONOMY AND FINANCE DIRECTORATE



### Interaction with the Shareholder

KMG's shareholders are the Fund (90%) and the National Bank of the Republic of Kazakhstan (10% + 1 share).

KMG's shares have been placed in trust of the Fund under trust agreement No. 505-NB/529-i of 12 October 2015.

The Fund plays an active role in formation and establishment of corporate governance in KMG. In order to develop a uniform approach to management of the Fund's subsidiaries, working groups on improvement of corporate governance with participation of representatives of the Fund's material subsidiaries are created.

### **Dividends**

By the resolution of the Samruk-Kazyna JSC's Management Board of 11 August 2016 (minutes No. 29/16), the following procedure for distribution of KMG's 2015 net income in the amount of 398,325,954,000 KZT was approved:

1) an amount of 59,748,893,100 KZT, constituting 15% of KMG's consolidated net income, is to be directed to distribution of dividends;

2) the remaining net income amount of 338,577,060,900 KZT is to be kept at KMG's disposal.

The approved dividend amount per one ordinary share of JSC NC "KazMunayGas" amounted to 102 (one hundred and two) tenges 27 (twenty-seven) tiyns.

### Interaction with Subsidiary and Dependent Entities

Interaction with subsidiary and dependent entities is done using approved corporate procedures through corresponding bodies of KMG and SDEs.

The main objectives of KMG's interaction with subsidiary and dependent entities are:

- ensuring sustainable financial development, profitability, improvement of investment attractiveness of KMG and its SDEs;
- ensuring protection of the rights and legally protected interests of the shareholders and the SDEs' shareholders;
- harmonization of relations between the shareholders, officials and employees of KMG and its SDEs, taking systemic measures to prevent any conflicts between them and inside the said groups;
- development and implementation of a well coordinated and effective strategy and investment policy of KMG and its SDEs.

#### Corporate Governance Mechanisms in the KMG Group of Companies.

- building a vertical system of management of subsidiary and dependent entities by means of organizing corporate governance via the divisional system;
- implementation of common corporate standards in SDEs;
- providing nominees to the administration bodies of SDEs;
- ensuring fair voting for the representatives on discussed issues on the basis of recommendations given to the representatives of JSC NC KazMunayGas in the boards of directors of SDEs on agenda items;
- organization of control over the activities of SDEs via representatives in management bodies and champions, revision of the financial and economic activities, selection of auditors etc.

# Board of Directors of JSC NC "KazMunayGas"

as at 31 December 2016

- solid	Frank C.W. Kuijlaars						
	Chairman of the Board of Directors						
	Year of birth – 1958 Nationality: The Netherlands						
	Education, line of profession (qualification):						
	University of Erasmus, Rotterdam, the Netherlands (1982), Diploma in Law						
	Post-graduate education:						
	Dutch Institute for Banks and Insurance Companies (1985)						
	University of Cambridge (2005)						
	London Business School (2008)						
	Harvard Business School (2008)						
	Work Experience:						
	A number of management posts in ABN AMRO and RBS;						
	Head of Corporate and Investment Banking in Belgium;						
	Regional Manager in Brazil;						
	Country Manager in Russia and Brazil;						
	Member of Supervisory Board in Russia, Kazakhstan and Uzbekistan;						
	Global Head, Energy & Resources.						
	Corporate Executive Vice President:						
	Member of Executive Committees for Europe, Central and Eastern Europe, Middle East						
	and Africa, Corporate & Investment Banking;						
	Advisor in several international organizations;						
	Member of Foreign Investors' Council under President of the Republic of Kazakhstan;						
	Independent Director of the Halyk Bank of Kazakhstan JSC;						
	Independent Director of Amsterdam Trade Bank (the Netherlands);						
	Managing Director of Eureka (Energy) Ventures B.V.						
	He is Chairman of the Finance Committee of KMG's Board of Directors; Member of the						
	Appointment and Remuneration Committee of KMG's Board of Directors, Member of the						
	Audit Committee of the KMG's Board of Directors and Member of the Committee for						
	Strategy and Innovations of KMG's Board of Directors.						
	Was elected as Member of the Board of Directors of JSC NC "KazMunayGas" for the						
	first time on 5 Sep. 2006. On 21 June 2014 he was reelected as Independent Director of						
	KMG's Board of Directors.						
	Holding of shares						
	Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.						
	Peter Lane						
and the second second	Independent Director						
and the second s	Year of birth – 1946						
	Nationality: United Kingdom. Education, line of profession (qualification):						
	Harvard Business School (1992);						
	London School of Economics (University of London) (1968): Bachelor of Economics;						
	University of Essex (1970), Master of Arts in Economics.						
	Work Experience:						
	Economic Advisor of the Exchequer, UK's Ministry of Finance;						
	Work in executive positions in RoyalDutchShell;						
	Chief Executive Officer for East Caribbean;						
	Director, ShellUKOil;						
	Managing Director of Lloyd'sofLondon;						
	Director, LLoyd's in Japan;						
	Director, LLoyd's in the USA;						
	Chairman of Management Board, Strathearn Capital Limited.						
	He is Chairman of the Audit Committee of KMG's Board of Directors, Member of the						
	Appointment and Remuneration Committee of KMG's Board of Directors, Member of the						
	Committee for Strategy and Innovations of KMG's Board of Directors, and Member of						
	the Finance Committee of KMG's Board of Directors.						
	Was elected as Member of the Board of Directors of JSC NC "KazMunayGas" for the						
	first time on 8 Aug 2008. On 20 Jun. 2014 he was reelected as Independent Director of						
	KMG's Board of Directors.						
	Holding of shares						
	Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.						

	Yerlan Urazgeldiyevich Baimuratov Independent Director Year of birth – 1959 Nationality: Republic of Kazakhstan Education, line of profession (qualification): Alma-Ata Institute of National Economy, Engineer-Economist (1981) Holds the academic degree of PhD in Economics (1988). Work Experience: Has worked in the system of research-and-development institutes of the Gosplan of the Kazakh SSR, in the positions from Engineer to Academic Secretary of an institute. Has worked in the banking sector. During a number of year held positions from Department Manager to Deputy Chairman of Management Board of Turanbank, Chairman of Management Board of Alembank, Chairman of Management of Almaty Commercial Bank, Senior Deputy Chairman of Management Board of Halyk Bank. Chairman of the Board of Directors, JSC "Bayan Sulu"						
	Chairman of the Board of Directors, JSC "AsiaAgroFood" Independent Director, JSC "Tobol SEC" Independent Director, JSC "KazAgro NMH" Independent Director, JSC NC "Aktau International Commercial Seaport", Member of						
	Supervisory Board, "Samruk-Kazyna Invest" LLP. Is the Chairman of the Appointment and Remuneration Committee of KMG's Board of Directors, Member of the Finance Committee of KMG's Board of Directors.						
	Was elected as Member of the Board of Directors of JSC NC "KazMunayGas" for the first time on 5 Mar. 2014. On 20 Jun. 2014 he was reelected as Independent Director of KMG's Board of Directors. Holding of shares						
	Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.						
	Christopher John Walton						
	Independent Director						
tor	Year of birth – 1957						
2	Nationality: Australia						
	Education, line of profession (qualification): Bachelor of Arts (Political Science), University of Western Australia						
	MBA in Finance, University of Western Australia						
	Work Experience:						
	Chairman of two London Exchange-listed companies: coal-mining Asia Resource						
	Minerals Plc, and ship operator Goldenport Holdings. Chairman of the Audit Committee in the national rail-way company "Kazakhstan Temir						
	Zholy".						
	Chairman of Lothian Buses PIc, Edinburgh bus network operator						
	Senior Independent Director and Chairman of the Audit Committee of oil-exploration company Rockhopper Exploration Plc, listed on the London Stock Exchange.						
	Non-executive Member of the Audit and Risk Committee of the Department for Culture,						
	Media and Sport, UK.						
	Non-executive Director and Member of the UK's Institute of Directors. Member of the Regional Economic Advisory Council, SE and East Anglia, the Bank of						
	England.						
	CFO of EasyJet Plc.						
	Australian state-owned airline Qantas, Air New Zealand, Australia Post and Australian Airlines.						
	BP Australia,						
	Australia's Senate Hamersley Iron.						
	He is Chairman of the Innovations and Strategy Committee of KMG's Board of						
	Directors; Member of the Appointment and Remuneration Committee of KMG's Board of Directors, Member of the Finance Committee of the KMG's Board of Directors and						
	Member of the Audit Committee of KMG's Board of Directors.						
	Was elected as Member of the Board of Directors of JSC NC "KazMunayGas" for the first time on 17 Apr. 2014. On 20 Jun. 2014 he was reelected as Independent Director of KMG's Board of Directors.						
	Holding of shares						
	Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.						

Baljeet Kaur Grewal Managing Director / Strategy and Portfolio Investments at Samryk Kazyna, the Sovereign Wealth Fund of Kazakhstan. She provides strategic oversight to the Fund's portfolio of investments and oversees corporate and investment strategy development. She has 15 years of experience in senior management positions in banking and financial companies including as Senior Advisor at the Asian Development Bank, Managing Director and Vice Chairman at Kuwait Finance House Investment Research, Vice President & Head, Investment Banking Research at Maybank Malaysia, ABN AMRO Bank and Deutsche Bank. She has deep experience in strategy, investment advisory and national economic strategies in emerging markets. She worked closely with the ECB, IMF, World Bank and various bodies on regulatory and policy development. She has led 18 international awards in the field of investment research, and has deep experiences in the oil & gas industry in emerging markets. Baljeet is a key advocate of women in finance.
She is a Fellow of Cambridge University, holds an Executive MBA (Cambridge University) and has a (1 <sup>st</sup> Class Hon) degree in International Economics from the University of Hertfordshire)
She does not hold shares of the company, its suppliers and competitors.
Berik Tursynbekovich Beisengaliyev
Managing Director for Asset Optimization, Samruk-Kazyna JSC Nationality: of the Republic of Kazakhstan Year of birth: – 1966 <b>Education, line of profession (qualification):</b> Graduated from Y.A. Buketov Karaganda State University, qualifying as Economist (1990), Candidate of Economic Sciences (1994), Lawyer (2000). Doctor of Science, Economics <b>Work Experience:</b> Teacher, Karaganda State University (1990-1994); Chief Accountant, "Computer Diagnostic and Treatment Systems" SRE (1994-1995); Dealer, Dealing Head Office of Kazakommertsbank (1995-1996); Deputy Head of the Karagandy Head Office, Alem Bank Kazakhstan (1996-1997); Deputy Head of the Karagandy Head Office, Alem Bank Kazakhstan (1996-1997); Deputy Director of the Karagandy Head Office, BankTuranAlem CJSC (1997-1998) Director of the Astana Branch, Almaty Trade and Finance Bank CJSC (1998-2001); Managing Director - Astana Branch Director, ATF Bank OJSC (2001-2004); Managing Director, ATFBank OJSC, Almaty (2004) Senior Deputy Chairman of Management Board, ATFBank JSC, Almaty (2004-2006) General Director, "Astana Capital Investment Group" Investment Company (2006- 2009); Deputy Chairman of Management Board, "KazAgro" National Management Holding JSC (2009-2011); Chairman of Management Board, "KazAgro" National Management Holding JSC (2009-2011); Chairman of Management Board, "KazAgro" National Management Holding JSC, Astana (2011-2012) Managing Director, Samruk-Kazyna JSC (2012-2013) Chief Business Development Officer - Member of the Management Board, Samruk- Kazyna JSC (2013-2016) Currently - Managing Director for Asset Optimization, Samruk-Kazyna JSC He is a Members of the Committee for Strategy and Innovations of KMG's Board of Directors. Date of first election to KMG's BoD: resolution of the "Samruk-Kazyna" Sovereign Wealth Fund JSC of 18 Feb. 2016, minutes No. 06/16 Holding of shares Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.



#### Uzakbai Suleimenovich Karabalin

Nationality: of the Republic of Kazakhstan Year of birth: 1947

Education, line of profession (qualification), licences:

I.M. Gubkin Moscow Institute of Petrochemical and Gas Industry (1970)

Oil & Gas Reservoir Engineering and All-round Mechanization, Mining Engineer **Academic ranks, degrees, activity:** 

Postgraduate Studies, I.M. Gubkin Moscow Institute of Petrochemical and Gas Industry (1973)

Candidate of Science (Engineering), subject of the thesis: "Development of Mineralized Solutions with Adhesive Colmatant for Maintaining Rigidity of Shales during Well Drilling" (Ufa Petroleum Institute, 1985)

Academic Professor in the "Oil and Gas Well Drilling" Department (Atyrau Institute of Oil and Gas, 2001)

Professor Emeritus, Kazakh National Technical University (2004)

Member of the National Academy of Engineering of the Republic of Kazakhstan with a specialization in "Oil & Gas Well Drilling" (2004)

Doctor of Science (Engineering), subject of the thesis: "Theoretical Basis of Increasing Security of Drilling Operations and Development of Environmental Technology for Developing Offshore Petroleum Fields" (2010)

#### Work Experience:

Drilling Process Engineer, South Emba Oil and Gas Exploratory Expedition of the "Kazneftegazorazvedka" Department (Atyrau Province) (1973-1974);

Chief of Laboratories of Drilling Technology and Flush Liquids of the Kazakh Scientific Research Institute of Petroleum Geologic Exploration (Atyrau Province) (1974-1981); Deputy Director for Research, Kazakh Scientific Research Institute of Petroleum Geologic Exploration (Atyrau Province) (1981-1988);

Head of Technical Progress and Deep Hole Drilling Development Department of the "Prikaspiygeologiya" Main Territorial Department (Uralsk) (1988-1990);

Head of Department, Guryev Branch of V.I. Lenin Kazakh Polytechnic (Atyrau) (1990); Senior Assistant of the Industry Department of the Executive Office of President of the Republic of Kazakhstan and the Cabinet of the Republic of Kazakhstan (Almaty) (1991-1992);

Head of the Main Oil and Gas Directorate, Ministry of Energy and Fuel Resources of the Republic of Kazakhstan (Almaty) (1992-1994);

Deputy Minister of Energy and Fuel Resources of the Republic of Kazakhstan, Deputy Minister of Oil and Gas Industry of the Republic of Kazakhstan (Almaty) (1994-07/1995);

Trainee of the "Agip" Oil Company, Italy (07/1995-11/1997);

Vice President for Corporate Development, Director for Prospective Development, Vice President for Prospective Development, Senior Vice President of National Oil And Gas Company "Kazakhoil" (Almaty) (11/1997-02/2000);

Acting CEO, National Oil And Gas Company "Kazakhoil" JSC (08/1999-10/1999); CEO, CJSC "KazTransGas" (Astana) (02/2000-01/2001);

Vice Minister of Energy and Mineral Resources of the Republic of Kazakhstan (Astana) (01/2001-03/2003);

CEO, JSC "National Company "KazMunayGas" (03/2003-29 May 2008);

CEO, Mangistaumunaigas JSC (07/2008);

General Director, Mangistaumunaigas JSC (07/2008-11/2009);

General Director, Kazakh Institute of Oil and Gas JSC (01/2010-07/2013);

Minister of Oil and Gas of the Republic of Kazakhstan (03 Jul. 2013-06 Aug. 2014; reappointed - since 04 Apr. 2014);

Senior Deputy Minister of Energy of the Republic of Kazakhstan (13 Aug. 2014-19 Jan. 2016)

#### Other positions:

Chairman of the Board of Directors, CJSC "KazTransOil" (2001-2002);

Chairman of the Board of Directors, NC "Oil and Gas Transportation" CJSC (05/2001-02/2002);

Chairman of the Board of Directors, NC "KazMunayGas" CJSC (02/2002-03/2003); Chairman of the Coordinating Board for Kazakh Content, KazEnergy Association (sinze 12/2006);

Member of the Board of Supervisory Directors, KazRosGas LLP (since 12/2006); Member of the National Investors' Council under the President of the Republic of Kazakhstan (09/2007-11/2008);

Chairman of the Board of Directors, KazMunaiGas Exploration Production JSC (28 Nov. 2006 - 09/2008);

[T	President, Amateur Boxing Federation of the Republic of Kazakhstan (2004-2009);
	Member of the Board of Directors, JSC NC "KazMunayGas" (since 18 Feb. 2016)
	Party membership: Member of the "Nur Otan" PDP
	National and international awards, prizes, titles of honour:
	Orders: "Barys" 3 <sup>rd</sup> class (2005), "Kurmet" (2000), "Russian Economy's Leader" (2005);
	"High Achiever of the USSR's Mineral Exploration" Badge (1988);
	Jubilee medals "10 Years of Kazakhstan's Constitution" (2005), "Kazakstan Respublikasynyn Parlamentine 10 zhyl" (2006);
	"Honorary High Achiever of Mineral Exploration of the Republic of Kazakhstan" Title
	(2003);
	"Honorary Sports Figure of the Republic of Kazakhstan" Medal (2007); "Person of the Year" Title and "Golden Prometheus" Prize awarded during the
	"Kazenergy" Eurasia Energy Forum (09/2009);
	"Kazakstannyn Yenbek Eri" Title (2011);
	"Otan" Order (2011) Scientific papers, literary works, publications:
	Author of over 70 publications, articles, books and 11 inventions
	Date of first election to KMG's BoD: Resolution of the "Samruk-Kazyna" Sovereign Wealth Fund JSC of 18 Feb. 2016, minutes No. 06/16 Holding of shares
	Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.
	Sauat Mukhametbayevich Mynbayev
	Member of the Board of Directors, JSC "National Company "KazMunayGas"
00	Year of birth – 1962 <b>Nationality:</b> Kazakhstan
	Education, line of profession (qualification):
	M.V. Lomonosov Moscow State University (1985), Economist-Cyberneticist Postgraduate studies of the Moscow State University (Nov, 1985- Nov,1988) -
	Candidate of Economic Sciences, subject of the thesis: 'Forecasting renewal of capital
	assets' (1988).
	Work Experience: President of the 'Kazakhstan' Republic-wide Construction Exchange;
	Senior Deputy Chairman of Management Board of 'Kazkommertsbank' Joint-Stock
	Bank;
	Deputy Minister of Finance of the Republic of Kazakhstan, Deputy Minister of Finance of the Republic of Kazakhstan - Head of Treasurer's Office under Ministry of Finance of the Republic of Kazakhstan;
	Senior Deputy Minister of Finance of the Republic of Kazakhstan;
	Deputy Minister of Finance (Vice Minister) of the Republic of Kazakhstan;
	Senior Vice Minister of Finance of the Republic of Kazakhstan; Minister of Finance of the Republic of Kazakhstan;
	Deputy Head of President's Administration of the Republic of Kazakhstan;
	Minister of Agriculture of the Republic of Kazakhstan; President of the "Development
	Bank of Kazakhstan" CJSC; General Director of the Caspian Industrial-Financial Group LLP;
	Deputy Prime Minister of the Republic of Kazakhstan; Deputy Prime Minister of the
	Republic of Kazakhstan - Minister of Industry and Trade of the Republic of Kazakhstan;
	Chairman of Management Board of the "Samruk" Kazakhstan Holding Company for Assets Management JSC;
	Minister of Energy and Mineral Resources of the Republic of Kazakhstan.
	Member of the Board of Directors, Sovereign Wealth Fund "Samruk-Kazyna" JSC.
	Minister of Oil and Gas of the Republic of Kazakhstan; Currently, he is Chairman of Management Board of JSC NC "KazMunayGas" and
	Member of KMG's Board of Directors.
	Was elected as Member of the Board of Directors of JSC NC "KazMunayGas" for the
	first time on 6 Jan. 2012.
	On 20 Jun. 2014 he was reelected to KMG's Board of Directors. Holding of shares

Members of KMG's Board of Directors are elected by a resolution of the Management Board of the Samruk-Kazyna JSC.

### **Requirements determined for Independent Directors**

1. **Primary criteria** (stipulated in article 1 of the Law of the Republic of Kazakhstan "On Joint Stock Companies"):

• is not an affiliate of KMG and has not been for three years preceding its election to the Board of Directors (except where it occupies the position of an Independent Director of this joint-stock company), and is not an affiliate in respect of KMG's affiliates;

• is not bound by subordination to the officials of this joint-stock company or entities affiliated to KMG, and has not been bound by subordination to these entities for the three years preceding its election to the board of directors;

• is not a government employee;

• is not a representative of the shareholder at meetings of the bodies of this joint-stock company, and has not been the same during the three years preceding its election to the board of directors;

• does not participate in the audit of this joint-stock company as an auditor employed in an auditing firm, and has not participated in such an audit during the three years preceding its election to the board of directors.

2. Ancillary criteria (stipulated in the Rules of Selecting Independent Directors of the Samruk-Kazyna JSC):

• has publicly announced its status of an Independent Director prior to election to the Board of Directors;

• has expertise in certain areas related to the functional duties of an Independent Director, membership in the committees of the Board of Directors, strong communication skills, relies in the work on the principles of transparency, objectivity, constructive thinking and professionalism;

• has general information about the key issues specific to an entity similar in size and nature of operations to KMG, and, among other things, demonstrates understanding of:

a. regulatory obligations

b. competitive environment on the domestic and international markets

c. peculiarities in the sphere of corporate finance, internal control, strategy and/or the matters of appointment and/or remuneration to provide an expert opinion when being a member in the relevant committee of KMG's Board of Directors;

• is capable of analyzing comprehensively and objectively evaluating the provided information, and work out an independent position on a matter relying on the principles of rule of law, justice and equitable treatment of all shareholders;

• has impeccable reputation/positive achievement in the business and/or industry environment, maintains high ethical standards;

• has plenty of time to participate in the work of the Board of Directors not only during meetings of the Board of Directors, but additionally - for appropriate study of materials for meetings of the Board of Directors;

• is not a member of boards of directors in more than four companies.

### Remuneration to Members of the Board of Directors

Members of the Board of Directors receive a remuneration in the amounts as follows:

- 1. Independent Directors (F. Kuijlaars, P. Lane, C. Walton) receive a fixed annual remuneration in the amount of 150,000 US dollars, Y.U. Baimuratov 18,200,000 tenges.
- 2. Member of the Board of Directors U.S. Karabalin in the amount of 18,200,000 tenges.

Furthermore, additional remuneration is paid to the Independent Directors:

- acting in the capacity of Chairman of KMG's Board of Directors – 75,000 US dollars (or an equivalent amount in KZT at the exchange rate of the National Bank of the Republic of Kazakhstan) annually;

- acting in the capacity of Chairman of the Committee for:

Audit – 35,000 US dollars (or an equivalent amount in KZT at the exchange rate of the National Bank of the Republic of Kazakhstan) annually;

Strategy and Innovations, Appointment and Remuneration, Finance - 25,000 US dollars (or an equivalent amount in KZT at the exchange rate of the National Bank of the Republic of Kazakhstan) annually;

- Member of the Committee for:

- Audit – 17,500 US dollars (or an equivalent amount in KZT at the exchange rate of the National Bank of the Republic of Kazakhstan) annually;

Strategy and Innovations, Appointment and Remuneration, Finance - 12,500 US dollars (or an equivalent amount in KZT at the exchange rate of the National Bank of the Republic of Kazakhstan) annually;

- for participation in a meeting initiated by Chairman of KMG's Board of Directors and/or Chairman of Management Board of the Samruk-Kazyna JSC, Chairman of Management Board of JSC NC "KazMunayGas" - 2,000 US dollars (or an equivalent amount in KZT at the exchange rate of the National Bank of the Republic of Kazakhstan) for each meeting.

### Business Report of the Board of Directors of JSC NC "KazMunayGas"

Seventeen meetings of the Board of Directors were held in 2016 and were in praesentia (including those held by means of conference call).

276 matters were submitted for consideration of the Board of Directors, of which 75 matters were for information on the current situation with the matters of vocational health and safety and environmental protection, KMG's financial standing, execution of resolutions of KMG's Board of Directors, implementation of major projects etc.

Of 276 resolutions passed by the Board of Directors in 2016:

over 60 resolutions - on important matters of corporate governance and the aspects regulating KMG's internal activities;

about 15 resolutions on the matters of subsoil use, making amendments to the subsoil use contracts;

57 resolutions were about appointment of staff and the structure of KMG's central office;

23 resolutions - on the matters of making interested-party transactions;

about 30 resolutions - on the matters of operations, falling within the exclusive terms of reference of the general meeting of shareholders (members) of a legal entity, whose ten or more percent of shares (interest in the equity capital) are owned by KMG.

Name of Member of	Meeting number and date (day, month)																
KMG's Board of Directors	No.1 (27.01)	No.2 (24.02)	No.3 (14.03)	No.4 (31.03)	No.5 (28.04)	No.6 (18.05)	No.7 (25.05)	No.8 (15.06)	No.9 (30.06)	№10 (11.07)	No.11 (25.07)	No.12 (28.07)	No.13 (29.09)	No.14 (27.10)	No.15 (7.11)	No.16 (23.11)	No.17 (13.12)
S.M. Mynbayev	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
F. Kuijlaars	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
P. Lane	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
N.K. Rakhmetov	+	+	+	-	Remov	ed from a	the BD	I	I	I	I	I		1	I	1	
Y.U. Baimuratov	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+
C. Walton	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
B.T. Beisengaliyev		+	+	+	+	+	-	+	+	-	-	-	-	+	+	+	+
U.S. Karabalin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Baljeet Grewal					+	+	+	+	+	+	+	+	+	+	+	+	+

## **Committees of the Board of Directors**

#### **Appointment and Remuneration Committee**

Chairman:

Y.U. Baimuratov (KMG's Independent Director)

#### Members:

F. Kuijlaars (KMG's Independent Director)

- P. Lane (KMG's Independent Director),
- C. Walton (KMG's Independent Director)

U.S. Karabalin (Representative of the Samruk-Kazyna JSC) The committee acts for the purposes of assisting the Board of Directors through development and provision of recommendations on the matters of:

- the Board of Directors and Management Board succession planning;
- ensuring continuous and objective performance appraisal of the Board of Directors, Management Board, Corporate Secretary and other employees;
- ensuring an efficient staff policy, compensation and remuneration system, and social support, vocational development and training of officers and employees.

The Appointment and Remuneration Committee held 14 meetings in 2016. During 2016 the Appointment and Remuneration Committee produced recommendations on the matters of:

- On the Management Board of JSC NC "KazMunayGas".
- On the membership of the Board of Directors of JSC NC "KazMunayGas"
- On the Board of Directors of JSC "KazTransOil"
- On the Ombudsman of JSC NC "KazMunayGas"
- Report on Implementation of the Staff policy of JSC NC "KazMunayGas" over 2011-2015
- On final approval of the Corporate KPIs of JSC NC "KazMunayGas" and their 2016 target values
- On final approval of the Motivation KPI Scorecards of the executive employees of JSC NC "KazMunayGas" and their 2016 target values
- On the Board of Directors of JSC "KazTransGas"
- On consideration of the developed 2016-2018 Action Plan to Increase the Social Stability Level among the Staff of the JSC NC "KazMunayGas" Group of Companies, and the results of the social research to determine the Social Stability Rating, conducted in the entities of the JSC NC "KazMunayGas" group of companies.
- On approval of the structure of the central office of JSC NC "KazMunayGas"
- On determining the remuneration amounts to the members of Management Board (executive employees) of JSC NC "KazMunayGas" following the results of work over 2015.
- Determining and approval of the amount of annual remuneration to be paid to expatriate employees following the results of the 2015 work.
- On election of Boards of Supervisory Directors of the KazMunayTeniz OOC LLP, LLP "NMSC "KazMorTransFlot", KMG Karachaganak LLP.
- On approval of amendments to the Rules of labour remuneration to the executive employees, employees of the internal audit service and Corporate Secretary of JSC NC "KazMunayGas"
- On early termination of powers and election of members of the Board of Directors
- On approval of motivation key performance indicator scorecards of certain executive employees of JSC NC "KazMunayGas" and their 2016 target values.
- O granting approval of combined job of a Member of the Management Board of JSC NC "KazMunayGas"
- Monitoring execution of the Motivation KPI Scorecards of KMG's executive employees over 9 months of 2016
- On appraisal of performance of the Corporate Secretary of JSC NC "KazMunayGas".
- Report on the state of work on organizing training and development of expertise in the JSC NC "KazMunayGas"

group of companies

- On appraisal of 2016 performance of the Board of Directors of JSC NC "KazMunayGas"
- On candidates for the post of Ombudsman in the subsidiary companies of JSC NC "KazMunayGas"
- On approval of the restated Code of Business Ethics of JSC NC "KazMunayGas"
- On the Staff Policy of JSC NC "KazMunayGas" for 2017-2021
- On the Senior Executives Succession Plan of the JSC NC "KazMunayGas" group of companies.

Recommendations of the Committee were presented at meetings of the Board of Directors, and were taken into account by KMG's Board of Directors in passing its resolutions.

#### Committee on Strategy and Innovation

Chairman: Christopher Walton (KMG's Independent Director)

Members:

P. Lane (KMG's Independent Director)

F. Kuijlaars (KMG's Independent Director)

U.S. Karabalin (Representative of the Samruk-Kazyna JSC)

B.T. Beisengaliyev (Representative of the Samruk-Kazyna JSC) The committee acts for the purposes of assisting the Board of Directors through development and provision of recommendations on the matters of:

- the development strategy and investment policy, including top-priority areas of development;
- increasing the investment appeal, including by means of improving corporate governance;
- appropriate planning of the financial and economic activities;
- introduction of Innovations.

B. Grewal (Representative of the Samruk-Kazyna JSC).

In 2016 the Committee held 12 meetings, where about 120 matters were considered, on which KMG's Board of Directors was given recommendations.

Recommendations developed by the Committee were presented at meetings of KMG's Board of Directors on an ongoing basis, and were taken into account by KMG's Board of Directors in passing its resolutions.

The Committee has considered a number of large and important issues on the "Corporate Governance" block. Following the results of consideration the Committee gave its recommendations to KMG's Board of Directors on the issues of approval of the Development Strategy of JSC NC «KazMunayGas» till 2025, KMG's Development Plan, introduction of SAP in JSC NC «KazMunayGas» group, approval of the Corporate Governance Code in the organizations whose fifty percent of voting shares (participation shares) and more are directly or indirectly owned by JSC NC «KazMunayGas» and approval of the Annual report of JSC NC «KazMunayGas» for 2015. The Committee discussed the Shareholder's expectations (SWF Samruk-Kazyna JSC) for 2016 and determined Corporate KPI of JSC NC «KazMunayGas». The Committee gave favorable recommendations to the Board of Directors upon consideration of the issues on approval of the Plan of measures on restructuring of the non-core facilities of the group of companies of JSC NC «KazMunayGas», on introduction of amendments to the List of subsidiary and dependent entities of JSC NC «KazMunayGas» proposed to be transferred to a competitive environment, elimination/reorganization. At the meetings of the Committee it was resolved to hear, on a quarterly basis, the information regarding the status of investment projects of JSC NC «KazMunayGas» group, the planned or actual cost of which is exceeding USD 100,000,000 .During the year the Committee made a number of decisions on the activity of KMG's subsidiary and dependent entities (including KazMunayGas — Refining and Marketing JSC, KazTransOil JSC, KMG Karachaganak LLP, KazTransGas JSC, KazMunayGas Exploration Production JSC). Besides, the Committee considered the Plan of transfer of a leading role to the Corporate Secretary of JSC NC «KazMunayGas» in preparation of reports on compliance with the requirements of the Corporate Governance Code of the Sovereign Welfare Fund Samruk-Kazyna Joint-Stock Company, approved by decree No. 1403 of the Government of the Republic of Kazakhstan dated November 5, 2012; amendments in the Regulations on the Board of Directors of JSC NC «KazMunayGas» and Plan of measures on improvement of quality of the materials submitted to the Board of Directors of JSC NC «KazMunayGas».

In the "main priority activities of KMG" block, each meeting in presentia of the Committee discussed the current situation with the KMG's business process transformation, prospect for development of the North Caspian Project and Karachaganak project, information on the programs implemented by Production and Drilling Technology Research and Development Institute of JSC NC «KazMunayGas»LLP. During the year the Committee discussed the implementation of individual projects of the "processing and marketing" transformation, the Concept of the information technologies, information security and data management development. Besides, the issues on implementation of the Transformation Program of KMG International N.V. and the "Oil Refining" direction were reported at the meetings of the Committee.

In the "acquisition and alienation by KMG of ten and more percent of shares (participatory shares in the authorized capital) of other legal entities" block, the Committee reviewed the issues of acquisition of 50% (fifty percent) of participatory share in the authorized capital of Becturly Energy Operating LLP; acquisition by KazMunayGas — Refining and Marketing JSC of 25% of participatory share of Investment Fund of Kazakhstan JSC in the authorized capital of Bio Operations LLP; alienation of 50% of participatory share in the authorized capital of Bio Operations LLP; alienation of 50% of participatory share in the authorized capital of Bio Operations LLP; alienation of 50% of stock of the authorized capital of KMG-Ustyurt LLP in favor of UnionField Group Ltd; alienation of 100% of stock of

shares of Kazakhstan-British Technical University JSC in favor of the Kazakh National Research Technical University named after Satpayev K.I.

In the "procurement and exercise by KMG of the subsurface right as well as introduction of amendments to contracts for subsurface use" block, the Committee considered the issues of introduction of amendments to the existing Contracts on "N" site located in the Kazakhstan part of the Caspian Sea; on "Bekturly Vostochny" site located in the Mangystau region; on "Orken" site located in the Kyzylorda region; on "Samtyr" site located in the Mangystau region as well as the issue of acquisition by KMG from KC KAZAKH B.V company of 27% of the subsurface right under Contract No. 2609 dated April 21, 2008 for exploration of hydrocarbon crude on "Zhambyl" site.

In the "sustainable development" block, the Committee considered the Sustainable Development Report of JSC NC «KazMunayGas» for 2015; the issues of elaboration of the Oilfield Service Assets Development Program of JSC NC «KazMunayGas»; a status-report on the Transformation Program of JSC NC «KazMunayGas»: sustainable transformation and urgent projects; reports on execution of the Plan of measures on enhancement of the Corporate Governance System in JSC NC «KazMunayGas» for 2016-2017; target organizational structure of JSC NC «KazMunayGas»; amendments to the Charter of JSC NC «KazMunayGas».

#### Finance Committee

Chairman: F. Kuijlaars (KMG's Independent Director)

Members:

P. Lane (KMG's Independent Director) Baljeet Kaur Grewal (Member of KMG's Board of Directors, Member of the Management Board, Samruk-Kazyna JSC)

C.J. Walton (KMG's Independent Director)

Y.U. Baimuratov (KMG's Independent Director)

Produces recommendations for the Board of Directors for pursuing an efficient financial policy of KMG, performs assessment of KMG's financial standing, and monitoring of the financial strategy.

#### Statement of Responsibility

In accordance with the provisions of sub-clause 1.3 of article 62 of the Law of the Republic of Kazakhstan "On Joint Stock Companies", Members of the Board of Directors, as KMG's officers, are obliged to ensure integrity of the accounting and financial reporting systems, including carrying out independent audit. In this respect, according to the provisions of clause 5, article 63 of the Law of the Kazakhstan "On Republic of Joint-Stock Companies", in the event that the company's financial reporting misrepresents the company's financial standing, the officers who signed this financial reporting of the company shall be liable to third parties who suffered material loss as a result thereof.

In 2016 the Finance Committee was the coordinator of KMG's efforts to improve the company's financial standing, including the matters of the company's financial soundness. The most important transactions aimed to reduce KMG's net debt and improve liquidity figures were the transactions for arranging prepaid supplies of the Tengizchevroil LLP's attributable to KMG's interest, and prepaid supplies of KMG Kashagan B.V.'s oil.

#### Audit Committee

Chairman: P. Lane (KMG's Independent Director),

Members:

- F. Kuijlaars (KMG's Independent Director)
- P. Lane (KMG's Independent Director)

The Audit Committee of the Board of Directors of JSC NC "KazMunayGas" was created by a resolution of the Board of Directors of JSC NC "KazMunayGas" (minutes No.9 of 20 Sep 2006).

The Audit Committee is an advisory-andconsultative body of KMG's Board of Directors and operates in compliance with the Regulation on the Audit Committee approved by KMG's Board of Directors (minutes No.1 of 1 Mar 2011).

In line with the provisions of KMG's Corporate Governance Code, the Board of Directors, jointly with the Audit Committee, Internal Audit Service and KMG's external auditors, establishes the formal and transparent order of determining the ways of application by KMG of financial reporting and internal control principles, and appropriate relations with KMG's external auditors.

Primary functions of the Audit Committee include the following:

- · consideration of financial reporting matters;
- consideration of internal control and risk management matters;
- · consideration of external audit matters;
- consideration of internal audit matters;

The Audit Committee considers the matters related to the internal and external audit, the matters of financial reporting and risk management. The Audit Committee provides the Board of Directors with recommendations with respect to making decisions on these matters.

The Audit Committee holder regular meetings in praesentia, including by means of conference calls.

13 meetings of the Audit Committee were held in 2016. In 2016, the Audit Committee considered a total of 71 matters.

### Management Board of JSC NC "KazMunayGas"

#### as at 31 December 2016

Photo	Sauat Mukhametbayevich Mynbayev <sup>1</sup>
	Chairman of Management Board, JSC NC "KazMunayGas"

#### Supervised matters of activity

Performs general management of KMG's operations in accordance with KMG's Charter and bears responsibility for KMG's work to KMG's Board of Directors and shareholders.

Leads KMG's Management Board, Investment Committee, Personnel Committee, Modernization and Transformation Council, Integrated Management System and Information Security Management System Council, Risk Committee, and a permanent working group on sustainable development governance.

Represents KMG in government authorities of the Republic of Kazakhstan, Samruk-Kazyna JSC, KMG's Board of Directors, Boards of Directors/Supervisory Boards and other bodies of the subsidiary and dependent entities (SDEs) and jointly-controlled entities.

Determines priority areas and target results of work of Executive Vice Presidents, Vice Presidents for Transformation, Strategy, Human Resources, Legal Support, Health, Safety and Environment, Service of Chairman of Management Board, Head of Secretariat of Management Board, Corporate Security and Risk Management Departments.

Ensures achievement of KMG's established key performance indicators in accordance with KMG's Development Strategy and established Policies.

#### Holding of shares

Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.

#### Membership in Board of Directors of Other Entities

Has never been a member of the board of directors in other entities.



#### Daniyar Amirbayevich Berlibayev

**Executive Vice President for Transportation, Refining and Marketing** Year of birth – 1968

Nationality: Kazakhstan

**Education, line of profession (qualification):** Al-Farabi Kazakh State University (1985 – 1992) Line of profession: Legal Science, qualification - Lawyer

#### Work Experience:

Has worked in various executive posts in the National Agency for Foreign Investment under the Ministry of Economy of the Republic of Kazakhstan, Government Export-Import Bank (Eximbank).

Has been working In various executive positions the oil and gas sector since 1997. General Director (Chairman of Management Board) of the Intergas Central Asia, JSC, combining the duties of Senior Deputy General Director of JSC "KazTransGas", Managing Director for Gas Projects of JSC NC "KazMunayGas", General Director of JSC "KazMunayGas-RM", General Director of JSC "KazTransGas", Managing Director fo Gas Projects, Senior Deputy Chairman of Management Board for Corporate Centre, Deputy Chairman of Management Board for Corporate Development of JSC NC "KazMunayGas".

#### Supervised matters of activity

Organizes and bears responsibility for the results of work in the following areas of KMG's activity:

ensuring common policy and coordinating development of oil-transportation systems, marketing, oil and gas refining and petrochemistry sphere of the supervised SDEs, through efficient management of assets, creation of the required capacity, integration of transportation systems and diversification of export directions, coordinating the efforts to implement the projects for development of the refineries of the Republic of Kazakhstan; working out the position of KMG and the supervised SDEs and JCEs on the strategy and development of

<sup>&</sup>lt;sup>1</sup> personal information is presented in the membership of KMG's Board of Directors

the oil refining industry of the Republic of Kazakhstan, including increasing the conversion ratio of oil and gas, enhancement of the products quality, improvement of the production operations, ensuring financial return on oil and gas refining, petrochemistry, crude and oil products marketing projects, increasing the level of technological development;

ensuring efficient management of projects for development of the existing and creation of new oiltransportation capacity;

ensuring development of the national marine fleet on the Caspian Sea and in open seas in order to improve the quality and reliability of marine oil transportation;

ensuring reliable and uninterrupted transportation of oil and

water through construction of new and modernization of the existing pipelines, carrying out safe operation of the pipeline systems;

development of Kazakhstan's oil and gas refining industry in the medium and long-term, control over execution of measures for ensuring delivery of oil and gas for refining and for increasing return on oil and gas refining;

in accordance with established procedure, ensuring efficient management of the interest of the Republic of Kazakhstan in the oil-transportation projects, and that of the supervised SDEs and JCEs, aimed to produce high-quality and environmentally sound oil products, increasing the yield of light oil products, reducing production costs, and enhancing the efficiency of their financial and economic activities;

ensuring execution of instructions of the Government of the Republic of Kazakhstan and the Ministry of Energy of the Republic of Kazakhstan on shipping diesel fuel for the needs of agricultural producers, fuel oil for the heating season, jet fuel, petrol, oil, lubricants and other products of oil refining by the supervised SDEs of KMG;

within the framework of the terms of reference on the supervised business areas of KMG, rendering assistance to KMG's representatives in the MOGPs (Tengiz, North-Caspian and Karachaganak Projects) in ensuring efficient management of KMG's interest in MOGSs on the strategic development matters;

participating in defining and achievement of the strategic goals and objectives;

coordinating the matters of international cooperation and technical regulation in oil transportation, oil and gas refining, petrochemistry, oil and oil products marketing within the framework of intergovernmental commissions with countries of far and near abroad, and as part of participation in international projects and international organizations relevant to the supervised business areas;

ensuring implementation of programs and forming a high level of the employees' corporate culture in occupational health, industrial safety and environmental protection.

In accordance with the established procedures and within the limits of its competence, represents KMG in government authorities of the Republic of Kazakhstan, Samruk-Kazyna JSC, boards of directors/supervisory boards and other management bodies of the supervised SDEs and JCEs of KMG, and in international and other organizations, relevant to the supervised business areas.

Determines priority areas and target results of work of Senior Vice Presidents: for Marketing and Sales, Oil Transportation, Oil and Gas Refining.

Ensures achievement of the set KPIs for the planned period in the supervised area in accordance with KMG's Development Strategy and the established Policies.

#### Holding of shares

Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.

#### Membership in Board of Directors of Other Entities

- Chairman of the Board of Directors, KMG International
- Chairman of the Board of Directors, JSC "KazTransOil"
- Member of the Board of Directors of JSC "KazTransGas"
- Member of the Board of Supervisory Directors, KazRosGas LLP
- Chairman of the Board of Supervisory Directors, AstanaGas KMG LLP
- Members of the Partnership Committee, Kylysh Commercial Partnership

#### Dauren Saparaliyevich Karabayev



### Senior Vice President - Chief Financial Officer Year of birth – 1978 Nationality: Kazakhstan Education, line of profession (qualification):

Kazakh State Academy of Management (1995-1999) Line of profession: International Economic Relations, qualification – International Economist Texas A&M University. Lowry Mays Business School (1999-2001) Master of Science in Finance

#### Work Experience:

Has worked in the banking system since 2001, held executive positions: Head of Credit Office, ABN AMRO Bank Kazakhstan SJSB CJSC, Managing Director for Investment Operations of the Halyk Bank of Kazakhstan JSC, Managing Director – Director of the Investment Banking Department of the Halyk Bank of Kazakhstan JSC, Managing Director - Director of the International Relations Department of the Halyk Bank of Kazakhstan JSC, Deputy Chairman of Management Board of the Halyk Bank of Kazakhstan JSC, from September, 2016 - champion of the project

McKinsey&Company Inc., from October, 2016 - Executive Vice President - Chief Financial Officer of JSC NC "KazMunayGas".

#### Supervised matters of activity

Organizes and bears responsibility for the results of work in the following areas of KMG's activity:

ensuring coordinated and efficient efforts in the field of budget and tax planning, finance, information technology, procurement and supply, and the related areas and types of operations;

within the framework of the terms of reference on the supervised business areas of KMG, rendering assistance to KMG's representatives in the major oil-and-gas projects (MOGPs) (Tengiz, North-Caspian and Karachaganak Projects) in ensuring efficient management of KMG's interest in MOGSs on the financial matters of development;

ensuring consolidation and forming on-going plans and budgets of the KMG group of companies with a view to determining the required funding volume and ensuring designated and rational use of funds;

ensuring achievement of the strategic goals in accordance with the Development Strategy of the KMG group of companies in finance and asset management, business restructuring, mergers and acquisitions;

control over the activity for organizing the purchase process and local content development;

ensuring statutory and fiscal accounting;

approval of acts on writing-off of fixed assets, reserves and intangible assets;

ensuring an efficient process of management of changes when implementing business initiatives and projects;

ensuring efficient management of financial risks and controls within the framework of the entire KMG group of companies;

coordinating development and implementation of the common IT strategy of KMG and its SDEs;

ensuring implementation of programs and forming a high level of the employees' corporate culture in occupational health, industrial safety and environmental protection (HSE);

assisting integration of sustainable development into the key processes in the supervised area.

In accordance with the established procedures and within the limits of its competence, represents KMG in government authorities of the Republic of Kazakhstan, Samruk-Kazyna JSC, Boards of Directors/Supervisory Boards and other bodies of KMG's SDEs and JCEs, and in international and other organizations.

Determines priority areas and target results of work of Vice Presidents: Financial Controller, for Information Technology, for Procurement and Supply.

Heads the following committees: Credit Committee, Planning Committee, and is Chairman of the Management Committee for Transformation of the Business Functions.

Heads the Commission for Filing and Considering Claims, Suits and Applications, and Matters Relating to Restructuring Overdue Accounts Receivable.

Ensures achievement of the set KPIs for the planned period in the supervised area in accordance with KMG's Development Strategy and the established Policies.

#### Holding of shares

Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.

#### Membership in Board of Directors of Other Entities

- Member of the SB (Supervisory Board) of the KMG Research and Development Institute of Production and Drilling Technology LLP
- Member of the SB, Mangistau Investment B.V.
- Member of the SB, KMG Finance Sub B.V.
- Member of the Partnership Council, Tengizchevroil JV LLP



#### Kairat Kamatayevich Sharipbayev

**Executive Vice President for Gas Transportation and Marketing** Year of birth – 1963

Nationality: Kazakhstan

Education, line of profession (qualification):

Kazakh Agricultural Institute (1985) Line of profession: Agrotechnician

Abai Almaty State University (1999)

Line of profession: Marketing and Commerce

Candidate of Political Sciences.

#### Work Experience:

Worked in the sales and logistics sphere, holding executive posts in the Koktem LLP, Shyn-Assyl JSC, Zhetisu LLP, was Deputy Akim of the city of Taraz.
From 2000 he took up the position of Senior Vice President of the Dauir CJSC, after which he was appointed CEO of the "Kitap" Publishing House.
Began working in the oil and gas sector from 2001, where he held various executive positions. Head of Marketing and Commerce Office, CJSC "KazTransGas", Director of the Gas Transportation and Marketing of the Intergas Central Asia CJSC, Deputy General Director for Marketing and Commerce, Deputy General Director for Marketing, CJSC "KazTransGas".
He was Advisor to Senior Vice President, and later - Managing Director for Commerce in JSC NC "Kazakstan Temir Zholy". During 2006-2009 he worked in business, being Chairman of the Danko JSC's Board of Directors.
From 2009 to October, 2014 he held the position of General Director (Chairman of Management Board) of JSC "KazTransGas Aimak".
On 28 October 2014 he was appointed General Director (Chairman of Commerce)

On 28 October 2014 he was appointed General Director (Chairman of Management Board) of JSC "KazTransGas". He has been Chairman of the Board of Directors of JSC "KazTransGas" since December, 2015.

Since August, 2016 - Executive Vice President for Gas Transportation and Marketing, JSC NC "KazMunayGas".

#### Supervised matters of activity

Organizes and bears responsibility for the results of work in the following areas of KMG's activity:

ensuring common policy and coordinating development of gas-transportation systems, marketing of the gas production in the supervised SDEs through efficient management of assets, creation of necessary capacity, integration of transportation systems and diversification of hydrocarbon export routes directions;

in accordance with the established procedure, ensuring efficient management of the shares of the Republic of Kazakhstan in gas-transportation projects;

within the framework of its terms of reference, participation as a representative of KMG in MOGPs (Tengiz, North-Caspian and Karachaganak projects), other projects for exploration, production and marketing of gas with the participation of KMG for the purposes of ensuring safe and uninterrupted gas supply to the Republic of Kazakhstan, among other things, through consideration and granting approval to the strategic matters of development of the MOGPs and other projects, and on other strategic matters of operations as part of the projects;

participating in defining and achievement of the strategic goals and objectives;

coordinating and controlling the efforts to form and increase the resource base, including the natural (LNG), compressed natural gas (CNG), petroleum (LPG) and other types of gas, and designing the strategy for implementing new technology of gas production and marketing within the terms of reference;

ensuring efficient management of projects for development of the existing and creation of new gastransportation capacity;

developing Kazakhstan's gas-processing industry in the medium and long-term, control over execution of measures for marketing of gas and gas condensate;

ensuring deliveries of gas and gas condensate for processing, and increasing the return on processing;

working out the position of KMG and KMG's SDEs/JCEs on the strategy and development of the gasprocessing industry of the Republic of Kazakhstan, including increasing the gas conversion ratio, enhancement of the products quality, improvement of the production operations, ensuring financial return on gas processing, gas condensate, chemical utilization of gas, gas and gas product marketing projects, increasing the level of technological development;

efficient management of the supervised SDEs and JCEs of KMG, aimed to produce high quality and environmentally sound gas products, gas marketing, increasing the yield of gas products, reducing production costs;

assistance in organizing joint ventures for creation of new gas equipment production facilities;

coordinating the matters of international cooperation and technical regulation in gas transportation, gas production and marketing, chemical utilization of gas, gas condensate processing, among other things, working in intergovernmental commissions and committees with countries of far and near abroad, and as part of participation in international projects and international organizations.

Works out KMG's position in the sphere of strategic planning in gas transportation and marketing, including: for development and control over implementation of the development strategy on the supervised business area, methodological supervision and operation of the performance appraisal system in the supervised business area;

ensuring implementation of programs and forming a high level of the employees' corporate culture in occupational health, industrial safety and environmental protection.

In accordance with the established procedures and within the limits of its competence, represents KMG in government authorities of the Republic of Kazakhstan, Samruk-Kazyna JSC, boards of directors/supervisory boards and other management bodies of KMG's SDEs and JCEs, and in international and other organizations.

Determines priority areas and target results of work of Senior Vice President for Gas Transportation and Storage, Senior Vice President for Resource Base, Provision of Gas Supply and Prospective Projects, Senior Vice President for Gas Processing and Marketing.

Ensures achievement of the set key performance indicators for the planned period in the supervised area in accordance with KMG's Development Strategy and the established Policies.

#### Holding of shares

Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.

#### Membership in Board of Directors of Other Entities

Chairman of the Board of Directors, JSC "KazTransGas"



#### **Gleb V. Luxembourg**

#### Senior Vice President for Transformation

Year of birth - 1968

**Nationality: Russian Federation** 

#### Education, line of profession (qualification):

Moscow Technical University of Communications and Informatics (1991-1996)

Line of profession: Applied Mathematician, Diploma with honours LIB No. 202796

Moscow Academy of State and Municipal Administration of the Academy of Public Administration under the RF's President (graduation - in 2003)

#### Work Experience:

Has been working in the oil and gas sector since 1988, starting from Assistant Driller in the Mamontoskoye EOR&WOD (Enhanced Oil Recovery & Workover Operations Department) of the Yuganskneftegaz PA.

From 1997 he continued his career in the NC "YUKOS" OJSC in various posts. He concurrently performed the functions of General Director of a subsidiary, YUKSAR OOO.

2000 - August, 2002 – Chief Financial Officer, Resursenergo OOO. In 2002 he joined the group of companies of the Tyumen Oil Company CJSC, subsequently - TNK-BP OJSC.

From 2002 through 2005 – General Director of the "Regional Service Center - Nyagan" CJSC.

During 2005-2007 he served as General Director of the RSSSC- Nizhnevartovsk CJSC, which is a part of the TNK-BP group of companies.
From 2007 to 2009 he acted as General Director of the Tagulskoye OOO, TNK-BP.
From 2009 to 2010 - Deputy General Director, Rospan International.
During 2010-2011 he held the position of Vice President for Health, Safety and Environment of the TNK-BP OJSC.
During 2011-2014 – General Director, Yamal LNG OJSC. He managed construction of the natural gas production and liquefaction facility based on the Yuzhno-Tambeyskoye gas-condensate field.
Since 2015 - Deputy Chairman of Management Board for Prospective Development of Production Operations, Senior Vice President for Transformation, JSC NC "KazMunayGas".
Since 2016 - combining the duties of General Director of KMG Global Solutions B.V. LLC branch in the Republic of Kazakhstan.

#### Supervised matters of activity

Organizes and bears responsibility for the results of work in the following areas of KMG's activity:

development and implementation of the Programme for Transformation of Business Processes of the KMG group of companies;

forming and managing the activities of the Business Process Transformation Program office;

organizing the proceedings of commissions, the Modernization and Transformation Council, working groups, meetings and workshops on the matters related to business process transformation;

coordinating the work for KMG's interface with its subsidiary and dependent entities, "Samruk-Kazyna" JSC and other authorities and stakeholders within the framework of the Transformation Program;

control over and monitoring of execution of the budgets for transformation of the business processes of KMG and its subsidiary and dependent entities;

coordinating and monitoring achievement of the target values of KPIs as part of KMG's Transformation Program;

ensuring expansion in the organizational capability of the staff through enhancing professional development and employee rotation in the structural subdivisions of the SDEs and KMG;

participating in defining and achievement of the strategic goals and objectives;

ensuring implementation of programs and forming a high level of the employees' corporate culture in occupational health, industrial safety and environmental protection.

In accordance with the established procedures and within the limits of its competence, represents KMG in government authorities of the Republic of Kazakhstan, Samruk-Kazyna JSC, Boards of Directors/Supervisory Boards and other bodies of KMG's SDEs and JCEs, and in international and other organizations.

Determines priority areas and target results of work of the transformation team:

Ensures achievement of the set KPIs for the planned period in the supervised area in accordance with KMG's Development Strategy and the established Policies.

#### Holding of shares

Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.

#### Membership in Board of Directors of Other Entities



Serik Sakbaldiyevich Abdenov

#### Vice President for Human Resources

Year of birth - 1977

#### Nationality: Kazakhstan

#### Education, line of profession (qualification):

Kazakh Institute of Law and International Relations (1994 – 1998) Line of profession: Legal Science, qualification - Lawyer Karaganda Economic University of Kazpotrebsoyuz (2002-2004) Line of profession: Economics, qualification – Economist Russian Academy of National Economy under the President of the Russian Federation (2011-2013), MBA

#### Work Experience:

He started out on a career in 1998 as Chief Specialist of the Regulatory Act Registration Administration, and later - Chief Specialist of the Legal Expert

	Review and Law Drafting Administration, Head of the Subordinate Legislation Expert Review Department of the Ministry of Justice of the Republic of Kazakhstan.
	From 2000 to 2003 he worked in the Ministry of Foreign Affairs: Head of the Legal Expert Review Section of the International Legal Department, Head of the Control and Document Workflow Administration, Deputy Chief of Staff.
	From 2003 to 2004 he worked in the business structures.
	From 2004 to 2009 he worked in the system of the Ministry of Labour and Social Protection of Population, holding the positions of Deputy Director, Director of the Department of Employment of Population and Public Control over Compliance with the Labour and Occupational Safety and Health Laws, Director of the Labour and Employment Department, Vice Minister of Labour and Social Protection of Population of the Republic of Kazakhstan. In 2009 he was appointed Deputy Akim, and later - Senior Deputy Akim of the East-Kazakhstan Province.
	During 2012-2013 – Minister of Labour and Social Protection of Population of the RoK.
	In 2013 he was appointed Managing Director for Human Resources and Labour Remuneration, JSC NC "KazMunayGas".
Supervised matters of activit	Since August, 2016 - Vice President for Human Resources, JSC NC "KazMunayGas". Since, 2016 - combining the duties of General Director, Oil Construction Company LLP).
collective and individual job result companies; improvement of the corporate go corporate governance score as it p ensuring social stability and mo implementation of a graded s business areas of the KMG group of formulating and implementing t ensuring formation and executi ensuring performance of labour forming KMG's consolidated sa forming the consolidated plan of monitoring its execution; ensuring an efficient system fo maintaining competitive capacity in ensuring timely and reliable p functions, including performance as ensuring compliance with the re of human resources on the scale of efficient management of risks a ensuring coordinated efforts a	he common staff and social policy; on of personnel training and development plans; r rate-setting works; lary fund within the framework of KMG's Development Plan; on KMG's headcount within the framework of KMG's Development Plan, and r staff appraisal and remuneration with a view to ensuring internal equity and the field of remuneration, in accordance with meritocracy principles; oreparation of reporting on the operating results of the human resources gainst the KPIs; equirements of the labour and other legislation and regulatory acts in the field f the entire KMG group of companies; and controls in human resources management; among all functions within the human resources unit, business units and
implementing the sponsor poli implementation of memoranda v development of the regions, regula participating in the creation of the	e adjacent fields and types of operations; icy of KMG and its SDEs, staff and social policy, among other things, on with local executive bodies on assistance to the social and economic tion of social and labour relations, rendering sponsorship and charitable aid; he sustainable development management system; able development into the key processes in the supervised area;
	able development into the key processes in the supervised area,

implementing the program for training and development of expertise of the executive and operating personnel;

participating in defining and achievement of the strategic goals and objectives; administrative support to KMG's operations;

implementing instructions of the President of the Republic of Kazakhstan, resolution of the Government of the Republic of Kazakhstan, government programs, resolutions of KMG's shareholders on the matters of construction of social and non-industrial facilities;

managing facilities of KMG's non-industrial and administrative infrastructure, administrative-and-service support to KMG;

engineering, construction, repair and reconstruction of KMG's administrative and non-industrial facilities;

participating in the program for restructuring KMG's non-core assets in the supervised business area;

approval of acts of the committee for writing-off of fixed assets, reserves and intangible assets in KMG;

ensuring implementation of programs and forming a high level of the employees' corporate culture in occupational health, industrial safety and environmental protection.

In accordance with the established procedures and within the limits of its competence, represents KMG in government authorities of the Republic of Kazakhstan, Samruk-Kazyna JSC, boards of directors/supervisory boards and other bodies of KMG's SDEs and JCEs, and in international and other organizations.

Determines priority areas and target work results of the human resources unit and Administrative Department, as well as the corresponding departments of the SDEs within the framework of the adopted divisional management structure.

Heads the Council for Development of Social Partnership for Settlement of Employment Disputes and Conflicts, disciplinary committee, Commission for Writing-Off of Fixed Assets, Reserves and Tangible Assets in KMG.

Ensures achievement of the set KPIs for the planned period in the supervised area in accordance with KMG's Development Strategy and the established Policies.

#### Holding of shares

Holds no KMG's shares. Holds no shares of the company's suppliers and competitors.

#### Membership in Board of Directors of Other Entities

- Representative of JSC NC "KazMunayGas" at the General Meeting of the "Samruk-Kazyna" CU PE's Members.
- Member of the Board of Directors, KazMunaiGas EP JSC.



#### Yerzhan Arystanbekovich Zhangaulov

Vice President, Legal Support

Year of birth – 1968

Nationality: Kazakhstan

#### Education, line of profession (qualification):

Karaganda State University (1985 – 1992) Line of profession: Jurisprudence; qualification: Lawyer-Jurist. Kazakh National Technical University, (2003-2006) Line of profession: Economist

#### Work Experience:

He started out on a career in 1992, worked in various positions in the justice system: Assistant to Prosecutor of the Makach region of the Semipalatinsk Province, Assistant to RoK's Minister of Justice. RoK's Ministry of Justice, Head of Department in the Legislation, Defense and Law Order Sector of the Office of the RoK's Prime Minister, Head of the Legal Service Department in the Administrative Department of the RoK President.

In 2001 he was appointed Director of the Legal Department, CJSC NC "Oil & Gas Transportation".

Since 2002, has worked in KMG in various executive posts: Director of the Department of Economic Agreements and Claim-related Work, Advisor to Vice President, Executive Director, Managing Director, Head of the Legal Service (Member of Management Board), Managing Director for Legal Support, since August, 2016 - Vice President for Legal Support, JSC NC "KazMunayGas".

#### Supervised matters of activity

Organizes and bears responsibility for the results of work in the following areas of KMG's activity:

ensuring observance of the laws of the Republic of Kazakhstan in KMG's activity, including those related to the matters of contracts, agreements, statements of intent and memoranda on KMG's oil-and-gas, oil-and-gastransportation and support-sector projects, in partnership with foreign partners or being implemented within foreign jurisdictions, and other documents related thereto, including subsoil use contracts and transactions related to financing of contracts (the International Contracts);

legal support to the matters of corporate governance of KMG and its SDEs, and rendering legal assistance thereto, within the limits of its terms of reference;

carrying out legal appraisal of draft orders and other legal documents developed in KMG, draft resolutions and other documents of legal nature, developed and submitted by KMG to governmental authorities, or presented to KMG for getting its agreement;

legal support to the processes aimed to achieve KMG's strategic (top-priority) goals, contemplating creation of legal relations complicated by a foreign element, including international public legal relations;

representing KMG in courts, governmental authorities, in projects (transactions) which a top-priority in accordance with KMG's strategy, in International Contracts, participating in negotiations within the framework of its terms of reference;

participating in defining and achievement of the strategic goals and objectives in the supervised business area;

analysis of the existing laws of the Republic of Kazakhstan, regulating KMG's operations, development (participating in development) and appraisal of draft regulatory legal acts initiated by KMG and its SDEs, in accordance with established procedure, and those submitted to KMG by governmental authorities, the Samruk-Kazyna JSC and non-governmental organizations, support to the said draft regulatory legal acts in government authorities and other organizations, if required;

ensuring implementation of programs and forming a high level of the employees' corporate culture in occupational health, industrial safety and environmental protection.

In accordance with the established procedures and within the limits of its competence, represents KMG in government authorities of the Republic of Kazakhstan, Samruk-Kazyna JSC, boards of directors/supervisory boards and other bodies of KMG's SDEs and JCEs, and in international and other organizations.

Determines priority areas and target work results of the legal support unit, as well as the corresponding departments^ of the SDEs within the framework of the adopted divisional management structure.

Ensures achievement of the set KPIs for the planned period in the supervised area in accordance with KMG's Development Strategy and the established Policies.

#### Holding of shares

Holds no KMG's shares. Holds no shares of the Company's suppliers and competitors.

Membership in Board of Directors of Other Entities

Member of SB, Aktaunefteservis

Chairman of SB, Aktauoilmash

### **Remuneration to Management Board Members**

Remuneration for the membership in the Management Board of JSC NC "KazMunayGas" is not provided for.

However, in accordance with the Rules of Remuneration of Labour of the Members of the Management Board (executive employees), employees of the internal audit service and Corporate Secretary of JSC NC "KazMunayGas", approved by resolution of the Board of Directors of JSC NC "KazMunayGas" No.1/2012 of 13 February 2013, fiscal year-end bonus to executive employees depending on the degree of achievement by executive employees of the strategic objectives is contemplated. The performance in achievement of the strategic objectives of executive employee is evaluated against two types of key performance indicators (KPIs): corporate and individual KPIs.

The planned amount of 2016 performance-based compensation to the Members of Management Board of KMG (taking into account taxes and other obligatory payments as required by the tax legislation of the Republic of Kazakhstan), is 429,897,912 thousand KZT, including that paid to non-residents - 119,999,880 KZT.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> To be paid after approval by KMG's Board of Directors (tentatively, in August, 2017) and may be subject to changes.

### Summary Business Report of the Management Board of JSC NC "KazMunayGas"

In 2016 The Management Board of JSC NC "KazMunayGas" adopted 453 resolutions, 440 of them (97%) were made at meetings in praesentia. 49 minutes of the Executive Body meetings were drawn up.

KMG's Management Board carried out its activity in compliance with the Work Plan of the Management Board of JSC NC "KazMunayGas" for 2016, approved by the resolution of 11 Dec. 2015 (minutes No.61).

Subject to the regulation on work, in-praesentia meetings of the Management Board were held on a weekly basis, on Tuesdays and/or Thursdays.

The frequency of meetings in praesentia of the Management Board is in line with the provisions of Corporate Governance Code.

149 issues have been submitted to the Board of Directors in accordance with the established procedure out of the total number of decisions in praesentia of the Management Board adopted for 2016.

Thus, 69 issues concerned draft documents or amendments and additions to decisions in force and internal documents, as well as KMG's participation in the creation of, alienation/transfer/acquisition of equity share/stock of shares of subsidiaries and dependent entities.

In accordance with the competence of the Board of Directors, 22 decisions of the Management Board have been initiated regarding the issues which fall within the exclusive competence of the general shareholders meeting (participants) of the legal entity, ten or more percent (equity share in the charter capital) of which are owned by KMG.

In 8 cases, at the suggestion of the Management Board the issues related to making amendments, approving additions, procurement and transfer of subsoil use rights on a number of Contracts for the exploration and production of hydrocarbon crude were submitted to the Board of Directors.

In accordance with the Investment Policy of Samruk-Kazyna JSC approved by the decision of the Board of Directors of the Fund (Minutes No. 111 as of 26 June, 2014) and the Corporate Standard for Investment Activities of Samruk-Kazyna JSC and legal entities, over fifty percent of voting stocks (equity shares) of which are directly or indirectly owned by Samruk-Kazyna JSC, approved by the decision of the Management Board of the Fund (minutes No. 34/15 dated 24 August, 2015), 7 issues on participation, acquisition and alienation of shares/equity shares of KMG and/or its subsidiaries in some organizations have been initiated for submitting to the Investment and Innovation Committee of Samruk-Kazyna JSC and subsequent submitting to KMG's Board of Directors.

Furthermore, 15 reports preliminarily approved by the Executive Body have been submitted for approval by the Board of Directors.

Within the powers that fall within the exclusive competence of SDE's general shareholders meeting, 13 decisions on the determination of KMG's position as a shareholder and 57 decisions on the determination of KMG's position as a member were adopted by the Management Board for subsequent voting at the general shareholders meetings by authorized representatives of KMG.

15 decisions as the Sole Shareholder and 133 decisions as the Sole Member of KMG's subsidiaries have been adopted by the Management Board.

In accordance with the Rules for Providing Sponsor and Charity Support by JSC NC «KazMunayGas» and Its Subsidiaries and Dependent Entities approved by the decision of KMG's Board of Directors dated 23 April, 2014 (minutes No. 3/2014), the Management Board adopted 1 decision on allocation of sponsor funds to the corporate sector of "Astana EXPO2017".

Also, during the reporting period, decisions on the conclusion of 3 Agreements on principles with TOTAL E&P KAZPETROL B.V. (Mugodzhar tract), Zhan oil LLP (Kaskol project), Synergized Gas Technology Kazakhstan LLP (Beyneu project) and 2 Additional agreements – No. 1 to the Agreement on principles between KMG and Meridian Central Asia Services B.V. (Samtyr project) and No. 2 to the Agreement on principles on "Samtyr" project dated 3 July, 2015 between KMG, Meridian Central Asia Services B.V. and Meridian Central Asia Services LLP were adopted.

In accordance with the Rules for Goods, Works and Services Procurement by the National Welfare Fund "Samruk-Kazyna" Joint Stock Company and organizations, fifty or more percent of voting stocks (equity shares) of which directly or indirectly belongs to Samruk-Kazyna JSC on the right of ownership or confidential management, approved by the decision of the Board of Directors of the Fund dated 28 January, 2016 (minutes No. 126), the Executive Body of KMG adopted 7 decisions on services procurement from single source.

Various internal documents, including 3 regulations, 3 policies, 18 rules, 13 action plans, and 31 decisions on introduction of amendments and additions to specific internal documents of KMG were approved by the decisions of the Management Board for 2016.

Monitored 344 decisions of the Management Board have been executed within a fixed timeframe at yearend.

### **Integrated Management System**

Pursing the objectives arising out of the Development Strategy of the Republic of Kazakhstan until 2030 and the Government's plan for accelerated transition of the Kazakh ventures to the international standards, JSC NC "KazMunayGas" was among the first organizations in the Republic of Kazakhstan in 2016 who implemented an integrated management system in the area of quality, environment, vocational health and safety, meeting the requirements of the ISO 9001, ISO 14001 and OHSAS 18001 series standards.

In order to maintain and improve the integrated management system (the IMS), JSC NC "KazMunayGas" (KMG) carried out the following actions in 2016:

- first IMS compliance audit was passed;
- in May of 2016 KMG's senior management performed analysis of IMS following the results of 2015, and
  passed a resolution establishing the goals in the sphere of quality, environmental protection, occupational
  health and safety, and approving the IMS improvement plan for 2016.
- KMG's Administrative Department, jointly with a service provider (KazMunayGas-Service LLP), determined and implemented measures for mitigating certain environmental aspects, risks and dangers for the health of KMG's employees for 2016;
- internal IMS audits in 36 departments (or 100% of structural subdivisions according to KMG's organizational structure effective for the audit period) were carried out, following the results of which incompliances were identified, and recommendations for improving the operations of certain structural subdivisions were made;
- the Occupational Health and Safety and Environmental Protection Policy was reviewed and approved by the resolution of KMG's Management Board of 24 May 2016 (minutes No. 20);
- for the purposes of updating, 139 internal documents, 127 job descriptions and about 60 of various forms were reviewed;
- In accordance with the legislative requirements and international standards, drills for evacuation of employees and visitors of KMG's administrative building were organized in July, 2016;
- 147 draft international, interstate and national standards were considered within the framework of technical regulation;
- 257 documents were placed in the IMS EDB in the state and Russian languages.

As at 31 December 2016, quality management systems are in place in 17 subsidiary and dependent entities of the JSC NC "KazMunayGas" group of companies.

Among them KMG and 13 subsidiary and dependent entities (JSC "KazTransOil", JSC "KazTransGas", KazMunayTeniz JSC, JSC NMSC "Kazmortransflot", KazakhoilAktobe LLP, "Teniz-Service" LLP, KazMunayGas-Service LLP, "Euro-Asia" Airlines JSC, KazMunayGas-Onimderi LLP, PetroKazakhstan Oil Products LLP, Pavlodar Petrochemical Plant LLP, Embamunaygaz JSC, Atyrau Refinery LLP) are certified to three standards (ISO 9001, ISO 14001 and OHSAS 18001).

The KMG-Security LLP provides its services as per the requirements of two international standards (ISO 9001 and OHSAS 18001), the Kazakhstan-British Technical University JSC - of three standards: quality management system - ISO 9001, occupational health and safety system - OHSAS 18001, test laboratory management system - ISO 17025.

The KazRosGas LLP operates up to the ISO 9001 standard.

The energy management system as per the requirements of ISO 50001 is in place in the Pavlodar Petrochemical Plant LLP, Atyrau Refinery LLP, PetroKazakhstanOilProducts LLP, Embamunaygas JSC, Ozenmunaygas JSC, Kazakhturkmunai Ltd., Kazakhoil Aktobe LLP, Intergas Central Asia JSC and JSC "KazTransOil".

An information security management system (ISO 27001) has been implemented in KMG's corporate centre and the JSC "KazTransOil", risk management system (ISO 31001) - in JSC "KazTransOil", social responsibility management system (SA 8000, ISO 26000) - in the Pavlodar Petrochemical Plant LLP.

During 2016, all companies of the group successfully passed compliance audits, confirming that the existing integrated management systems meet the international standards.

# **INDEPENDENT AUDITOR'S OPINION**

To the shareholders and management of JSC "National Company "KazMunayGas"

#### Opinion

We audited the consolidated financial statements of JSC "National Company "KazMunayGas" and its subsidiaries (hereinafter, the Group) which include the consolidated financial standing statement as at 31 December 2016, consolidated aggregate income statement, consolidated statement of changes in equity, and consolidated cash flow statement for the year which ended by the indicated date, as well as the notes to the consolidated financial statements, including the information about the material aspects of the accounting policy.

In our opinion, the attached consolidated financial statements in all its material aspects reflect correctly the financial standing of the Group as at 31 December 2016, and its financial results and cash flows for the year which ended on the indicated date, in accordance with International Financial Reporting Standards (IFRS).

#### Basis for expressing the opinion

We conducted the audit in accordance with International Audit Standards (IAS). Our obligations as per these standards are described in the section "Auditor's responsibility for the audit of consolidated financial statements" hereinafter. We are independent of the Group as specified in the Code of Ethics for Professional Accountants of the International Ethics Standards Board for Accountants (IESBA Code), and we have met other ethical obligations as specified in the IESBA Code. We believe that the audit proofs that we received are sufficient and appropriate to serve as the basis for expressing our opinion.

#### Key audit matters

Key audit matters are the matters which, in our professional judgment, have been the most important for our audit of the consolidated financial statements for the current period. These matters have been considered in the context of our audit of the consolidated financial statements broadly and when forming our opinion about these consolidated financial statements, and we are not expressing a separate opinion on these matters. Our description of how the issue was addressed in our audit for each of the following issues is given in this context.

We have fulfilled the responsibilities described in the section "Auditor's responsibility for the audit of consolidated financial statements" of our conclusion, including with respect to these issues. Accordingly, our audit included the execution of procedures elaborated in response to our assessment of the risks of substantial misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed during the consideration of the issues listed below, form the basis for expressing our audit opinion on the attached consolidated financial statements.

#### Impairment of long-term assets

We believe that this issue is one of the most significant in the audit in accordance with the materiality of the balances of long-term assets, including assets for production, exploration and assessment, refining and investment in oil and gas joint ventures and associates, in relation to consolidated financial statements, high level of subjectivity of the assumptions underlying the impairment analysis, and significant judgments and estimates made by management. In addition, the combination of the recent fall in oil prices, the devaluation of the tenge, the increase in inflation and the cost of borrowing, and uncertainty about future economic growth affect the prospects for the Group and can potentially lead to a depreciation of the Group's assets.

Substantial assumptions included discount rates, forecast prices for oil and oil products, and projected inflation and exchange rates. Significant estimates include a production plan, future capital expenditures and oil and gas reserves available for development and production.

We have recruited our valuation experts to test the impairment analysis and the calculation of recoverable amounts prepared by management. We have analyzed the assumptions underlying the management's projections. We compared the prices of oil and oil products used in calculating the recoverable amount, with available market forecasts.

We compared discount rates and long-term growth rates with general market indicators and other available information.

We tested the mathematical accuracy of the models of impairment and sensitivity analysis.

Information on long-term assets and performed impairment testing is disclosed in Note 4 to the consolidated financial statements.

#### **Discontinued operations**

December 15, 2016, the Group signed an agreement to sell a 51% interest ("SPA") to KMG International NV (KMGI), a subsidiary of the Group. The completion of the SPA depends on the fulfillment of certain conditions until May 31, 2017. If the conditions are not met before that date, but there is a reasonably justified likelihood that they will be met in a reasonable period after that date, the parties may extend such date. We paid special attention to this issue owing to the uncertainty of completing the sale of a 51% stake in KMGI and the judgment required to assess whether the sale is highly probable. Such an assessment affects the accounting and presentation of KMGI's assets classified as held for sale and liabilities directly associated with them and the results of discontinued operations that are substantial for the consolidated financial statements.

We focused on analysis of the criteria for classifying assets as held for sale and operations as discontinued. We examined the SPA and got the management assessment of the status of compliance with the conditions preceding the transaction. We have reviewed the management's estimate of fair value less costs to sell assets and liabilities of KMGI, which is based on the terms of the SPA.

Information on discontinued operations is disclosed in Note 5 to the consolidated financial statements; a description of the accounting policies and key judgments and estimates is provided in Notes 3 and 4 to the consolidated financial statements.

#### Compliance with contractual terms (indicators) of loan agreements

In accordance with the terms of loan agreements for certain loans and issued bonds, the Group must comply with and maintain financial and non-financial performance at a certain level. There is a high probability that indicators that depend on the volumes of trade, revenues and profits, which are affected by low oil prices and higher operating costs, may be violated, especially in subsidiaries. In course of the audit, we paid special attention to this issue. Violation of the indicators can lead to significant fines and penalties, along with a funding gap. The provisions on cross-default operate under the agreements of the Group with credit institutions and on the documentation for the issue of bonds. Compliance with financial ratios is the most significant for the audit because it has a large impact on the assumption of business continuity used in the preparation of the consolidated financial statements, as well as on the classification of interest liabilities in the consolidated statement of financial position.

We examined the terms of agreements with credit institutions and the documentation for the issue of bonds, as well as checked the calculation of compliance with the requirements for financial indicators.

Information on compliance with the requirements for indicators is disclosed in Note 20 to the consolidated financial statements.

#### Other information included in the Group's annual report for 2016

Other information includes information contained in the Group's annual report for 2016, but does not include consolidated financial statements and our audit opinion thereon.

The management is held liable for other information. It is expected that we will receive the Group's Annual Report for 2016 after the issuance of this audit report.

Our opinion on the consolidated financial statements does not apply to other information, and we do not provide a conclusion expressing confidence in any form, with respect to this information.

In connection with our audit of the consolidated financial statements, it is our responsibility to read the other information mentioned above when available, and to consider whether there are significant inconsistencies between other information and the consolidated financial statements or our knowledge obtained in course of Audit, and whether the other information contains other substantial misstatements.

#### Responsibility of Management and the Audit Committee for consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, as well as for the internal control system that management considers necessary to ensure the preparation of consolidated financial statements that are free from substantial misstatement due to fraud or error.

In course of preparation of the consolidated financial statements, management is responsible for assessing the ability of the Group to carry out continuous operation, for disclosure, as appropriate, of information relating to continuity of operations and for reporting on the basis of the assumption on continuity operations, unless management intends to liquidate the Group, cease its activities or when it does not have a real alternative to such actions.

The Audit Committee is responsible for overseeing the preparation of the consolidated financial statements of the Group.

#### Auditor's responsibility for the audit of consolidated financial statements

Our objectives are to obtain reasonable assurance that the consolidated financial statements as a whole do not contain substantial misstatement due to fraud or error, and in the issuance of an audit conclusion containing our opinion. Reasonable confidence presents a high degree of certainty, but it is not a guarantee that an audit conducted in accordance with International Auditing Guidelines will always reveal a significant distortion if it exists. Distortions can be the result of unfair acts or mistakes and are considered significant if one can reasonably assume that individually or collectively they could affect the economic decisions of users made on the basis of this consolidated financial statement.

As part of an audit conducted in accordance with International Auditing Guidelines, we apply professional judgment and maintain professional skepticism throughout the audit. Furthermore, we:

- Identify and assess the risks of substantial misstatement of the consolidated financial statements due to fraud or error, plan and perform audit procedures, and obtain audit evidence that is sufficient and appropriate to express our opinion. The risk of not detecting significant distortion as a result of unfair acts is higher than the risk of not detecting significant distortion as a result of mistakes, since unfair acts may include collusion, fraud, intentional omission, misrepresentation or circumvention of the internal control system.
- Obtain an understanding of the internal control system that is relevant to the audit in order to develop audit procedures that are appropriate for the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control system.
- Assess the proper nature of the accounting policies used and the reasonableness of accounting estimates made by management and the disclosure of relevant information;
- Draw a conclusion on the legitimacy of the management's application of the principle of continuous operation and, on the basis of the audit evidence obtained, a conclusion as to whether there is a significant uncertainty in connection with events or conditions that could cause significant doubt in the Group's ability to continue its business. If we conclude that there is significant uncertainty, in our audit opinion we must pay attention to the relevant disclosures in the consolidated financial statements, or, if these disclosures are insufficient, change our opinion. Our conclusions are based on the audit evidence obtained before the date of our audit report. Future events or conditions may, however, result in the Group ceasing to operate on the basis of the principle of continuity.
- Assess the presentation of the consolidated financial statements as a whole, its structure and content, including disclosure, and whether the consolidated financial statements present the underlying transactions and events in a manner that ensures their reliable representation.
- Obtain sufficient appropriate audit evidence regarding the financial information of organizations or economic activities within the Group in order to express an opinion on the consolidated financial statements. We are responsible for the direction, control and execution of the group's audit. We remain solely responsible for our audit opinion.

We bring to the attention of the Audit Committee, among other things, information about the planned scope and timing of the audit, as well as significant comments on the audit results, including significant deficiencies in the internal control system, if we identify those in the audit process. We also provide the Audit Committee with a statement that we have complied with all relevant ethical requirements for independence and informed of all relationships and other surveys that can reasonably be considered influencing our independence and, where necessary, of appropriate precautions.

Of those issues that we brought to the attention of the Audit Committee, we identify the issues that were most

relevant to the audit of the consolidated financial statements for the current period and which, therefore, are key audit issues. We describe these issues in our audit report, except the cases where public disclosure of information on these issues is prohibited by law or regulation, or when in very rare cases we come to the conclusion that information about an issue should not be reported in our conclusion, as it can reasonably be assumed that the negative consequences of the disclosure of such information will exceed the socially significant benefit from its disclosure.

The partner responsible for conduction of the audit, which resulted in the release of the present opinion of independent auditor - Gulmira Turmagambetova.

#### Gulmira Turmagambetova

Auditor/General Director LLC Ernst and Young

Auditor's certificate of competence No. 0000374 of 21 February 1998 State License for Auditing in the Republic of Kazakhstan M $\Phi$ IO-2 No. 0000003 issued by the Ministry of Finance of the Republic of Kazakhstan on 15 July 2005

050060, Kazakhstan, Almaty, 77/7 Al-Farabi Av.

10 March 2017

#### Information on External Auditor

In 2016, JSC NC "KazMunayGas" signed the agreement with the Ernst & Young LLP on the financial statements audit services for 2016-2018. The fee amount under this agreement is 1,165,532 thousand tenges (including VAT), which includes by years:

- for 2016 - 479,460 thousand KZT;

- for 2017 - 341,048 thousand KZT;

- for 2018 - 345,024 thousand KZT.

In 2016, the Ernst&Young LLP rendered advisory services for an amount of 611,584 United Kingdom pounds sterling.

### **Policy on External Auditor**

Policy on appointment and rotation of the external auditor and key personnel of the auditing firm, on approval of the auditing firm's services not related to audit of the financial reporting and other in respect of and recruitment of former employees of the auditing firm (excerpt from the Policy of JSC NC "KazMunayGas" on Attracting Services of Auditing Firms, approved by Resolution of KMG's BoD No. 2/2012 of 15 Mar 2012):

1. KMG believes that provision of certain services not related to auditing, and the level of the nonaudit services fee paid to an auditing firm, may lead to a conflict of interest or actual or deemed loss of objectivity. Each of the potential services of an auditing firm is classified into one of the following categories:

Category A: non-audit services that may influence independence in securing current liabilities of an auditing firm and that may be provided by an auditing firm under the Law and subject to the conditions stipulated by the Code of Ethics for Professional Accountants.

Category B: non-audit services that will lead to the loss of independence in securing current liabilities of an auditing firm and are deemed to be prohibited services under the Law and subject to the restrictions contemplates by the Code of Ethics for Professional Accountants, such as reconstruction and keeping of accounts, preparation of financial reporting.

Services in Category A may be provided by an auditing firm conducting mandatory audit under the Law.

For services in Category A, KMG will not engage an auditing firm carrying out KMG's mandatory audit.

The Audit Committee shall consider the matter of accuracy of non-audit services classification, as necessary.

Before an auditing firm is engaged for services in Category A, prior approval from the Audit Committee shall be required. In the request for determining the Auditor, an auditing firm shall list the reasons for which getting the approval will not compromise the auditing firm's independence. Resolutions passed by the Audit Committee on this clause of the Policy shall be presented to the Board of Directors for reference.

Engagement of members of an Auditing Firm, who carry out audit of KMG's financial reporting, for rendering advisory services belonging to Category A shall be prohibited.

An auditing firm may not render to KMG advisory services amounting to over 50% of the total value of fee to be paid to the Auditor (other than advisory services related to audit of the financial reporting and other information).

At least once a year, KMG Chief Financial Officer shall ensure submission to the Audit Committee of a report containing the information for the previous period of 12 months, including:

- scope of audit services rendered by the Auditor;
- scope of non-audit services rendered by the Auditor (broken down into various categories of services);
- fee (for each individual service and in the aggregate) paid by KMG to the Auditor for rendering those services.

2. KMG shall demand from the Auditor adherence to the principle of rotation of the project partner (bearing primary responsibility for the audit) every five years. The succession plan upon achievement of this result shall be prepared by the Auditor and be submitted to the Audit Committee for consideration no later than one year prior to carrying out rotation.

3. In case appointment (election) to the post of KMG's executive employee or Chief Accountant of a person who is participating in KMG's mandatory audit as the Auditor's employee or who participated in KMG's mandatory audit as the Auditor's employee within two years prior to the date of its appointment (election) to KMG is proposed, in order to avoid a conflict of interest, prior approval from the Audit Committee of the proposed candidate shall be required for further consideration of its appointment (election).

Furthermore, former members of an auditing firm shall not be recruited to take up executive positions or positions assuming material influence on the process of the financial reporting preparation earlier than a year upon their resignation from the auditing firm.

### CONSOLIDATED FINANCIAL REPORTING

For the year ending 31 December 2016

# Consolidated financial standing report

In thousand KZT	As of 31 D	ecember
		2015
	2016	(recalculated)*
ASSETS		
Long-term assets		
Fixed assets	2.953.135.665	2.661.342.684
Exploration and appraisal assets	231.553.168	208.526.063
Investment properties	29.480.044	29.260.917
Intangible assets	116.488.612	119.945.371
Long-term bank deposits	50.027.102	48.808.421
Investment into joint ventures and associated companies	3.706.276.810	3.422.939.745
Deferred tax asset	71.909.033	107.481.291
VAT reimbursable	71.918.992	42.455.417
Advance payments for long-term assets	139.185.121	133.734.033
Bonds receivable from related party	37.683.003	37.400.972
Note receivable from joint venture participant	16.695.758	21.602.249
Note receivable from an associate	34.837.804	42.319.688
Loans to related parties	476.777.932	433.410.880
Miscellaneous long-term assets	20.687.850	26.259.148
	7.956.656.894	7.335.486.879
Current assets		
Inventories	98.776.900	125.709.383
VAT reimbursable	68.719.671	88.931.793
Income tax down payment	74.457.414	60.482.541
Trade receivables	279.811.631	95.499.391
Short-term financial assets	1.182.669.493	947.909.540
Bonds receivable from related party	4.440.000	4.440.000
Loan to related party	113.616.133	113.045.841
Note receivable from joint venture participant	17.617.100	8.821.698
Miscellaneous current assets	149.079.608	93.123.601
Cash and cash equivalents	878.438.350	770.003.517
·	2.867.626.300	2.307.967.305
Assets classified as intended for sale	1.058.794.076	1.066.203.474
	3.926.420.376	3.374.170.779
TOTAL ASSETS	11.883.077.270	10.709.657.658

## Consolidated statement of financial position (continued)

In thousand KZT	As of 31 De	ecember
		2015
	2016	(recalculated)*
EQUITY AND LIABILITIES		
Equity		
Authorized capital	696.376.625	696.363.445
Additional paid capital	243.655.405	243.655.405
Miscellaneous capital	222.074	3.110.573
Reporting currency recalculation reserve	1.372.771.521	1.405.325.707
Retained earnings	3.163.685.193	2.988.542.754
Related to the parent company's shareholder	5.476.710.818	5.336.997.884
Non-controlling participatory interest	801.560.097	753.179.913
Total capital	6.278.270.915	6.090.177.797
Long-term liabilities		
Loans	2.706.101.321	2.932.323.037
Reserves	139.371.823	150.427.821
Deferred tax liabilities	264.599.978	218.909.753
Financial guarantee	12.259.980	8.038.985
Prepayment under oil delivery agreements	738.572.306	-
Miscellaneous long-term liabilities	52.509.205	23.226.111
	3.913.414.613	3.332.925.707
Current liabilities		
Current portion of loans	366.438.649	296.545.652
Reserves	94.394.277	116.508.954
Income tax payable	2.301.839	4.114.767
Trade payables	260.137.009	174.237.185
Other taxes payable	34.014.457	40.015.053
Financial guarantee	1.211.481	1.121.173
Prepayment under oil delivery agreements	249.967.500	_
Miscellaneous current liabilities	119.042.249	145.204.352
	1.127.507.461	777.747.136
Liabilities related to the assets classified as intended for sale	563.884.281	508.807.018
Total liabilities	5.604.806.355	4.619.479.861
TOTAL EQUITY AND LIABILITIES	11.883.077.270	10.709.657.658
Book value per share		
	10.547	10.219
	10.547	10.219

## Consolidated statement of comprehensive income

In thousand KZT	For the years ended 31 December			
	2016	2015 (recalculated)*		
Proceeds from sold goods and rendered services Cost price of sold products and rendered services	1.857.435.356 (1.561.746.019)	1.093.805.922 (1.090.380.226)		
Gross profit	295.689.337	3.425.696		
General and Administrative Expenses Transportation and selling expenses	(117.675.164) (198.473.083)	(211.223.843) (195.320.579)		
Impairment of fixed assets and intangible assets, other than goodwill Goodwill depreciation	(3.282.679) _	(67.125.848) (11.922.192)		
Loss from retirement of fixed assets, intangible assets and investment properties, net Miscellaneous operating income Miscellaneous operating loss	(5.620.831) 19.429.680 (14.821.567)	(3.580.092) 21.692.072 (19.529.597)		
Profit from operating activities	(24.754.307)	(483.584.383)		
Foreign exchange loss / gain, net Financial income Financial expenses Impairment of investment into joint ventures	(12.894.441) 167.891.688 (230.383.354) (5.503.379)	469.508.889 172.979.474 (198.337.046) <b>(9.342.198)</b>		
Depreciation of assets classified as intended for sale Impairment of loans granted Share in the income of joint ventures and associates, net	(92.601) (1.346.447) 270.190.990	(85.744) <b>(10.969.792)</b> 112.807.416		
Profit before income tax	163.108.149	52.976.616)		
Income tax expenses Loss for the year from continuing operations	<u>(163.791.137)</u> (682.988)	(231.527.690) (178.551.074)		
Discontinued operations Profit after taxes from discontinued operations	360.854.031	673.234.095		
Profit for year Net income for the year attributable to:	360.171.043	494.683.021		
Parent Company's shareholders	305.849	9.105 398.325.954		
Non-controlling participatory interest	54.321	.938 96.357.067		
	360.171	.043 494.683.021		

# Consolidated statement of comprehensive income (continued)

In thousand KZT	For the years end	ed 31 December
	2016	2015 (recalculated)*
Miscellaneous aggregate income		, <u>,</u>
Miscellaneous aggregate income subject to re- classification into future profit or loss:		
Exchange difference resulting from the translation of the		
foreign subsidiaries financial statements	(38.081.340)	1.180.868.321
Accumulated exchange rate difference of the disposal		
group	-	(106.930.994)
Not microllonoous aggregate income subject to re		
Net miscellaneous aggregate income subject to re- classification into future profit or loss	(38.081.340)	1.073.937.327
Miscellaneous aggregate income not subject to re-	(30.001.340)	1.075.357.327
classification into future profit or loss:		
Revaluation of actuarial income/(losses) under the		
Group's defined benefit plans	3.775.606	(1.760.276)
Revaluation of actuarial income/(losses) under the defined		,
benefit plans of joint ventures	(127.142)	10.098
Tax effect of aggregate loss components	(807.240)	365.421
Net miscellaneous aggregate income/(loss) for the		
year, not subject to re-classification into future		
profit or loss	2.841.224	(1.384.757)
Miscellaneous aggregate income/(loss) for the year	(35.240.116)	1.072.552.570
Total: aggregate income for the year, less income tax	324.930.927	1.567.235.591
Total aggregate income for the year, attributable to:		
Parent Company's shareholders	275.618.617	1.353.725.956
Non-controlling participatory interest	49.312.310	213.509.635
	324.930.927	1.567.235.591

## Consolidated cash flow statement

In thousand KZT	For the years Decem	ber
		2015
	<b>2016</b> (1	ecalculated)*
Cash flow from operating activities:		
Profit before income tax from continuing		
activities	163.108.149	52.976.616
Loss before income tax from discontinued operations	357.713.189	653.693.071
Profit before taxes	520.821.338	706.669.687
Adjustments against:		
Aging, depletion and amortization	181.273.147	141.483.857
Aging, depletion and amortization of discontinued operations	38.939.596	41.694.853
Share in the profits of joint ventures and associates, net	(270.190.990)	(112.807.416)
Share in the income of joint ventures and associates from		
discontinued operations, net	(1.175.613)	(160.800)
Financial expenses	230.383.354	198.337.046
Financial expenditures of discontinued operations	10.613.369	19.377.394
Financial income	(167.891.688)	(172.979.474)
Financial income of discontinued operations	(1.249.393)	(2.633.900)
Unrealized losses from derivative financial instruments on oil		
products	341.709	2.543.060
Realized losses from derivative financial instruments on oil products	728.846	241.176
Impairment of fixed assets and intangible assets and goodwill	3.282.679	79.048.040
Impairment of fixed assets and intangible assets and goodwill		
on discontinued operations	3.982.106	6.490.037
Adjustment on revaluation of fair value less costs to sell	16.337.163	160.035.211
(Recovery)/impairment of VAT reimbursable	(3.417.616)	51.548.508
Loss from retirement of fixed assets, intangible assets and		
investment properties, net	5.620.831	3.580.092
Impairment of investment into joint ventures	5.503.379	9.342.198
Depreciation of assets classified as intended for sale	92.601	85.744
Impairment of loans to related parties	1.346.447	10.969.792
Profit from sale of a subsidiary	-	(427.840.668)
Loss from sale of a joint venture	-	6.151.234
Reserves	13.106.165	99.695.140
Reserve for impairment of trade receivables and miscellaneous		
current and long-term assets	7.482.029	3.158.635
Reserve for impairment of trade receivables and miscellaneous		
current and long-term assets of discontinued operations	9.999.997	8.319.118
Reserve for obsolete and slow-moving inventories	1.058.595	1.391.281
Reserve for obsolete and slow-moving inventories of		
discontinued operations	4.259.577	(5.875.841)
Recognition of share-based payments	1.347.558	1.589.628
Change in the subsidiary ownership ratio	(9.550)	-
Unrealized foreign exchange gain	(18.888.571)	(321.841.594)
Profit from operating activities before changes in the		
floating capital	593.697.065	507.612.038

## Consolidated cash flow statement (continued)

Change in inventories Change in VAT reimbursable Change in trade receivables and miscellaneous assets Change in other taxes payable Change in prepayment under oil delivery agreements Change in trade payables <u>Change in miscellaneous liabilities</u> Cash inflow from operating activities Income tax paid Fee received	23.309.510 (6.666.694) (199.108.793) (39.469.136) 1.012.020.000 132.824.726 2.220.436 1.518.827.114 (106.406.440) 61.212.115	57.113.535 (1.186.992) (110.105.376) (47.542.464) - 39.745.815 (24.663.004) 420.973.552 (187.135.282) 118.778.446
Fee paid	(197.781.983)	(212.864.705)
Proceeds from derivative financial instruments, net	330.120	6.694.868
Net cash inflow from operating activities	1.276.180.926	146.446.879
Cash flow from investment activities:	(260 569 072)	313.189.387
Withdrawal of deposits in banks, net Acquisition of fixed assets, intangible assets, investment	(269.568.073)	313.109.307
properties and exploration and appraisal assets	(464.811.894)	(557.448.149)
Cash inflow from sale of fixed assets, intangible assets and	(10110111001)	(007.110.110)
investment properties, and exploration and valuation assets	1.379.771	22.350.510
Receipts from sale of subsidiaries	-	1.372.498.443
Dividends received from joint ventures and associates, less		
taxes	118.607.550	172.719.434
Acquisition of and contributions into joint ventures	(160.057.189)	(41.435.041)
Return of contributions into joint ventures	1.672.268	
Return of loans and receivables from related parties	125.002.452	
Note receivable from an associate	6.889.431	
Loans provided to related parties	(222.725.040)	· · · · · ·
Net cash flow used in investment activities	(863.610.724)	(1.222.934.795)
Cash flow from financial activities:		
Proceeds of loans	316.799.290	
Repayment of loans	(530.514.370)	
Distributions to Samruk-Kazyna	(2.202.898)	
Dividends paid to Samruk-Kazyna and National Bank	(90.853.335)	
Dividends paid to non-controlling interest	(5.248.975)	
Share issue	1	12.700.436
Net cash flow from financial activities	(312.020.287)	(1.630.541.459)
Effect of change in exchange rates on cash and its equivalents	(3.531.543)	243.150.206
Net change in cash and cash equivalents	97.018.543	
Cash and its equivalents as of the beginning of the year	808.434.139	
Cash and its equivalents as of the end of the year	905.452.511	808.434.139

\* Certain amounts listed in the column do not correspond to the amounts in the consolidated financial statements for 2015, as they reflect the adjustments made.

## Consolidated statement of changes in equity

Due to the Parent Company's shareholders

In thousand KZT	Authorized capital	Additional paid-in capital	Miscellaneo us capital	Reporting currency recalculatio n reserve	Retained earnings	Total	Non- controlling participator y interest	Total
As at 31 December 2014	557.072.34	0 226.761.34	7 2.105.73	7 448.739.927	7 2.627.270.657	3.861.950.008	3 555.162.424	4.417.112.432
Profit for year					- 398.325.954	398.325.954	96.357.067	494.683.021
Miscellaneous aggregate income	-			- 956.585.780	) (1.185.778)	955.400.002	117.152.568	1.072.552.570
Total amount of aggregate income for the year	•			- 956.585.780	397.140.176	1.353.725.956	213.509.635	1.567.235.591
Contribution to the authorized capital (Note 19)	139.291.10	5 16.894.058	3 -			156.185.163	. –	156.185.163
Dividends ( <i>Note 19</i> )					- (24.335.911)	(24.335.911)	(15.790.408)	(40.126.319)
Distributions to Samruk-Kazyna (Note 19)					- (6.771.791)	(6.771.791)	) –	(6.771.791)
Recognition of payments based on equity instruments in subsidiaries			- 1.004.836	6 -		1.004.836	584.792	1.589.628
Operations with Samruk-Kazyna (Note 19)					- (4.760.377)	(4.760.377)	) –	(4.760.377)
Disposal of a subsidiary						·  _	- (286.530)	(286.530)
As at 31 December 2015	696.363.44	5 243.655.405	5 3.110.573	3 1.405.325.707	2.988.542.754	5.336.997.884	753.179.913	6.090.177.797

## **Consolidated statement of changes in equity (continued)**

In thousand KZT	Authorized capital	Additional paid-in capital	Miscellaneo us capital	Reporting currency recalculatio n reserve	Retained earnings	Total	Non- controlling participator y interest	Total
As at 31 December 2015	696.363.445	243.655.405	3.110.573	1.405.325.707	2.988.542.754	5.336.997.884	753.179.913	6.090.177.797
Profit for year	-	-	-	-	305.849.105	305.849.105	54.321.938	360.171.043
Miscellaneous aggregate income	-	-	-	(32.554.186)	2.323.698	(30.230.488)	(5.009.628)	(35.240.116)
Total amount of aggregate income for the year	-	-	_	(32.554.186)	308.172.803	275.618.617	49.312.310	324.930.927
Contribution to the authorized capital (Note 19)	13.180		-	-	-	13.180	-	13.180
Dividends (Note 19)	-	-	-	-	(59.748.893)	(59.748.893)	(5.167.227)	(64.916.120)
Distributions to Samruk-Kazyna (Note 19)	-	-	-	-	(22.401.021)	(22.401.021)	-	(22.401.021)
Operations with Samruk-Kazyna (Note 19)	-	-	-	-	(50.871.857)	(50.871.857)	-	(50.871.857)
Recognition of options on share-based payments	-	-	891.404	. –	-	891.404	518.777	1.410.181
Exercise of options on share-based payments	-	-	(3.740.318)	-	-	(3.740.318)	3.740.318	-
Withdrawal of options on share-based payments	-	-	(39.585)	-	-	(39.585)	(23.038)	(62.623)
Change in the subsidiary ownership ratio	_	-	-	-	(8.593)	(8.593)	(956)	(9.549)
As at 31 December 2016	696.376.625	243.655.405	222.074	1.372.771.521	3.163.685.193	5.476.710.818	801.560.097	6.278.270.915

## Due to the Parent Company's shareholders

## Material Aspects of Accounting Policy

## BASIS FOR PREPARATION OF FINANCIAL REPORTING

This consolidated financial reporting has been prepared in accordance with the historical cost valuation principle, except for the operations disclosed in the accounting policy and Notes to this consolidated financial reporting. All values in this consolidated financial reporting have been rounded off to a thousand, except where specifically indicated.

## **Conformity Statement**

This consolidated financial reporting of the Group has been prepared in conformity with the International Financial Reporting Standards (IFRS) as amended and approved by the International Accounting Standards Board (IASB).

Preparation of the consolidated financial reporting in conformity with the IFRS requires application of certain important accounting estimates and requires from the management the use of judgments on assumptions in the course of the accounting policy application.

## Foreign currency translation

## Functional currency and presentation currency

The elements of the financial reporting of each Group's enterprise, included in this consolidated financial reporting, are evaluated using the currency of the basic economic environment, where the enterprises are operating ("functional currency"). The consolidated financial reporting is represented in KZT, which is the Company's functional currency.

## Transactions and account balances

Transactions in a foreign currency are translated into the functional currency using the exchange rates as of the date of transaction. Exchange gain and loss, resulting from settlement for such transactions, and translation of monetary assets and liabilities, expressed in a foreign currency, at the rates as of the reporting date, are recognized in the consolidated aggregate income statement.

Non-monetary items valued based on the historical value in a foreign currency are recalculated at the exchange rates effective at the date of making the initial transactions. Non-monetary items valued at fair value in a foreign currency are recalculated at the exchange rates effective at the date of determining the fair value.

Differences resulting from repayment and recalculation of monetary items are recognized as part of the profit or loss, except for the monetary items determined as part of hedging the Group's net investment in foreign units. These items are recognized as part of miscellaneous aggregate income before retirement of net investment, with reclassification of the accumulated amount at the time of investment retirement into the part of profit or loss. Tax payments and credits inherent in the exchange rate differences on these monetary items, are also recognized as part of miscellaneous aggregate income.

## Group's enterprises

Income, loss and financial standing of all subsidiary entities, joint ventures and associated companies of the Group (none of which operate in currencies of hyperinflationary economies), whose functional currency is different from the presentation currency, are translated into the presentation currency in the following manner:

• assets and liabilities for each statement of financial position presented are translated at the closing rates at the reporting date;

• income and expenses on each of the aggregate income statements are translated at the average rates (except where the average rate is not a reasonable approximation of the aggregate effect of the rates as of the date of a transaction; in this case income and expenses are translated at the rate as of the date of the transaction); and

• all exchange rate differences are recognized as a separate component in the miscellaneous aggregate income.

## Exchange rates

The weighted average exchange rates determined on the Kazakhstan Stock Exchange ("KASE") are used as official exchange rates in the Republic of Kazakhstan.

KASE's exchange rate as at 31 December 2016 was 333.29 KZT for 1 US dollar. These rates have been used for translation of the monetary assets and liabilities, expressed in US dollars as at 31 June 2016 and 31 December 2015: 340.01 KZT for 1 US dollar). KASE's exchange rate as at 10 March 2017 was 317.97 KZT for 1 US dollar.

#### **Consolidation Basis**

The attached consolidated financial reporting includes the financial statements of the Company and its subsidiaries as at 31 December 2016. Control is exercised in case the Group is entitled to a variable return on investment and is exposed to a risk related to its change and can influence this return due to its powers in respect of the investee. The financial reporting of the subsidiaries was prepared for the same reporting period as that of the parent company based on the consistent application of the accounting policy for all companies of the Group.

## **Business Combination and Goodwill**

Business combinations shall be recorded using the purchase accounting method. The cost of acquisition shall be evaluated as the amount of the transferred compensation, evaluated at fair value as at the date of acquisition, and non-controlling participatory interest in the company acquired. For every business combination transaction, the acquirer shall evaluate the non-controlling participatory interest in the company acquired in the company acquired either at fair value or at the pro rata proportion in the identifiable net assets of the company acquired. Expenditures incurred due to the acquisition shall be included in the administrative expenses.

## Acquisition of subsidiaries to the Shareholder's order

When subsidiaries are acquired to the Shareholders' order, the difference between the amount of the consideration paid and the fair value of the acquired assets and assumed obligations other than a non-controlling participatory interest, and the result of revaluation of the participatory interest previously owned by the Group are recorded as distributions to the Parent Company directly in the equity.

Acquisition of subsidiaries from parties who are under common control

Acquisition of subsidiaries from the parties who are under common control shall be recognized using the pooling of interest method.

#### Participatory Interests in Jointly-controlled Operations

The Group has participatory interests in jointly-controlled operations.

When a participatory interest in jointly-controlled operations is acquired, the Group shall recognize the assets relating to that interest, including the interest in the jointly-controlled assets, liabilities, including the share in the jointly incurred liabilities. Subsequently, the Group shall recognize income from sales of goods related to jointly-controlled operations, including the share in the income from sales of goods produced as a result of jointly-controlled operations; the expenses related to jointly-controlled operations, including the share of expenses incurred in jointly-controlled operations.

The Group shall recognize assets, liabilities, income and expenses from jointly-controlled operations in compliance with the Group's accounting policy in respect of such assets, liabilities, income and expenses.

In case the Group has not joint control of joint operations, it shall recognize its participatory interest in such joint operations just as the parties having joint control, as described in the preceding paragraphs.

## Investment in associated companies and joint venture

Associated company is a company in respect of which the Group has significant influence. Significant influence is the powers to participate in decision-making in respect of the investee's financial and operations policy, but not control or joint control in respect of this policy.

Joint venture is a joint operating agreement under which the parties exercising joint control in respect of the agreement, are entitled to the net assets of the joint venture. Joint control is joint exercise of control, stipulated in the agreement and taking place only if and to the extent that decision-making in respect of material activities require unanimous consent of the parties exercising joint control.

Factors taken into consideration when determining the presence of material influence or joint control are similar to the factors taken into consideration when determining the presence of control over subsidiary companies.

Investments in an associated company and a joint venture are recorded using the equity method. In compliance with the equity method, an investment in an associated company or joint venture is initially recognized at historical cost. The book value of investments is subsequently increased or decreased as a result of recognition of Group's share in the changes in the net assets of a joint venture or associated company, resulting from such an acquisition. The goodwill related to a joint venture or associated company

shall be recorded in the book value of the investment and shall not be amortized, and not subject to a separate audit concerning its depreciation.

## Classification of assets and liabilities into short-term and long-term

In the consolidated statement of financial position the Group shall record assets and liabilities based on their classification into short-term and long-term. An asset is short-term if:

- it is expected to be realized or is held for sale and consumption as part of the usual operating cycle;
- it is held mainly for the purposes of trade;
- it is expected to be realized within twelve months of the completion of the reporting period; or

• it is represented by cash of cash equivalents, except in cases there are restrictions on its exchange or use for repayment of liabilities within a minimum of twelve months of the completion of the reporting period.

- All other assets are classified as long-term. A liability is short-term if:
- it is expected to be repaid within the framework of the usual operating cycle;
- it is held mainly for the purposes of trade;
- it is subject to repayment within twelve months of the completion of the reporting period; or

• the company has no unconditional right to put off repayment of the liability within a minimum of twelve months of the completion of the reporting period.

The Group shall classify all other liabilities as long-term liabilities. Deferred tax assets and liabilities shall be classifed as long-term assets and liabilities.

## Expenses Related to Exploration, Appraisal and Development of Fields

### Expenditures Incurred before Obtaining Licences

Expenditures incurred before obtaining licences shall be classified as expenses of the period they were incurred in. Expenditures incurred after an appropriate agreement with the Government of the Republic of Kazakhstan is signed shall be capitalized.

## Expenditures for Obtaining Licenses and Property

Expenditures for obtaining licenses and property shall be capitalized and classified as intangible assets. Every exploration target shall be considered on an annual basis concerning the fact that the drilling works have been planned, and it has not depreciated. If future works are not planned, the present value of the costs of acquiring exploration licences and the relevant facilities shall be written off. When economically feasible recoverable reserves ("proven reserves" or "commercial reserves") are found, and in case of internal approval of development, the present value of the costs of acquiring exploration licences and relevant facilities, broken down by field, shall be combined with the exploration expenditures and be transferred to the oil and gas properties.

## Expenditures Related to Exploration and Appraisal

As soon as the legal right to exploration is gained, the expenditures for geological and geophysical surveys and expenditures directly related to an exploration well, shall be capitalized as intangible or tangible exploration and appraisal assets until drilling of the well has been completed and the results of such drilling have been appraised. Such expenditures include payment to employees, materials and fuel used, cost of drilling rig and payments to contractors. If no reserves are found, the exploration asset shall be tested for impairment, if recoverable hydrocarbons are found, and are subject to further appraisal that may include drilling of other wells the commercial development of which is probable enough, then the expenditures shall continue to be recorded as an intangible asset, until reasonable/continuous progress in the appraisal of commercial extraction of hydrocarbons is achieved. All expenditures of such kind shall be subject to a technical, commercial and management test, along with an impairment test, at least once a year, in order to confirm the intent to continue development or any other way of deriving benefit from the discovery. Otherwise, the expenditures shall be written off. When the proven oil reserves are determined and the decision on continuing the development is made, the corresponding expenditures shall be transformed into petroleum property after the depreciation appraisal and recognition of the impairment loss incurred.

### Development Costs

Costs for construction, installation and completion of infrastructure facilities, such as platforms, pipelines and development well drilling, including dry development wells or outpost wells and unforeseen engineering problems, shall be capitalized as part of the petroleum property.

## **Petroleum Property and Other Fixed Assets**

Petroleum property and other fixed assets shall be recorded at cost minus the accumulated amortization, depletion and depreciation.

Original cost of assets is comprised of the acquisition or construction price, interest expenditures for longterm construction projects, when the criterion of recognition of expenses directly related to making the asset operation is met, and the initial estimate of the asset removal costs, as required. The acquisition or construction price is the aggregate value paid and fair value of any type of consideration provided for acquisition of the asset.

Petroleum property shall be amortized using the units of production method, while tangible assets shall be amortized according to the proven developed reserves, and intangible assets – according to the proven reserves. Certain petroleum property with useful life shorter than the residual life of fields shall be amortized using the straight-line basis during the useful life from 4 to 10 years.

Fixed assets, apart from the oil and gas assets, mainly include buildings, machinery and equipment, amortized using the straight-line basis during the following fixed useful lives:

Refinery Assets	4-100 years
Pipelines	2-30 years
Buildings and	
Constructions	2-100 years
Machinery and	
equipment	2-30 years
Means of transportation	3-35 years
Miscellaneous	2-20 years

The contemplated useful life of the fixed assets shall be revised on an annual basis, and as required, changes in the lives shall be adjusted in the subsequent periods.

Present value of the fixed assets shall be revised for impairment if and to the extent that events and changes in circumstances occur, indicating that the present value is not recoverable.

## Intangible assets

Intangible assets shall be recorded at cost, minus accumulated amortization and accumulated impairment losses. Intangible assets include expenditures for obtaining oil and gas resources exploration licences, software and goodwill. Intangible assets acquired separately shall be initially appraised at the purchase value. The initial value is the aggregate amount paid and fair value of any other consideration provided for acquisition of the asset.

Intangible assets, other than the goodwill, shall be amortized using the straight-line basis during the estimated remaining useful life. The expected useful life of assets shall be revised on an annual basis, and as required, changes in the lives shall be adjusted in the subsequent periods. The useful life of computer software is from 3 to 7 years.

Present value of intangible assets shall be analyzed for depreciation if and to the extent that events and changes in circumstances indicate that the present value cannot be recovered.

Goodwill shall be tested for depreciation annually (as at 31 December) and where events and circumstances indicate that its present value may be depreciated.

#### Investment properties

Investment properties shall be initially valued at historical cost, including the transaction costs.

Since the Group applies the historical cost accounting method, after the initial recognition, investment properties shall be recognized using the method adopted in accordance with IFRS 16 "Fixed Assets" - taking into account the accumulated depreciation and accumulated amortization.

Investment properties shall be amortized on the straight-line basis within the useful life of 2 to 100 years.

On every reporting date the Group shall determine the fair value of investment properties, and in case the present value exceeds the fair value, the difference shall be recognized in the profit or loss.

#### Impairment of Non-financial Assets

As at every reporting date, the Group shall determine if there are signs of possible impairment of an asset. If such signs take place, or if an annual check of the asset for impairment is required, the Group shall evaluate the recoverable value of the asset. Recoverable value of an asset is the biggest value of: the fair value of an asset or a cash generating unit (CGU), less costs to sell, and value in use of the asset (CGU). The recoverable value shall be determined for an individual asset, except to the extent that the asset generates cash flows, that are mainly independent of the cash flows generated by other assets or groups of assets. If the present value of an asset or CGU exceeds its recoverable value, the asset shall be determed impaired and shall be written-off to the recoverable value. The Group shall determine the depreciation amount, proceeding from detailed plans and forecast calculations prepared separately for each CGU of the Group, to which individual assets are referred. As a rule, these plans and forecast calculations are made for a five-year period. For longer terms long-term growth rates shall be calculated, to be used in respect of the forecasted future cash flows after the fifth year.

#### Impairment of Exploration and Appraisal Assets

The Group shall check its exploration and appraisal assets for impairment, when such assets are transferred to tangible or intangible development assets, or when there are facts and circumstances indicating impairment of assets.

## Assets Held for Sale and Discontinued Operations

Assets and disposal groups, classified as held for sales, shall be evaluated at the least of the two values – the present value and the fair value less costs to sell. Assets and disposal groups shall be classified as held for sales, if their present value is refundable, mainly through a selling transaction, and not as a result of continued use. This condition shall be deemed to be observed only to the extent that the likelihood of sale is high, and the asset or disposal group cannot be sold immediately in their current condition.

## Asset Retirement Obligation (Decommissioning)

Reserves for decommissioning shall be recognized in full on a discounted basis, when the Group has liabilities on decommissioning and relocation of equipment or a mechanism and restoration of the site where the equipment was located, and where reasonable valuation of such reserve can be made. The amount recognized constitutes the present value of the estimated deferred expenses, determined in accordance with the local conditions and requirements. The corresponding fixed asset, equivalent in size to the reserve amount shall be also recognized. Subsequently, this asset shall be amortized as part of the capital expenditures on the means of production and means of transportation on the basis of the units of production method.

## **Financial Assets**

#### Initial recognition and valuation

Financial assets at the initial recognition shall be classified accordingly as financial assets revaluated at fair value through the profit or loss; loans and accounts receivable; investment held to maturity, financial assets available for sale; derivatives set as hedging instruments in case of effective hedging. All financial assets, other than financial assets revaluated at fair value through profit or loss, shall be initially recognized at fair value increased by the transaction costs directly related thereto.

The Group's financial assets include cash and cash equivalents, short-term bank deposits, bonds receivable from the Parent Company, note receivable from a joint venture member, note receivable from an associated company, loans to related parties and trade receivables.

## Impairment of Financial Assets

The Group shall establish the presence of objective evidence of impairment of a financial asset or a group of financial assets. A financial asset or a group of financial assets shall be deemed impaired then and only then when there is an objective evidence of impairment as a result of one ore more events occurring after the initial recognition of the asset (occurrence of a "damage sustained event") that have exerted reliably measurable influence on the expected cash flows on a financial asset or a group of financial assets.

### Inventories

Inventories shall be accounted at the least of the following two values: production cost and net realizable value according to the FIFO costing method. The value shall include all expenditures incurred in the ordinary course of business, related to the local delivery of inventories and bringing them to the current condition. The cost of crude oil and oil products shall be their lifting cost, including a corresponding part of expenses on depreciation, depletion and amortization, and overheads based on the average volume of production. The net realizable value of crude and oil products shall be based on the estimated selling price, net of the expenses connected with such a sale.

#### Value-added tax (VAT)

Tax authorities allow repayment of the VAT on sales and acquisition on a net basis. VAT reimbursable constitutes VAT on acquisition on the domestic market, lett VAT on sales on the domestic market. Export sales have the zero rate.

#### Cash and cash equivalents

Cash and its equivalents shall include cash in banks and on hand, and short-term deposits with the original maturity of not more than three months.

## **Financial Liabilities**

#### Initial recognition and valuation

Financial liabilities within the scope of IAS 39 shall be classified accordingly as financial liabilities, revaluated at fair value through profit or loss, credits and borrowings, and derivatives. The Group shall classify its financial liabilities at their initial recognition.

Financial liabilities shall be initially recognized at fair value, increased in case of credits and borrowings by the transaction costs directly related thereto.

The Group's financial liabilities include trade and other accounts payable, loans and borrowings, and derivative financial instruments.

#### Reserves

Reserves shall be recognized, if the Group has a current liability (legal or voluntarily assumed), occurring as a result of a past event, there is a substantial likelihood that an outflow of economic benefits will be required for the repayment of the liability, and the amount of such a liability can be accurately determined. If the Group intends to receive reimbursement of a certain portion or all reserves, for example, on an insurance agreement, the reimbursement shall be recognized as a separate asset, but only in case receipt of the reimbursement is beyond exception.

If the effect of the time value of money is material, the reserves shall be discounted at the current rate before taxes, that reflects, where applicable, the risks characteristic of the specific liability. If discounting is used, an increase in the reserve shall be recognized as financial costs over time.

## Provisions for construction

The Government delegates to the Group various obligations related to sponsorship and financing. The Group's management believes that such obligations are constructive and shall be recognized in accordance with resolutions of the Government. Since the Government is the Group's ultimate shareholder, the costs related to fulfillment of such obligations shall be recognized in the consolidated financial statements as "distribution to the shareholders" as part of the equity.

## **Payments to Employees**

## Pension Plan

Payments under a predetermined contribution pension program shall be booked to expenses as they are paid. Payments under the public pension system shall be considered as defined contribution plans, when the Group's liabilities under this plan are equal to the liabilities arising under a predetermined contribution pension program.

## Long-term employee benefits

The Group offers to its employees long-term benefits before and after retirement under the Bargaining Agreement between the Group and its employees. The Bargaining Agreement, in particular, provides for payment of a lump-sum retirement benefit, rendering material assistance to employees in case of incapacity, a jubilee or death. Entitlement to benefits is usually conditioned by the need for an employee to continue work before retirement.

Estimated cost on payment of lump-sum benefits shall be accrued during the working life of an employee according to the methodology used in calculating defined contribution pension plans. Actuarial gains and losses arising during a year shall be recorded as part of the miscellaneous aggregate income. For this purpose, actuarial gains and losses include both the influence of changes in actuarial assumptions, and the influence of the past experience in connection with the differences between the actuarial assumptions and the actual data. Other changes are recognized in the current period, including the current service cost, past service cost and the influence of staff reductions or calculations performed.

## **Recognition of Proceeds**

Proceeds shall be recognized if there is a likelihood that the Group will receive economic benefits, and if the proceeds can be reliably evaluated. The proceeds shall be evaluated at fair value of the received compensation, less discounts and other sales taxes or duties. The following criteria shall be fulfilled for recognition of proceeds in the consolidated financial reporting:

### Sales of goods

Income from sales of crude oil, oil products, gas and other commodities shall be recognized when a delivery of a commodity has occurred, and the rights and title have been transferred to the buyer.

## Provision of services

Income from services provided, such as transportation services, shall be recognized at the time of rendering the services.

## Interest Income

For all financial instruments valuated at amortized cost and interest-bearing financial instruments classified as instruments available for sale, the interest income or costs shall be recorded at the effective interest rate, which, when discounted at, brings the expected future cash payments or proceeds throughout the projected period of use of the financial instrument or throughout a shorter time period, where applicable, precisely to the net book value of a financial asset or financial liability. Interest income shall be included in the financial income in the consolidated aggregate income statement.

### **Recognition of Expenses**

Expenses shall be recorded at the moment of occurrence and reflected in the consolidated financial reporting in the period they are related to, based on the accrual method.

### Income Tax

Income tax for a year includes the current income tax, the excess profits tax and the deferred tax.

Assets and liabilities on the current income tax for the current and prior periods shall be evaluated at the amount, that will be supposed to be refunded by the tax authorities or paid to them. Tax rates and tax

legislation used for the calculation of this amount are the rates and laws adopted and actually adopted as at the reporting date.

The current corporate income tax (CIT) attributable to items recognized directly in the capital shall be recognized as part of the capital, and not in the statement of comprehensive income.

The excess profits tax (EPT) is considered as an income tax and forms a portion of the income tax expenses. In accordance with the effective tax legislation, the Group assesses and pays the EPT in respect of each subsoil use contract at variable rates based on the ratio of the total annual income to the deductions over the year on each separate subsoil use contract. The ratio of the total annual income to deduction in each fiscal year, which initiates application of the EPT is 1.25:1. EPT rates shall be applied to a portion of the net tax income (taxable income after deduction of CIT and permitted adjustments) in respect of every subsoil use contract in excess of 25% of the deductions attributable to each contract.

Deferred tax shall be calculated both for the corporate income tax and for the excess profits tax. Deferred excess profits tax shall be calculated according to the temporary differences for the assets referred to the sub-soil use contracts, at the expected rate of the excess profits tax, subject to payment under the contract.

## Equity

#### Non-controlling participatory interest

Non-controlling participatory interests are represented in the consolidated statement of financial position as part of the equity capital separately from the capital attributable to the Company's shareholders. The losses of a subsidiary shall be classified as the non-controlling participatory interest even in case this leads to negative balance.

#### Payments based on equity instruments

Employees of the Group receive remuneration in the form of payments based on equity instruments. Employees provide services for which they receive remuneration in equity instruments of a subsidiary where they work ("transactions settled with equity instruments").

The value of transactions with employees, settled with equity instruments, shall be evaluated proceeding from the fair value of such instruments at the date they are provided. The fair value shall be determined using a relevant evaluation model.

## Dividends

Dividends shall re recognized as liabilities and be subtracted from the capital amount as at the reporting date only in case they are declared on or before the reporting date. Information on dividends shall be disclosed in the reporting, if they have been recommended before the reporting date, and recommended or declared after the reporting date, but before the date of approval of the consolidated financial reporting for issuance.

## Miscellaneous distributions to shareholder

Costs incurred by the Group in compliance with resolutions of the Government or resolutions of Samruk-Kazyna or their instructions shall be recognized as distributions through equity. Such costs shall be included in the expenses related to the Group's non-core operations (construction of social facilities and acquisition of investments).

### Events after the reporting date

Events occurring after the end of the reporting year, providing evidence of the conditions that existed at the date of preparation of the statement of financial position (adjusting events), shall be reflected in the consolidated financial reporting. Events occurring after the end of the reporting year, which are not adjusting events, shall be disclosed in the notes to the reporting, if they are material.

S. Mynbayev

This Report on compliance with provisions and principles of the Corporate Governance Code (the Code) of JSC NC "KazMunayGas" (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 2016 KMG complied with provisions and principles of the Code, except for the following aspects:

N≌	PROVISIONS OF THE CODE	EXTENT OF COMPLIANCE	COMMENTS
		THE GOV	ERNMENT
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	<ul> <li>In 2016, KMG did not establish any legal entities in the form of a joint-stock company. On 30.06.2016 the KMG Board of Directors approved the Target Operating Model of the KMG group of companies providing for simplification of the production asset management through:</li> <li>1) the "direct management", i.e. transfer of shareholdings (participation shares) in production assets to KMG ownership;</li> <li>2) conversion of current JSCs into LLPs;</li> <li>3) withdrawal from noncore and auxiliary assets (within the framework of implementation of the instruction of the Head of the State "On drawing up of a new Complex Privatization Plan for 2016 – 2020", the Government of the RoK approved of the "Complex Privatization Plan for 2016 – 2020", the Government of the RoK approved of the "Complex Privatization Plan for 2016 – 2020", the Government the Decree, the KMG Board of Directors by its resolution dated 24.02.2016, (Minutes №2/2016) approved lists of companies (assets) of KMG, subject to proviatization, (hereinafter - the Lists). To implement procedures on disposal of assets, the Board of Directors of "Samruk-Kazyna" JSC approved of the Uniform Rules of Asset Disposal. The Sectoral Commission was established out of representatives of KMG, "Samruk-Kazyna" and non-government organizations to define the way and timing of an asset disposal depending on an asset; the KMG Board of Directors approved the Action Plan on restructuring of non-core assets of the KMG group of companies by its resolution dated 30.06.2016, (Minutes №9/2016));</li> <li>4) reduction of management levels and decreasing the number of companies.</li> </ul>
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 creating new organizations KMG establishes LLPs. The Supervisory Boards are created in such newly established LLPs, if appropriate; the number of members of such Supervisory Boards depends on the scope of the organization. It is not in practice to elect any Independent Directors into the Supervisory Boards of companies of the KMG group due to lack of need and any cooridnated approval of such practice by the entity, which owns all the voting shares of KMG ("Samruk-Kazyna" JSC).

N≌	PROVISIONS OF THE CODE	EXTENT OF COMPLIANCE	COMMENTS
		THE FUND AND C	ORGANIZATIONS
Item 2 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 carries out its financial and operating activities on the basis of self-sustainability; in line with item 13 of the KMG Charter, the goal of KMG is to gain net profit while carrying out independent economic activities; as per item 24 of the KMG Charter, KMG has autonomy in solving any issues related to planning of its operating activities, employee compensation, material and technical supply, social development, income distribution, staff selection, placement and retraining. However, certain documents of "Samruk-Kazyna" JSC (the Investment Policy approved by the Board of Directors of "Samruk-Kazyna" JSC on 26.06.2014; the Rules of coordination of appointment and early termination of powers of CEOs of legal entities in which "Samruk- Kazyna" JSC directly or indirectly owns all the voting shares, as approved by the resolution of the Management Board of "Samruk-Kazyna" JSC dated 16.10.2012, Minutes №40/12) provide for certain procedures, limiting the autonomy of the KMG Board of Directors in decision making on certain issues (incl. entering into M&A transactions, appointment of CEOs of subsidiaries of KMG).

#### **RIGHTS OF SHAREHOLDERS**

complies partially

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The Organization must have 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. KMG has the operating Rules of coordination of appointment (election) of executive employees by the Board of Directors (as approved by the resolution of the KMG Board of Directors dated 12.03.2007, Minutes №2), Rules of establishing Boards of Directors/ Supervisory Boards of legal entities in which KMG owns the equity stake/ participation shares on the right of ownership or upon trust (approved by the resolution of the Management Board of KMG dated 30.04.2013 (Minutes №29). On 16.05.2016 Letter №19-19/2222 was sent to "Samruk-Kazyna" JSC covering proposals on the procedure for the election and establishment of remuneration of the Board of Directors (Supervisory Board) of subsidiaries and associates of "Samruk-Kazyna" JSC.

26.09.2016 "Samruk-Kazyna" JSC Management Board of (Minutes № 35/16) approved the Rules on forming a composition of Boards of Directors of "Samruk-Kazyna" JSC's companies. The work is started to implement analogous requirements on KMG group.

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Nº	PROVISIONS OF THE CODE	EXTENT OF COMPLIANCE	COMMENTS						
	THE BOARD OF DIRECTORS AND THE EXECUTIVE BOARD								
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.	complies partially	64 managers of KMG and its subsidiaries and affiliates were evaluated under the project of Leadership Assessment; the relevant Top Management Succession Plan of the KMG group of companies was developed following the above mentioned evaluation. At the same time, the Job Matching of CEO-1 and CEO-2 level positions was carried out according to the resolution of the KMG Board of Directors dated 28.07.2016, Minutes №12. Under the job matching procedure, the Organizational Transition Committee of the KMG Board of Directors of Directors (including Independent complies partially Directors of the KMG Board of Directors and representatives of the Fund) selected candidates to the CEO-1 and CEO-2 positions and determined the membership of the KMG Management Board out of those who underwent the Job Matching; it also provided relevant recommendations on including certain candidates to the Succession Plan. There is no formally approved Succession Plan of appointments to the KMG Board of Directors. However a draft of the restated Regulation on the Board of Directors has been developed to introduce relevant provisions on succession planning; this document is to be agreed upon with "Samruk-Kazyna" JSC.						
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. This Methodology should be discussed with at least one member of the Nomination and Remuneration Committee of the Board of the Fund.	complies partially	On 16.05.2016 Letter №19-19/2222 was sent to "Samruk-Kazyna" JSC covering proposals on the procedure for election and establishment of the remuneration for the Board of Directors (Supervisory Board) of subsidiaries and affiliates of "Samruk-Kazyna" JSC. 26.09.2016 "Samruk-Kazyna" JSC Management Board of (Minutes № 35/16) approved the Rules on forming a composition of Boards of Directors of "Samruk-Kazyna" JSC's companies, embodying, amongst other, provisions on remuneration. The work is started to implement analogous requirements on KMG group.						
Item 13 of Chapter 5	The Board of Directors, committees and members of the Board of Directors shall be assessed 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	The external assessment of the KMG Board of Directors was scheduled for 2016; however, due to certain organizational reasons it was rescheduled for the beginning of 2017.						

N≌	PROVISIONS OF THE CODE	EXTENT OF COMPLIANCE	COMMENTS
Item 14 of Chapter 5	The Board of Directors reflects the manner in which the assessment of the Board of Directors is conducted and taken actions within the annual report following the results. In the case of hiring an independent consultant, it is indicated whether this independent consultant has provided another consulting services to the Fund and organizations over the past three years.	complies partially	By its resolution dated 09.12.2016, Minutes №46, KMG Management Board resolved to introduce relevant amendments into the Rules of development of the Annual Report of JSC NC "KazMunayGas" (as approved by the resolution of the KMG Management Board dated 07.04.2015, Minutes №17). Information about the results of the assessment of the Board of Directors shall be included into the Annual Report for a relevant period.
ltem 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	A draft of the restated Regulation on the Board of Directors has been developed to introduce relevant provisions on succession planning; this document is to be agreed upon with "Samruk-Kazyna" JSC.

# GLOSSARY

2D - seismic acquisition in two planes 3D - seismic acquisition in three planes **BTL - Batumi Terminal Limited** EBITDA - analytical indicator presenting the amount of profit before tax, amortization costs and credit interest JBIC - Japan Bank for International Cooperation TRG - The Rompetrol Group, an integrated Romanian oil and gas company GFS - gas filling station NGVRS - NGV refill station AGP - Asia Gas Pipeline (trunk gas pipeline for transportation of the Central Asian gas to China) FFS - fuel filling station AR - Atyrau Refinery JSC NC "KazMunayGas", National Company "KazMunayGas", KazMunayGas, KMG, Company - Joint-Stock Company "National Company "KazMunayGas" SWF "Samruk-Kazyna" JSC, the Fund, SWF - "Samuryk-Kazyna" Sovereign Wealth Fund JSC BBSh - Kazakhstan section of the Asia Gas Pipeline, running through Beineu - Bozoi - Shymkent HVL - high voltage line GIS - geographic information system SRC - State Commission of Mineral Reserves GEWs - geologic exploration works SDE - subsidiary dependent entity EPC contract (engineering, procurement, construction) - type of a turnkey construction contract DE – dependent entity SS - soil surveying ITD - innovation-and-technology development ORF - oil recovery factor KMG RM - JSC "KazMunayGas - Refining & Marketing" APC - aromatics production complex KPIs - key performance indicators CS - compressor station KSCS - Kazakhstan sector of the Caspian Sea KTG - JSC "KazTransGas" CPC - Caspian Pipeline Consortium (trunk oil pipeline from transporting oil from the Tengiz field to the port of Novorossiysk on the Black Sea) IPL - integrated process line at the Tengiz field KTO - JSC "KazTransOil" CC - corporate centre, central office of JSC NC "KazMunayGas" MA-VSP - multi-azimuth vertical seismic profiling, a seismic acquisition method IDC - interdepartmental commission TGP - trunk gas pipeline CDPM - a seismic acquisition method using common depth point MMtpa - million tons per annum RoK's MoE - Ministry of Energy of the Republic of Kazakhstan R&D - research-and-development works PS - pump station SEC - science and engineering council PCC - petrochemical complex EIA - environmental impact assessment **OGPP - Orenburg Gas-Processing Plant** PCD - pilot commercial development TP - test production FGP - Tengiz field future growth project SUC – start-up complex PKOP - PetroKazakhstan Oil Products JSC, the owner of the Shymkent Refinery **PPCP** - Pavlodar Refinery ME - miscellaneous entity PreEIA - preliminary hearing on environmental impact assessment KGP - Karachaganak field growth project HVS - high voltage substation DED - design-and-estimate documentation WPCP - well-head pressure control project at the Tengiz field

LDPE - low-density polyethylene

HDPE - high-density polyethylene JCE – jointly-controlled entity NCP - North-Caspian Project NCERB - North-Caspian Environmental Oil Spills Response Base CAWs - construction-and-assembly works JV - joint venture JUR - jack-up self-elevating drilling rig PSA - production sharing agreement TCO - Tengizchevroil LLP, the opetor for development of the Tengiz field FS - feasibility study HC - hydrocarbons RWC - raw hydrocarbons

DC - delayed coker

CCED - Central Commission for Exploration and Development of the RoK's Ministry of Energy)