

**MANAGEMENT REPORT  
PJSC GAZPROM  
2016**

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### Note:

In the present Management Report some of operating and economic parameters have been determined in accordance with International Financial Reporting Standards (IFRS) principles and for the Group's entities included in the IFRS consolidated financial statements of PJSC Gazprom for the year ended December 31, 2016, therefore they can differ from similar parameters in reports of PJSC Gazprom prepared under Russian statutory requirements.

Moreover, some operating parameters of PJSC Gazprom and its subsidiaries are determined in accordance with principles underlying management reporting.

Analysis of financial results should be read in conjunction with the audited consolidated financial statements of PJSC Gazprom for the year ended December, 31, 2016 prepared in accordance with IFRS.

Among other things, the Management Report discloses information on the future production and economic activities of Gazprom Group, based on the management's forecasts and estimates considering the current situation. Actual performance results may differ from the forecasts and estimates due to the impact of various objective factors.

Gazprom Group (PJSC Gazprom and its subsidiaries, hereinafter – Gazprom, the Group) – is one of the world's largest vertically integrated energy companies.

## THE GROUP'S POSITION IN THE GLOBAL ENERGY INDUSTRY

Gazprom remains a global leader in terms of gas reserves (17% of global reserves) and gas production (11% of global gas production). Gazprom's share in Russian production stands at 66% of gas and 11% of oil and gas condensate (including the Group's share in the reserves and production of entities where Gazprom has investments classified as joint operations).

The Unified Gas Supply System (UGSS) of Russia is a centrally operated system of natural gas processing, transportation and storage. The UGSS incorporates the world's longest network of high-pressure trunk pipelines covering the European part of Russia and Western Siberia. As at the end of 2016, the combined length of trunk pipelines and connections operated by the Group's gas transportation subsidiaries in Russia totalled 171.4 thousand km.

In Russia, Gazprom Group accounts for a half of all natural and associated petroleum gas processing and 18% of oil and stable gas condensate refining.

Gazprom is the dominant supplier of gas to consumers in Russia and countries of the former Soviet Union (FSU). In addition, the Group is Europe's major supplier of natural gas. Share of PJSC Gazprom's gas sales under contracts signed by OOO Gazprom export in the total gas consumption in European far abroad countries is 33.6%.

The Group also owns electricity generating assets, which provide approximately 15% of all the electrical power generated in Russia. Gazprom is the largest heat producer in Russia.

Gazprom Group's key operational and financial indicators for 2016 and 2015 are presented in the tables below.

	<b>As of and for the year ended December 31,</b>		<b>Change, %</b>
	<b>2016</b>	<b>2015</b>	
<b>Reserves of hydrocarbons under PRMS Standards<sup>(1)</sup></b>			
Proved and probable gas reserves, bcm	23,855.11	23,704.99	0.6
Proved and probable gas condensate reserves, million tons	1,018.94	933.30	9.2
Proved and probable crude oil reserves, million tons	1,378.72	1,355.40	1.7
Total proved and probable reserves of hydrocarbons <sup>(2)</sup> , bboe	173.26	171.42	1.1
<b>Operating indicators</b>			
Natural and associated petroleum gas production <sup>(1)</sup> , bcm	420.1	419.5	0.1
Crude oil production <sup>(1)</sup> , million tons	47.2	44.0	7.3
Unstable gas condensate production <sup>(1)</sup> , million tons	15.9	15.3	3.9
Total hydrocarbon production <sup>(1),(2)</sup> , million boe	3,202.5	3,170.3	1.0
Natural and associated petroleum gas refining, bcm	31.0	31.2	-0.6
Oil and gas condensate refining, million tons	65.9	66.8	-1.3
Electricity generation, billion kilowatt-hour (kWh)	157.6	148.0	6.5
<b>Key financial results (RUB million)</b>			
Total sales (net of excise tax, VAT and customs duties)	6,111,051	6,073,318	0.6
Operating profit	725,580	1,228,301	-40.9
Profit for the year attributable to owners of PJSC Gazprom	951,637	787,056	20.9
Adjusted EBITDA	1,322,199	1,874,726	-29.5
<b>Balance Sheet highlights (RUB million)</b>			
Cash and cash equivalents	896,728	1,359,095	-34.0
Total debt	2,829,623	3,442,215	-17.8
Net debt	1,932,895	2,083,120	-7.2
Total assets	16,918,938	17,052,040	-0.8
Total equity (including non-controlling interest)	11,441,839	10,914,622	4.8

## Ratios

Basic and diluted earnings per share for profit attributable to the owners of PJSC Gazprom, RUB	42.19	34.29	23.0
Total debt to total equity ratio	0.25	0.32	-21.9
Return on adjusted EBITDA, %	21.6	30.9	-30.1
Return on profit for the year, attributable to owners of PJSC Gazprom, %	15.6	13.0	20.0

Note:

- (1) Including the Group's share in the reserves and production of entities where Gazprom has investments classified as joint operations.
- (2) For management accounting purposes, Gazprom Group measures hydrocarbon reserves and production in metric units. In this Management Report, gas reserves are converted from metric units to barrels of oil equivalent at a ratio of 1,000 cubic metres to 6.49 boe. For data comparability, the figure as at 31 December 2015 has been recalculated using the above ratio and so differs from the figure in Management Report 2015.

## OPERATING RESULTS

### Reserves and development of hydrocarbons

The table below presents assets and volumes of capital expenditures in the Production of gas and Production of oil and gas condensate segments:

	As of December 31,	
	2016	2015
<b>Gas production</b>		
Assets, RUB million	2,479,386	2,357,813
Share in the total assets of the Group, %	14.8	15.0
<b>Oil and gas condensate production</b>		
Assets, RUB million	2,383,892	2,183,335
Share in the total assets of the Group, %	14.3	13.9

	Year ended December 31,	
	2016	2015
<b>Gas production</b>		
Capital expenditures, RUB million	231,530	220,214
Share in capital expenditures of the Group, %	17.2	16.4
<b>Oil and gas condensate production</b>		
Capital expenditures, RUB million	316,823	324,330
Share in capital expenditures of the Group, %	23.6	24.1

### Reserves

According to the audit of Gazprom Group's hydrocarbon reserves under PRMS Standards performed by DeGolyer and MacNaughton, as of December 31, 2016 proved and probable reserves of the Group's hydrocarbons (including the share in the reserves of entities where Gazprom has investments classified as joint operations) are 173.3 bboe. The valuation covered 95.4% of gas reserves, 93.5% of condensate reserves and 93.3% of oil reserves attributed to grades A+B<sub>1</sub>+C<sub>1</sub>.

The following table shows proved and probable reserves of Gazprom Group (including the share in the reserves of entities where Gazprom has investments classified as joint operations) under PRMS Standards:

		<b>As of December 31,</b>	
		<b>2016</b>	<b>2015</b>
<b>Gas</b>			
Share of A+B <sub>1</sub> +C <sub>1</sub> reserves covered by the assessment under PRMS Standards <sup>(1)</sup> , %			
Proved		95.4	94.2
	bcm	18,596.47	18,791.20
	tcf	656.75	663.63
	bboe	120.69	121.96
Probable			
	bcm	5,258.64	4,913.79
	tcf	185.72	173.54
	bboe	34.13	31.89
Proved and probable			
	bcm	23,855.11	23,704.99
	tcf	842.47	837.17
	bboe	154.82	153.85
<b>Gas condensate</b>			
Share of A+B <sub>1</sub> +C <sub>1</sub> reserves covered by the assessment under PRMS Standards <sup>(1)</sup> , %			
Proved		93.5	92.2
	million tons	759.23	699.53
	bboe	6.21	5.72
Probable			
	million tons	259.71	233.77
	bboe	2.12	1.91
Proved and probable			
	million tons	1,018.94	933.30
	bboe	8.33	7.63
<b>Oil</b>			
Share of A+B <sub>1</sub> +C <sub>1</sub> reserves covered by the assessment under PRMS Standards <sup>(1)</sup> , %			
Proved		93.3	92.4
	million tons	789.56	792.73
	bboe	5.79	5.81
Probable			
	million tons	589.16	562.67
	bboe	4.32	4.13
Proved and probable			
	million tons	1,378.72	1,355.40
	bboe	10.11	9.94
<b>Total</b>			
Share of A+B <sub>1</sub> +C <sub>1</sub> reserves covered by the assessment under PRMS Standards <sup>(1)</sup> , %			
Proved, bboe <sup>(2)</sup>		95.2	94.0
Probable, bboe <sup>(2)</sup>		132.69	133.49
Proved and probable, bboe <sup>(2)</sup>		40.57	37.93
		173.26	171.42

Notes:

<sup>(1)</sup> The A+B<sub>1</sub>+C<sub>1</sub> classification accepted in Russia is based on the geological data analysis and evaluates the actual hydrocarbon reserves in geological formations. Under the new classification of Reserves and Resources of Oil and Flammable Gases, approved by the Ministry of Natural Resources and Environment of the Russian Federation, Decree No. 477 dated 1 November 2013 and effective from 1 January 2016, grades A+B<sub>1</sub>+C<sub>1</sub> are explored reserves of high geological certainty and correspond to previously used A+B+C<sub>1</sub>. PRMS Standards take into account not only the probability of hydrocarbon presence in geological

formations but also the economic feasibility of reserves extraction, which is determined based on exploration and drilling costs, operating expenses for production and transportation, taxes, current selling prices of hydrocarbon and other factors.

- (2) For management accounting purposes, Gazprom Group measures hydrocarbon reserves and production in metric units. In this Management Report, gas reserves are converted from metric units to barrels of oil equivalent at a ratio of 1,000 cubic metres to 6.49 boe. For data comparability, the figure as at 31 December 2015 has been recalculated using the above ratio and so differs from the figure in Management Report 2015.

The volume of PRMS proved and probable hydrocarbon reserves of Gazprom Group increased by 1.8 bboe year-on-year. The increase in the proved and probable gas and gas condensate reserves was driven by re-estimation of reserves and also factors in new development solutions for the Bovanenkovskoye and Yuzhno-Kirinskoye fields. The increase in the oil reserves resulted from the use of new technologies in production drilling at the fields operated by Gazprom Neft, including the Orenburgskoye (Eastern part), Novoportovskoye, Prirazlomnoye, Muravlenkovskoye and Novogodneye fields, and the discovery, in 2016, and subsequent audit of the Zapadno-Chatylkinskoye oil field.

Most of Gazprom hydrocarbon resources are located within the license areas in Russia. International reserves of the Group are insignificant.

As of December 31, 2016, Gazprom Group held 267 subsoil licenses for conducting geological surveys, prospecting, exploration and production of hydrocarbons in the Russian Federation.

The licensed subsoil area covered 545,6 thousand sq. km, including 331.3 thousand sq. km of offshore sites. In addition, entities where Gazprom has investments classified as joint operations held 36 licenses with the licensed subsoil area of 23,1 thousand sq. km.

As at 31 December 2016, Gazprom Group's A+B<sub>1</sub>+C<sub>1</sub> hydrocarbon reserves in Russia were 36,443.9 bcm of natural gas, 1,534.9 mm tonnes of gas condensate, and 2,078.5 mm tonnes of oil, for a total of 264.3 bboe, including Gazprom Group's share in the reserves owned by entities in which Gazprom has investments classified as joint operations was 25.0 bcm of gas, 2.9 mm tonnes of gas condensate and 197.6 mm tonnes of oil, or 1.6 bboe'

The Group's share in A+B<sub>1</sub>+C<sub>1</sub> hydrocarbon reserves of associates and joint ventures as at 31 December 2016 was 999.1 bcm of gas, 104.5 mm tonnes of gas condensate, and 571.5 mm tonnes of oil, for a total of 11.5 bboe.

The following table presents changes to A+B<sub>1</sub>+C<sub>1</sub> reserves of natural gas, gas condensate and oil (including the share in the reserves of entities where Gazprom has investments classified as joint operations) at licensed areas of Gazprom Group in Russia in 2016:

	Natural gas, bcm	Gas condensate, million tons	Crude oil, million tons	Total, million boe
<b>Reserves as of December 31, 2015 including non-controlling interest<sup>(1)</sup></b>	<b>36,147.3</b>	<b>1,499.5</b>	<b>2,082.0</b>	<b>262,123.0</b>
	<b>643.0</b>	<b>4.2</b>	<b>69.5</b>	<b>4,717.1</b>
Additions to reserves as a result of exploration	457.4	38.0	19.3	3,420.7
Transfer of reserves discovered in 2016, to the Undistributed Subsoil Fund of Russia <sup>(2)</sup> , transfer to other companies, acquisition from other companies	-2.4	-1.7	-2.0	-44.2
Licenses obtaining	257.5	10.9	15.0	1,870.3
Return of licenses	-0.6	-	-	-3.9
Acquisition of assets	-	-	-	-
Disposal of assets	-	-	-	-
Revaluation	2.0	-0.1	11.1	93.6
Production (including losses)	-417.3 <sup>(3)</sup>	-11.7 <sup>(4)</sup>	-46.9	-3,147.8
<b>Reserves as of December 31, 2016 including non-controlling interest<sup>(1)</sup></b>	<b>36,443.9</b>	<b>1,534.9</b>	<b>2,078.5</b>	<b>264,311.7</b>
	<b>622.3</b>	<b>4.2</b>	<b>68.6</b>	<b>4,575.9</b>

Notes:

- (1) Non-controlling interest as at the end of the year is calculated based on Gazprom Group's effective interest in the share capital of the relevant subsidiary which is a subsoil use licence holder.
- (2) Under the Russian Federation laws, the subsoil user does not have any vested right to develop reserves discovered in areas covered by exploration licenses or beyond the licensed areas. Such reserves shall be transferred to the Undistributed Subsoil Fund of the Russian Federation. Subsequently the subsoil user has a preference right to receive a license for their development.
- (3) Except for dissolved gas.
- (4) Any changes in gas condensate reserves due to production are recognized as converted into stable gas condensate (C<sub>5+</sub>). In 2016, Gazprom Group produced 15.9 million tons of unstable gas condensate.

### Exploration

The following table presents summary information on exploration work at licensed areas of Gazprom Group in Russia and those under the foreign projects with the Group's participation:

	Year ended December 31, 2016	
	in Russia	abroad
Exploration drilling, thousand meters	111.6	9.7
Completed exploration wells, units	40	8
including successful wells	34	7
Seismic exploration 2D, thousand km	1.1	1.5
Seismic exploration 3D, thousand km <sup>2</sup>	20.6	0.8
Financing for exploration (including VAT), RUB billion	79.0	12.7

Note:

- (1) The consolidated data about exploration work carried out by Gazprom Group in foreign countries include the data on projects where the Group's subsidiaries perform as operators.

In addition, for companies in which Gazprom has investments classified as joint operations, exploration drilling stood at 7.4 thousand m, with two exploration wells completed and one of them flowing.

In 2016, exploration-driven additions to Gazprom's hydrocarbon reserves in Russia totalled: 457.4 bcm of natural gas, 38.0 mm tonnes of gas condensate, and 19.3 mm tonnes of oil.

A sizeable increase was achieved in A+B<sub>1</sub>+C<sub>1</sub> gas reserves at the Yuzhno-Kirinskoye field (the Russian continental shelf of the Okhotsk Sea) – 187.9 bcm, Kovyktinskoye field (Irkutsk Region) 138.2 bcm, and Chayandinskoye field (Republic of Sakha (Yakutia)) 86.6 bcm, and oil reserves at the Zapadno-Chatylkinskoye field (Yamal-Nenets Autonomous Area) – 10.4 mm tonnes.

The reserves replacement ratio was 1.10 for natural gas, and 0.98 for gas condensate and oil.

In 2016, Gazprom Group continued prospecting, exploration and development of fields outside Russia under the relevant contracts. The geography of its international prospecting activities covered the CIS, Europe, Southeast Asia, Africa, the Middle East, and Latin America.

Exploration projects operated by Gazprom Group included exploration drilling in Algeria (142 m), Vietnam (195 m) and Serbia (9,391 m), seismic surveys in Kyrgyzstan, Algeria, Iraq (Kurdistan), and Serbia (1.5 thousand linear m and 0.8 thousand square km of 2D and 3D seismic surveys, respectively). The Company completed the construction of eight exploration wells (including seven productive wells).

In Serbia, the Idos-Sever field with 0.4 mm tonnes of oil reserves was discovered by exploration drilling at the Severni Banat licence block.

#### Licensing

New licences obtained in 2016 increased Gazprom Group's A+B<sub>1</sub>+C<sub>1</sub> oil reserves by: 257.5 bcm of gas, 10.9 mm tonnes of gas condensate, and 15.0 mm tonnes of oil. Five licences were obtained through auctions. The purchase cost of the blocks totalled RUB 24.1bn.

#### Production

The following table presents information on the volumes of natural gas and liquid hydrocarbons produced by Gazprom Group and associated companies and joint ventures in Russia:

	Natural and associated petroleum gas, bcm	Unstable gas condensate, million tons	Crude oil, million tons	Total million boe
<b>Year ended December 31, 2016</b>				
Production of Gazprom Group, including the share in the production of entities where Gazprom has investments classified as joint operations	420.1	15.9	47.2	3,202.5
Share of Gazprom Group in the production of associated companies and joint ventures	27.2	5.2	9.9	291.6
<b>Year ended December 31, 2015</b>				
Production of Gazprom Group, including the share in the production of entities where Gazprom has investments classified as joint operations	419.5	15.3	44.0	3,170.3
Share of Gazprom Group in the production of associated companies and joint ventures	25.5	4.7	9.6	274.3

Gazprom Group produced 420.1 bcm of natural and associated gas, including volumes of companies in which Gazprom has investments classified as joint operations (1.0 bcm of natural gas and APG), slight increase compared to 2015.



Gazprom Group produced 47.2 mm tonnes of oil, including 7.9 million tons produced by companies in which Gazprom has investments classified as joint operations. This increase was driven by the growing oil production at the Novoportovskoye and Prirazlomnoye fields, oil production in the Orenburg Region, and at fields in the Khanty-Mansi Autonomous Area – Yugra.

In 2016 gas condensate production by Gazprom Group reached 15.9 mm tonnes.

Associates and joint ventures produced 27.2 bcm of gas, 5.2 mm tonnes of gas condensate, and 9.9 mm tonnes of oil (share attributable to Gazprom Group). The growth of gas and condensate production is attributable to larger gas and gas condensate production volumes at fields operated by OAO Arcticgas controlled by OOO SeverEnergia. Additionally, in 2016, oil production started at the Vostochno-Messoyakhskoye field (Tazovsky District of the Yamal-Nenets Autonomous Area). The relevant licence for hydrocarbon prospecting, exploration, and production is held by AO Messoyakhaneftegaz. The company is owned by PAO Gazprom Neft (operator) and PAO NK Rosneft as equal shareholders. The project has been implemented despite the lack of industrial and transport infrastructure. The field will reach its production peak of 5.6 mm tonnes of oil in 2020.

In 2016, NIS, a Serbian subsidiary of Gazprom Neft Group, produced 1.0 mm tonnes of oil and gas condensate and 0.6 bcm of natural and associated gas in Serbia, and 51.8 thousand tonnes of oil in Angola.

The following table presents information on the number of Gazprom Group's developing fields and production wells stock:

	<b>As of December 31, 2016</b>	
	<b>in Russia</b>	<b>abroad</b>
Developing fields	151	47
Gas active production wells	7,441	81
Oil active production wells	8,681	681

In addition, as of December 31, 2016, entities where Gazprom has investments classified as joint operations developed 42 fields in Russia.

In addition, Gazprom Group holds shares in a number of oil and gas projects abroad that have entered a production phase.

- Moc Tinh and Hai Thach fields located within licence blocks 05–2 and 05–3 in the Vietnamese section of the South China Sea (49% held by Gazprom Group). In 2016, the fields produced 2,142 mmcm of gas and 572.9 thousand tonnes of gas condensate (as compared to 1,883.7 mmcm and 435.9 thousand tonnes, respectively, in 2015).
- Wingate offshore field in the North Sea. Gazprom International UK Ltd., which participates in the project on behalf of Gazprom Group, holds a 20% interest, while joint venture Wintershall Noordzee B.V. acts as the project operator, holding a 49.5% interest. In 2016, the field produced a total of 686 mmcm of gas and 3.4 thousand tonnes of gas condensate (as compared to 877.0 mmcm and 5.3 thousand tonnes, respectively, in 2015).
- Shakhpakhty field in Uzbekistan (5% held by the Group). In 2016, the field produced a total of 363.0 mmcm of natural gas (as compared to 357.4 mmcm in 2015).
- Junin-6 project in Venezuela (20% held by Gazprom Neft Group in the Russian segment of the project operated by OOO National Oil Consortium). In 2016, the field produced a total of 822.6 mm tonnes of oil. Follow-up exploration is underway, with a full-scale development programme currently designed. The consortium continues to carry out the Early Production project.
- Badrah field in Iraq (30% held by Gazprom Neft Group). In 2016, the field produced a total of 2.6 mm tonnes of oil. A third oil treatment line was commissioned in 2016, with gas programme infrastructure construction underway.
- Garmian block in Iraq (Kurdistan) (operator, 40% held by Gazprom Neft Group). In 2016, production at the project totalled 193.1 thousand tonnes.

- The Incahuasi field (Ipati and Aquio blocks) in Bolivia (20% held by the Group). Since coming on stream in August 2016, the field has produced 740 mmcm of gas and 75.3 thousand tonnes of gas condensate. Gas is mainly exported to Argentina, while condensate is marketed domestically.

Another joint venture, Wintershall Noordzee (50% held by the Group following an asset swap deal between PJSC Gazprom and Wintershall Holding GmbH completed in September 2015), produced 1.0 bcm of gas in 2016.

In Lybia, Wintershall AG (50% owned by the Group) operates nine fields on oil concessions C96 and C97. In 2016, the company produced 504 thousand tonnes of oil and 137 mmcm of gas. Production was confined to C96 block at 4.7–5.5 thousand tonnes per day.

#### Main areas of investments

Most capital investments in gas production segment were associated with the field construction to develop the Cenomanian-Aptian layers at the Bovanenkovskoye oil and gas condensate field, and in oil and gas condensate production segment, with field construction to develop the oil rim in the Botuobinsky horizon of the Chayandinskoye oil and gas condensate field and implementation of Gazprom Neft's projects, including construction and production drilling at the Novoportovskoye and Priobskoye fields, as well as at the Eastern block of the Orenburgskoye field. Long-term financial investments in oil and gas condensate exploration and production were associated with the Messoyakha project.

During 2016, Gazprom Group commissioned the following facilities in Russia:

- two booster compressor stations (Phase 2) of CGTU-2 at the Bovanenkovskoye oil and gas condensate field (Modules 1 and 2), with a combined capacity of 160 MW;
- a 112 MW booster compressor station (Phase 1) of CGTU-9 at the Kharvutinskaya area in the Yamburgskoye oil and gas condensate field;
- a 64 MW booster compressor station (Phase 1) at the Pestsovaya area in the Urengoyevskoye oil and gas condensate field;
- 114 new gas production wells and 703 new oil production wells. Production drilling totalled 227.2 thousand m of gas wells and 2,735.8 thousand m of oil well;
- The Arctic Gate ("Vorota Arktiki"), a unique oil loading terminal, as part of the development of Novoportovskoye field;
- Phase 1 of the booster pump station (BPS) at the Archinskoye field, with a free water knock-out and an annual capacity of up to 500 thousand tonnes of well fluid (on completion, the full capacity of the booster pump station will increase to 1.7 mm tonnes).

Also, as part of its APG utilisation improvement initiatives, Gazprom Neft commissioned 24 MW gas turbine power plants in Russia to supply power to oil and gas production, treatment and transportation facilities at the Shinginskoye fields and a compressor station near booster pump station 2 at the Ety-Purovskoye field.

#### Sale of oil and gas condensate

In 2016, Gazprom Group sold 24.7 mm tonnes of crude oil and stable gas condensate, with total net sales revenue (net of VAT and customs duties) reaching RUB 411.9 bn, a significant increase over 2015, driven mostly by higher revenue from sales to far abroad countries.

Volumes of oil and gas condensate sold by Gazprom Group in domestic and foreign markets were as follows:

(million tons)	Year ended December 31		Change, %
	2016 <sup>(1)</sup>	2015 <sup>(1)</sup>	
Russia	5.9	5.3	11.3
including: Gazprom Neft Group	4.4	3.9	12.8
FSU	1.7	1.9	-10.5
including: Gazprom Neft Group	1.7	1.9	-10.5
Europe and other countries	17.1	9.8	74.5
including: Gazprom Neft Group	13.6	8.6	58.1
<b>Total</b>	<b>24.7</b>	<b>17.0</b>	<b>45.3</b>

Note:

<sup>(1)</sup> The volumes of sold oil and gas condensate do not include intra-group sales.

Higher sales to far abroad countries in 2016 are attributable to larger oil production volumes at the Novoportovskoye and Prirazlomnoye fields, start of production at the Vostochno-Messoyakhskoye field in Russia, and oil production growth in Iraq. Lower sales in FSU countries were due to declining oil exports by Gazprom Neft to Belarus and Uzbekistan. An increase in sales in the domestic market was driven by higher efficiency of oil trading operations in the domestic market and oil production growth in the Orenburg region.

Operations of Gazprom Group are affected by the prevailing price of crude oil, both in domestic and international oil markets.

In 2016, according to PLATTS, average price for Urals crude oil (average quotes of Urals Mediterranean and Urals Rotterdam) was 42.1 U.S. dollars per barrel, which is lower 18% than in 2015.

Oil grade	January	February	March	April	May	June
	USD /barrel					
Brent <sup>(1)</sup>	30.69	32.48	38.49	41.48	46.88	48.34
Urals <sup>(2)</sup>	28.96	30.76	36.70	39.92	44.72	46.76
Spread Urals to Brent	1.73	1.72	1.80	1.56	2.15	1.58

Oil grade	July	August	September	October	November	December
	USD /barrel					
Brent <sup>(1)</sup>	45.10	45.77	46.67	49.66	45.13	53.60
Urals <sup>(2)</sup>	43.85	44.12	44.15	48.27	44.20	52.26
Spread Urals to Brent	1.25	1.65	2.52	1.40	0.92	1.34

Notes:

<sup>(1)</sup> Based on daily average of Brent quotes, calculated as an average between daily maximum and minimum quotes.

<sup>(2)</sup> Based on daily average quotes of Urals Mediterranean and Urals Rotterdam, calculated as an average between daily maximum and minimum quotes.

### Reporting year events

In December 2016, PJSC Gazprom and OMV signed the Basic Agreement on asset swap. The deal will give OMV a 24.98% stake in the project for developing Blocks 4A and 5A of the Achimov formations in the Urengoy oil, gas and condensate field (Gazprom's interest will be reduced to 50.01%, while Wintershall Holding's stake will remain at 25.01%). PJSC Gazprom will also receive a 38.5 % stake in OMV Norge, a company focused on hydrocarbon exploration and production in Norway.

The deal is subject to an agreement on the final transaction documents, regulatory approvals and further corporate approvals.

## Outlook for the Production of gas and Production of crude oil and gas condensate segments

Gas reserves in the conventional hydrocarbon fields operated by Gazprom Group will secure domestic gas supplies and gas exports for a longer term (70 years or more of supplies with the current annual gas production of 419.1 bcm (not including volumes of companies in which Gazprom has investments classified as joint operations) and projected production increase to 550 bcm).

One of Gazprom's key production objectives is to achieve the projected production capacity of the existing fields, start developing new fields in the Nadym-Pur-Taz region, and launch production at unique, large fields in the Yamal Peninsula and on the continental shelf in northern seas to sustain and increase hydrocarbon output levels. Gazprom consistently adds production from the Nadym-Pur-Taz region and the Bovanenkovskoye field in the Yamal Peninsula.

Strategic priority production regions over the longer term include the Yamal Peninsula (cenomanian-aptian deposits of the Kharasaveyskoye field, neocomian-jurassic deposits of the Bovanenkovskoye and Kharasaveyskoye fields; Kruzenshternskoye field), and Russian northern seas (fields in the Ob and Taz Bays, primarily the Severo-Kamennomyskoye and Kamennomyskoye-Sea fields, the offshore Shtokman field in the Barents Sea).

Gazprom has been building gas production centres in Russia's Eastern regions. The Chayandinskoye oil and gas condensate field is the core field for the future Yakutsk gas production centre, and the Kovyktinskoye gas condensate field is key to the future Irkutsk gas production centre. The fields will comprise the resource base for the Power of Siberia pipeline. The top development priorities to boost output from the Sakhalin gas production centre include Sakhalin III fields: the Kirinskoye oil and gas and condensate field put into commercial development in 2014, and the Yuzhno-Kirinskoye gas and condensate field, one of Gazprom's priority projects in gas production over the long term.

## **Transportation**

The following table presents information on assets and volumes of capital investments in the Transportation segment:

	<b>As of December 31,</b>	
	<b>2016</b>	<b>2015</b>
Assets, RUB million	6,596,937	6,119,073
Share in total assets of the Group, %	39.5	39.0

  

	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Capital expenditures, RUB million	406,828	420,874
Share in the Group's total capital expenditures, %	30.3	31.3

### Gas transportation system

The Unified Gas Supply System (UGSS) of Russia is a centrally operated system of natural gas processing, transportation and storage. The UGSS incorporates the world's longest network of high-pressure trunk pipelines covering the European part of Russia and Western Siberia. In addition, the Group owns trunk pipelines in the Russian Far East: Sakhalin – Khabarovsk – Vladivostok and Sobolevo – Petropavlosk-Kamchatsky pipelines.

As at the end of 2016, the combined length of trunk pipelines and connections operated by the Group's gas transportation subsidiaries in Russia totalled 171.4 thousand km. The gas transportation system (GTS) comprises 253 compressor stations (CSs), equipped with 3,852 gas pumping units with a combined capacity of 46.7 thousand MW.

The table below shows data on Gazprom Group's gas trunk pipelines in Russia by age:

Age of trunk pipelines	As of December 31, 2016	
	Length, thousand km,	Share, %
Up to 10 years	19.9	11.6
11 – 20	19.1	11.2
21 – 30	47.2	27.5
31 – 40	49.1	28.6
41 – 50	23.0	13.4
Over 50	13.1	7.7
<b>Total</b>	<b>171.4</b>	<b>100.0</b>

In a continuous effort to improve safety and reliability of the GTS infrastructure and deliver operational excellence, Gazprom Group is introducing a GTS Operability and Integrity Management System. By leveraging this System and a dedicated software tool, Gazprom Group developed the Trunk Pipeline Linear Section Comprehensive Overhaul Programme for 2016–2020, approved by PJSC Gazprom's Management Committee in 2015.

All overhauls of the gas transportation system facilities scheduled for the reporting year in relevant targeted comprehensive repair programmes were completed in full.

In 2016, Gazprom's GTS transported 622.6 bcm of gas (as compared to 602.6 bcm in 2015). In 2016, the amount of natural gas consumed for GTS' own operational needs was 32.0 bcm, remaining flat year-on-year.

As an owner of a GTS in Russia, PJSC Gazprom leases free pipeline capacity to companies outside Gazprom Group provided they have a gas production licence and a supply contract with the buyer of the supplied gas. Such third-party gas also needs to meet relevant technical standards. In 2016, the volume of gas transported via Gazprom Group's GTS in Russia by companies outside Gazprom Group was 129.0 bcm (vs. 121.5 bcm in 2015).

Gazprom Group companies own the gas transportation systems in Belarus, Armenia and Kyrgyzstan. OAO Gazprom transgaz Belarus is the Group's core gas transportation asset abroad, supplying natural gas to consumers in Belarus and carrying transit supplies of gas to Europe and the Kaliningrad Region. Daily requests of PJSC Gazprom to transport Russian natural gas through Belarus were satisfied in full.

The table below shows data key metrics of Gazprom Group's gas transportation infrastructure outside Russia as at 31 December 2016:

	Length, thousand km	Compressor stations, units	Gas injection into the GTS, bcm	
			Total	including gas in transit
Belarus (OAO Gazprom transgaz Belarus and Yamal – Europe trunk gas pipeline)	7.9	10	60.3	41.7
Armenia (ZAO Gazprom Armenia)	1.6	–	2.2	–
Kyrgyzstan (OOsO Gazprom Kyrgyzstan)	0.7	1	4.5	4.2

Gas transportation services in foreign countries are provided to Gazprom by a number of companies with a non-controlling participation of the Group. The key drivers of gas pipeline capacity utilization include demand from European consumers and regulatory restrictions by supervisory authorities on access to gas transportation facilities. Offshore cross-border pipeline

systems constructed with the Group's involvement secured gas supplies to consumers in Northwest and Central Europe (Nord Stream, 43.8 bcm of gas in 2016, up 12.0% year-on-year) and Turkey (Blue Stream, 13.1 bcm in 2016, up 17.0% year-on-year).

#### Main areas of investments

The bulk of capital expenditures was used to finance the construction of the Bovanenkovo – Ukhta trunk gas pipeline system, the implementation of the Power of Siberia project, the Ukhta – Torzhok Trunk Gas Pipeline System – Second Line (Yamal) project, and the UGSS expansion project to supply gas to a new pipeline under the Black Sea. Long-term financial investment was mostly focused on the construction and upgrades of gas transportation facilities to support gas distribution in Kyrgyzstan. In 2016, Gazprom commissioned 770.6 km of trunk pipelines and connections, one compressor station and additional capacity totalling 488 MW in Russia.

#### Reporting year events

In the reporting year, activities under the Memorandum of Understanding signed between PJSC Gazprom, Edison and DEPA in February 2016 with respect to a joint feasibility study of gas pipeline construction in Greece were completed, including analysis of various alternatives for constructing a gas pipeline from the Greek border to the point of connection with Italy's GTS.

In the reporting year, the Turkish Stream project was resumed to supply Russia's natural gas across the Black Sea to Turkey and further to its neighbouring countries. In 2016, a number of permits were obtained from the Turkish side. In particular, the first permit for offshore section construction and an exploration permit with respect to the two strings of the offshore gas pipeline in Turkey's exclusive economic zone and territorial waters. In October 2016, Russia and Turkey signed an intergovernmental agreement providing for the construction of two Turkish Stream strings across the Black Sea bottom from Russia to Turkey, and of an onshore transit string to the border between Turkey and its neighbouring countries.

In December, a contract to install the first offshore string of the Turkish Stream, with an option for second string installation, was signed with Allseas Group. According to the work schedule, first string installation is to start in the summer of 2017.

#### Outlook for the Transportation segment

Expansion of PJSC Gazprom's gas transportation capacity is planned in tandem and close coordination with the development of gas production and storage facilities, and also takes into account the degree of readiness to receive gas shown by new consumers, as well as export projects.

Timesales for commissioning new and upgrading existing gas transportation facilities are scheduled with a long-term perspective and depend on their effective utilisation periods and the need to maintain optimal throughput of the existing GTS. This approach helps prevent introducing excessive capacity, ensure efficient and flexible use of PJSC Gazprom's investments, and optimise gas transportation costs.

Apart from greenfield gas transportation projects, Gazprom also performs upgrades and technical re-equipment of its existing gas transportation facilities.

Gazprom is decommissioning excessive capacity of the Central Gas Transmission Corridor to improve operational efficiency of its gas transmission capacity taking into account the diversification of its gas export routes. Excess capacity is slated for retirement taking into account the need to have required back-up capacity available to maintain the reliability of the transportation network in the future.

To ensure gas supplies to the domestic market and meet its obligations under export contracts, PJSC Gazprom is implementing a number of gas transportation projects.

Gas pipeline systems Bovanenkovo – Ukhta and Ukhta – Torzhok are intended to carry gas from the Yamal fields.

In order to diversify export routes for Russian pipeline gas to PJSC Gazprom's traditional European market the Company initiated the Nord Stream 2 project. The new pipeline, to be laid from Russia to Germany across the Baltic Sea will comprise two offshore strings with a capacity of 27.5 bcm each. Western and Central European countries are the project's target markets. Nord Stream 2 gas supplies are expected to be secured by the Gryazovets – Volkhov – Russia's Baltic Sea coast gas pipeline expansion. The Nord Stream 2 project is implemented on schedule, with both strings to be commissioned in Q4 2019.

In the reporting year, the Turkish Stream project was resumed to supply Russia's natural gas across the Black Sea to Turkey and further to its neighbouring countries.

As part of its efforts to ensure geographic diversification of export routes for Russian gas supplies, the Company pays much attention to pipeline gas supplies from Russia to China.

Power of Siberia trunk pipeline project to transport gas from Yakutsk and Irkutsk gas production centres to consumers in the Far East and China is on track. Preparations are underway to start construction of a cross-border section, including an underwater crossing of the Amur River.

This project is pursued to meet the obligations under the 2014 agreement for Russian gas supplies to China via the eastern route. A 30-year contract was signed, which provides for exports of 38 bcm of gas per year. The gas purchase and sale agreement came into full force in May 2015, with eastern route supplies to start between 2019 and 2021. In the reporting year, PJSC Gazprom continued its efforts to agree with CNPC technical appendices to the agreement, covering various technical aspects of partnership between the parties for gas supplies via the eastern route.

PJSC Gazprom and CNPC continued discussion of delivery terms and conditions. In 2016, PJSC Gazprom also continued its feasibility study of pipeline gas supplies to China from Russia's Far East.

## Gas storage

The following table presents information on assets and volumes of capital investments in the Gas storage segment:

	As of December 31,	
	2016	2015
Assets, RUB million	393,482	348,857
Share in total assets of the Group, %	2.4	2.2
	Year ended December 31,	
	2016	2015
Capital expenditures, RUB million	35,542	48,486
Share in the Group's total capital expenditures, %	2.6	3.6

Russia's UGSS relies on underground gas storage facilities (UGSFs) for agile, smooth, safe and effective operation. UGSFs cover 20% to 40% of Gazprom's total gas supplies during the heating season. Proximity of networked UGSFs to consumer markets reliably ensures stable and flexible gas supplies.

In Russia, Gazprom operates 22 UGSFs in 26 geological structures: 17 facilities in depleted gas deposits, eight in aquifers, and one in a rock salt deposit. The storage facilities are located in 19 regions.

Their operation is supported by 18 compressor stations with an aggregate capacity of 916.5 MW; production wells total 2,681.

As at 31 December 2016, the Group's UGSFs in Russia had a total active capacity of 73.6 bcm. During 2016, withdrawal and injection amounts for Russian UGSFs totalled 44.9 bcm and 24.7 bcm of gas, respectively. The highest daily capacity of 507.1 mmcm was registered on 25 January 2016. The maximum daily capacity in 2016 increased by 11.4 mmcm year-on-year to 801.3 mmcm. By the 2016/2017 withdrawal season, operating gas reserves in Russian UGSFs had increased to 72.1 bcm, up 0.08 bcm year-on-year.

The growth in 2016 was driven by the recovery of the design capacity of wells and upgrades of Kanchurinsko-Musinskoye, Uvyazovskoye, Kasimovskoye and Kaluzhskoye UGSFs.

In 2016, the amount of natural gas consumed for UGSFs own operational needs was 0.308 bcm (as compared to 0.327 bcm in 2015).

To secure reliable and flexible gas supplies, Gazprom's export projects involve active utilisation of gas storage facilities located abroad: in Austria (Haidach), Germany (Rehden, Katharina and Etzel), Serbia (Banatski Dvor), the Netherlands (Bergermeer), and the Czech Republic (Damborice). Additionally, a gas storage contract for UGSF capacity in the UK was valid throughout 2016.

In 2016, Gazprom's own gas storage capacity in far abroad European countries totalled 5.0 bcm, with a daily capacity of 83.4 mmcm. A total of 2.6 bcm of gas were injected in 2016 into UGSFs in far abroad European countries, with a total gas withdrawal of 4.9 bcm.

Following an asset swap deal closed in 2015 between PJSC Gazprom and Wintershall Holding GmbH, Gazprom Group took control of WINGAS and its subsidiaries, and, accordingly, of Rehden and Jemgum UGSFs in Germany. The integration of these assets into Gazprom Germania Group propelled its market share in the EU UGSF capacity market from 0.8% to 6% (28 EU countries).

In FSU countries, Gazprom operates three gas storage facilities in Belarus (Pribugskoye, Osipovichskoye and Mozyrskoye UGSFs), one facility in Armenia (Abovyanskaya underground gas storage station), and also has access to UGSF capacity in Latvia (Inchukalnskoe UGSF). The operating gas reserves in FSU UGSFs totalled 2.9 bcm as at 31 December 2016, with a daily capacity of 57.0 mmcm.

As at 31 December 2016, the active capacity of UGSFs used by Gazprom Group totalled 1.18 bcm of gas in Belarus (with a daily capacity of 34.0 mmcm); and 0.135 bcm (6.0 mmcm) and 1.6 bcm (17.0 mmcm) in Armenia and Latvia, respectively.

Foreign and Russian UGSFs operate in sync. When export gas supplies increase in the heating season, foreign UGSFs operate at their maximum capacity to deliver gas to consumers. Russian gas storage facilities ramp-up their throughput simultaneously with the foreign ones.

#### Main areas of investments

The bulk of capital investments in underground gas storage in Russia was spent on the expansion of Punginskoye UGSF, upgrades of Sovkhoznoye UGSF and Stepnovskaya underground gas storage station, on production drilling at underground gas storage facilities, and other initiatives. In 2016, Gazprom commissioned 0.06 bcm of active capacity and connected two production wells to enhance underground gas storage system in Russia.

In far abroad European countries, Gazprom Group invested mostly in the construction of Katharina, Damborice and Jemgum UGSFs. In 2016, Gazprom Group's share in active capacity additions totalled 95.6 mmcm at Katharina UGSF, 60 mmcm at Jemgum UGSF and 58.5 mmcm at Damborice UGSF.

#### Outlook for the Gas storage segment

Gazprom's forward-looking plans provide for further expansion of its UGSF network in Russia, increasing the network's daily withdrawal capacity. This will help cut gas transportation costs and the cost of gas deliveries to consumers.

To achieve the above goal, PJSC Gazprom plans to:

- sustain the current UGSF performance through upgrade and re-equipment of the existing UGSFs;
- enhance capacities of the existing UGSFs (Kasymovskoye, Nevskoye, Krasnodarskoye, Udmurtskoye and Kanchurinsko-Musinskoye UGSF complexes, as well as Sovkhoznoye and Stepnovskoye UGSFs);



- build and expand peak-shaving gas storage capacity in rock salt deposits (Volgogradskoye and Kaliningradskoye UGSFs);
- continue the implementation of well workover programme;
- build new UGSFs in high consumption regions: Arbuzovskoye in the Volga Federal District, Bednodemyanovskoye in the Central Federal District, Shatrovskoye in the Ural Federal District, and explore opportunities for UGSF construction in the North-Western, Siberian and Far Eastern Federal Districts.

PJSC Gazprom carries out exploration to locate geological structures suitable for UGSF construction in the Arkhangelsk and Yaroslavl Regions, and in the southern part of Western and Eastern Siberia. In the Far East, Gazprom has launched efforts to identify structures suitable for housing helium storage facilities.

In terms of international underground gas storage expansion, the challenge is to enhance Gazprom Group's UGSF capacity in foreign countries to an active capacity of at least 5% of annual exports by 2030, with a focus on constructing own UGSFs. To address this challenge, Gazprom continued the construction of the Katharina, Jemgum and Etzel UGSFs in Germany.

A working group on underground gas storage was set up within the Joint Coordinating Committee (JCC) of PJSC Gazprom and CNPC to explore the opportunities for establishing a joint venture for underground gas storage in China with a view to ensure reliable supplies of Russian gas. In 2016, the parties agreed to jointly carry out four research projects (on a commercial basis) facilitating the development of China's underground gas storage system. These projects will significantly improve the reliability of Russian gas supplies and enable the optimisation of technical parameters and costs of the Power of Siberia and the Power of Siberia 2 export pipeline systems.

## Distribution of gas

The following table presents information on assets and volumes of capital investment in the Distribution of gas segment:

	<b>As of December 31,</b>	
	<b>2016</b>	<b>2015</b>
Assets, RUB million	1,557,089	1,677,460
Share in total assets of the Group, %	9.3	10.7

	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Capital expenditures, RUB million	41,785	25,962
Share in the Group's total capital expenditures, %	3.1	1.9

The following table sets out natural gas sales volumes of Gazprom Group by geographical segments:

(bcm)	<b>Year ended December 31,</b>		<b>Change,</b>
	<b>2016</b>	<b>2015</b>	<b>%</b>
Russia	214.9	221.2	-2.8
FSU <sup>(1)</sup>	33.2	40.3	-17.6
Europe and other countries <sup>(1)</sup>	228.3	184.4	23.8
<b>Total</b>	<b>476.4</b>	<b>445.9</b>	<b>6.8</b>

Note.

- <sup>(1)</sup> The sales to FSU countries, Europe and other countries include both gas export from Russian Federation and sales of gas purchased by the Group outside the Russian Federation.

In 2016, Gazprom Group sold 228.3 bcm of gas to far-abroad countries, with net sales (net of excise tax and customs duties) reaching RUB 2,140.0 billion, decrease 1.2% y-o-y due to decrease in average sale price.

Natural gas sold to far abroad countries in 2016 accounted for 48% of Gazprom Group's total gas sales (vs 41% in 2015) and 65% of total net revenue from gas sales (vs 63% in 2015).

PJSC Gazprom is a major supplier of natural gas to the European market. Share of PJSC Gazprom's gas sales under contracts signed by OOO Gazprom export in the total gas consumption in European far abroad countries is 33.6%.

PJSC Gazprom's gas supplies to European countries under the contracts with OOO Gazprom export in 2016 totalled 178.3 bcm, up 19.7 bcm or 12.4% y-o-y. Major factors of growth in supplies are as follows: weather factor, decline in indigenous European gas production, price attractiveness of Russian gas.

On 31 August, 1 and 2 September 2016, OOO Gazprom export held an auction for buyers in Northwest Europe for deliveries in the 2016/2017 winter season. As a result of the auction, c. 2 bcm of gas was sold to 11 companies, both traditional partners and new buyers. Based on the results of completed gas auctions, this approach may be developed and used in the future to secure balancing sales in addition to the long-term contracts if required by market conditions.

In 2016 LNG sales by Gazprom Group grew by 4.1% year-on-year to 3.71 mm tonnes (4.94 bcm). In 2016, Japan remained the key destination for LNG supplies in Gazprom Group's trading portfolio, accounting for c. 45% of total LNG sales. LNG shipments to Taiwan increased considerably. LNG shipments to Mexico and the UAE were resumed for the first time after a long interruption.

Gazprom is the largest natural gas supplier on the Russian market. In 2016, gas consumption in Russia totalled 456.7 bcm, up 2.8% year-on-year. This growth was driven mainly by lower temperatures in Q4 2016.

In 2016, Gazprom Group sold 214.9 bcm of gas to consumers in the Russian Federation, net sales revenue was RUB 819.9 bn, up 1.8% year-on-year. Natural gas sold to Russian consumers in 2016 accounted for 45% (vs 50% in 2015) of Gazprom Group's total natural gas sales and c. 25% of total net revenue from gas sales (vs 24% in 2015).

Major buyers of Gazprom Group's natural gas are generating companies, household consumers and utilities. Moreover, the Group's natural gas is heavily used in the steel-making, fertiliser, and cement industries, and other sectors of the economy.

Gazprom Group covers a significant portion of natural gas demand in the FSU countries.

In 2016, Gazprom Group sold 33.2 bcm of natural gas to the FSU countries, with net sales (net of customs duties) reaching RUB 309.6 billion, decrease 27.9% y-o-y.

Natural gas sold to the FSU countries in 2016 accounted for 7% (vs. 9% in 2015) of Gazprom Group's total gas sales and 9% of sales revenue (vs. 13% in 2015).

The decrease in gas supplies to FSU countries in 2016 resulted from declines in demand, above all in Ukraine and the Baltic states. Lower gas consumption was driven by an overall economic situation, declining industrial production and a growing share of coal in the fuel mix.

In 2016, the Group extended auctions for sales of natural gas to FSU countries. In March 2016, OOO Gazprom export held an auction for buyers in the Baltic states (Lithuania, Latvia) with deliveries in Q2–Q4 2016. As a result of the auction, over 420 mmcm of gas were sold, mostly to PJSC Gazprom's traditional partners in the region.

### Domestic natural gas prices

The following table shows the average domestic natural gas prices:

	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
	<b>(net of VAT)</b>	
RUB per mcm	3,815.5	3,641.3
RUB per thousand cf	108.0	103.1
USD per mcm <sup>(1)</sup>	57.1	59.4
USD per thousand cf <sup>(1)</sup>	1.6	1.7

Note:

<sup>(1)</sup> Calculated based on the annual average currency exchange rate between RUB and USD.

In accordance with applicable Russian laws, end consumers buy gas at regulated prices which are differentiated by consumer group (households vs industrial consumers) and price range based on the relative distance between the gas production region and consumers. In 2016, wholesale gas prices for subsequent resale to household consumers were 18% lower than wholesale gas prices for industrial consumers.

The Forecast of Russia's Socio-economic Development drafted by the Russian Ministry of Economic Development and approved by the Government in October 2016 assumes increases in domestic regulated wholesale gas prices by 3.9% from 1 July 2017, by 3.4% from 1 July 2018 and by 3.9% from 1 July 2019.

The table below presents weighted average changes in domestic prices in 2017-2019, annual average increase versus prior year:

	<b>2017</b>	<b>2018</b>	<b>2019</b>
Change in average regulated wholesale prices for all Russian consumers, %	1.8	4.0	3.3
Change in average regulated wholesale prices for all Russian consumers except for households, %	1.5	4.3	3.3
Change in average regulated wholesale prices for gas to be sold to households, %	2.7	3.7	3.3

To facilitate the development of the Russian gas market, PJSC Gazprom has been growing gas sales through the Saint Petersburg International Mercantile Exchange (SPIMEX). In 2016, 16.7 bcm of gas was sold through the SPIMEX, including 10.7 bcm of gas sold by PJSC Gazprom. PJSC Gazprom's share of sales totalled 64%, with independent gas producers accounting for the remaining 36%. Gas sold through the exchange was supplied mainly to regions with high concentrations of industrial consumers or located close to gas fields: the Republic of Tatarstan (25.3%), the Belgorod Region (8.4%), the Perm Territory (6.7%), the Kurgan Region (4.8%), the Kirov Region (4.7%), the Tver Region (4.2%) and the Tula Region (4.2%). In 2016, average exchange prices were lower than the regulated prices.

### The prices of natural gas in FSU, Europe and other countries

The following table shows the average prices of natural gas sold by Gazprom Group to FSU, Europe and other countries:

	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
	<b>(including excise tax and customs duties)</b>	
Natural gas sales to Europe and other countries <sup>(1)</sup>		
USD per mcm <sup>(2)</sup>	176.0	245.6
USD thousand cf <sup>(2)</sup>	5.0	7.0
RUB per mcm	11,763.3	15,057.3
Natural gas sales to FSU <sup>(1)</sup>		
USD per mcm <sup>(2)</sup>	153.6	194.2
USD per thousand cf <sup>(2)</sup>	4.3	5.5
RUB per mcm	10,263.1	11,911.0

Notes:

(1) VAT is not charged on sales to Europe and other countries and FSU countries.

(2) Calculated based on annual average currency exchange rate between RUB and USD.

The price of gas supplied by PJSC Gazprom under long-term contracts included delivery to customer as per daily orders. The contract gas price includes a premium for reliability and flexibility of supplies as opposed to the hub-traded gas which is supplied in standard equal lots over the contract term.

A significant portion of gas sales are tied to various price indices at liquid trading hubs in Europe. The share of gas sales linked to oil product prices is shrinking.

Under the long-term contracts between OOO Gazprom export and counterparties, each party is entitled to request a revision of the contract price if any material changes occur on respective markets. The parties exercise this right when such material changes occur. Negotiations on price are currently underway with some of OOO Gazprom export's customers. Since the European gas market is heterogeneous, price negotiations with every individual customer have their own specifics. Negotiations with customers based in Northwest Europe take place amid liquidity growth at major trading hubs, while in other European regions, the impact of hub-based trading is less prominent. Disputes with some of the counterparties have been referred to international arbitration. The Company makes relevant public announcements as soon as agreements are reached or arbitral decisions are made.

### Main areas of investments

Programme for Expansion of Gas Infrastructure in Russia comprise the bulk of capital investments in the Distribution of gas segment. As part of the Programme for Expansion of Gas Infrastructure, in 2016, the Group completed the construction of 163 inter-community gas pipelines with a total length of 1,425 km in 29 Russian regions to supply gas to 254 locations. Under the Programme, 25.4 thousand households and 175 boiler houses, with a total annual gas consumption of 256 mmcm, will be ready to receive gas, provided that regional administrations fully meet their commitments.

### Reporting year events

PJSC Gazprom continued to expand partnerships in LNG trade.

In June 2016 PJSC Gazprom and Shell signed a Memorandum of Understanding with respect to the Baltic LNG project, which outlines the key stages in consideration of joint project implementation. The project timescale will be determined after design documents are finalised.

In September 2016, PJSC Gazprom and Bahrain's Nogaholding signed a Memorandum of Understanding to cooperate in LNG, and in December 2016, PJSC Gazprom and KOGAS signed an Agreement of Cooperation, which envisages, inter alia, further coordination in LNG supplies.

### Outlook for the Gas Distribution segment

Gazprom Group seeks to maintain its leadership in the global gas industry in the long term.

In the Russian market, Gazprom Group strives to maintain its current positions both in terms of gas supply volumes and their reliability, including during the heating season.

On traditional European gas markets, Gazprom Group intends to keep its share and further strengthen its positions should the market environment become favourable. PJSC Gazprom seeks to grow its share of North-East Asia markets the longer term.

Below is the list of key initiatives to increase PJSC Gazprom's share in the global gas market and associated markets (approved by Resolution of the Board of Directors No. 2678 dated 16 February 2016)

- Improve contracting for pipeline gas supplies in the modern context;
- Increase pipeline gas supplies from Russia to the Asia Pacific;
- Increase supplies of Gazprom Group's LNG to global markets, coordinated with the pipeline gas business;
- Deliver LNG production projects inside and outside Russia, including through partnerships;
- Develop small-scale LNG production and competitive supplies to external markets;
- Develop production and competitive supplies of higher-grade products, including liquefied helium, LHG and other valuable components of natural gas to global markets;
- Expand geography of the NGV fuel segment to external markets;
- Increase natural gas supplies to the foreign power generation segment, while mitigating potential adverse effect on Gazprom Group's sales portfolio;
- Expand geography of natural gas supplies to end consumers in foreign markets;
- Assist in improving sentiment towards natural gas in key foreign markets;
- Deliver strong management of the Company's expenditure on these initiatives.

### **Refining**

Assets and volumes of capital investments in the Refining segment are presented in the table below:

	<b>As of December 31,</b>	
	<b>2016</b>	<b>2015</b>
Assets, RUB million	1,361,161	1,260,557
Share in total assets of the Group,%	8.2	8.0
	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Capital expenditures, RUB million	193,243	136,299
Share in total capital expenditures of the Group,%	14.4	10.1

### Processing of hydrocarbons and production of refined products

The following table presents the volumes of Gazprom Group's hydrocarbon processing and refining (including share of Yuzhno-Priobskiy gas processing plant and share of entities where PJSC Gazprom has investments classified as joint operations):

	Year ended December 31,			
	2016 <sup>(1)</sup>		2015 <sup>(1)</sup>	
	Total	including abroad	Total	including abroad
Natural and petroleum associated gas, bcm	31.0	–	31.2	–
including Gazprom Neft Group	0.4	–	0.1	–
Gazprom Neftekhim Salavat Group	0.5	–	0.4	–
Crude oil and unstable gas condensate, million tons	65.9	3.2	66.8	3.5
including Gazprom Neft Group	41.9	3.2	43.1	3.5
Gazprom Neftekhim Salavat Group	6.5	–	6.4	–

Note:

<sup>(1)</sup> The data in tables do not include raw materials supplied by customers.

In 2016, PJSC Gazprom's gas processing and production subsidiaries processed and refined 29.0 bcm of natural gas (in 2015 – 29.5 bcm of natural gas) and 1.1 bcm of APG (in 2015 – 1.2 bcm), and 17.5 mm tonnes of crude oil and unstable gas condensate (in 2015 – 17.3 mm tonnes of crude oil and unstable gas condensate),

The drop in gas processing volumes against 2015 was due to declining gas production at the fields feeding the Orenburg GPP and Sosnogorsk GPP (Orenburgskoye and Vuktylskoye oil and gas condensate fields) and due to decline in volumes of gas refining at OAO Vostokgazprom subsidiaries. Volumes of unstable condensate processing grew on the back of increased production of liquid hydrocarbons from the Achimov formations of the Urengoykoye oil and gas condensate field.

In 2016, Gazprom Neft Group refined 41.9 mm tonnes of oil and stable gas condensate and 0.4 bcm of APG supplied to the Yuzhno-Priobskiy GPP. The decrease of 2.8% year-on-year in oil refining volumes is explained by decrease of economic efficiency of refining due to demand and price environment for oil and oil products. Despite decrease in refining volumes of liquid hydrocarbons, output of light oil products was increased.

In 2016, production facilities of Gazprom neftekhim Salavat refined 6.5 mm tonnes of crude oil and gas condensate, including 4.4 mm tonnes of unstable gas condensate (in 2015 – 6.4 mm tonnes, including 4.0 mm tonnes of unstable gas condensate) and processed 0.5 bcm of natural gas (in 2015 – 0.4 bcm of natural gas). Higher volumes of gas condensate processing were driven by the need to increase conversion rates and reduce consumption of third-party feedstocks. Production of other oil products (marine fuel, light naphtha) increased while production of motor fuel decreased due to commercial restrictions. Increased gas processing was due to the transition of the gas chemical plant facilities to a two-year repair cycle.

The following table presents production volumes of major refined products of Gazprom Group:

	Year ended December 31,			
	2016 <sup>(1)</sup>		2015 <sup>(1)</sup>	
	Total	including abroad	Total	including abroad
Dry gas, bcm	24.0	–	24.2	–
Liquefied oil gas, million tons	3.5	0.1	3.5	0.1
including Gazprom Neft Group	0.9	0.1	1.0	0.1
Broad fractions of light hydrocarbons, million tons	1.8	–	1.7	–
Stable gas condensate and crude oil, million tons	8.2	–	7.4	–
Oil products, million tons	50.2	3.1	51.3	3.4
including Gazprom Neft Group	38.8	3.1	40.0	3.4
Gazprom Neftekhim Salavat Group	5.5	–	5.5	–
Helium, mmcm	5.1	–	5.0	–
Sulphur, million tons	4.9	0.0 <sup>(2)</sup>	4.8	0.0 <sup>(2)</sup>
including Gazprom Neft Group	0.2	0.0 <sup>(2)</sup>	0.1	0.0 <sup>(2)</sup>

Notes:

<sup>(1)</sup> The data in tables do not include raw materials supplied by customers.

<sup>(2)</sup> Less than 0.05.

### Sales of refined products

The following table presents sales of refined and petrochemical products by Gazprom Group:

(million tons)	Year ended December 31,		Change, %
	2016 <sup>(1,2)</sup>	2015 <sup>(1,2)</sup>	
Russia	41.2	41.3	–0.2
including Gazprom Neft Group	27.8	27.7	0.4
FSU	3.6	4.3	–16.3
including Gazprom Neft Group	2.5	2.4	4.2
Europe and other countries	23.3	23.8	–2.1
including Gazprom Neft Group	14.4	15.5	–7.1
<b>Total</b>	<b>68.1</b>	<b>69.4</b>	<b>–1.9</b>

Note:

<sup>(1)</sup> The volumes do not include intercompany sales. Sales of own products and products purchased from third parties.

<sup>(2)</sup> The volumes do not include helium.

In 2016, Gazprom Group sold 68.1 mm tonnes of refined oil and gas products, with net sales revenue of RUB 1,497.6 bn (net of VAT, excise tax and customs duties).

Total sales of refined oil and gas products by Gazprom Group were down by 1.3 mm tonnes (or 1.9%), mostly due to weaker sales of other oil products by Gazprom Neft (resulting mostly from lower sales of marine fuel in the context of sluggish demand for transit bunkering by ship owners), and lower sales of fuel oil to far abroad countries due to lower output of dark products and higher yields of light products at refineries operated by Gazprom Neft Group. Sales of jet fuel were also down, due to weaker demand for international flights resulting from reduced tourist traffic.

At the same time, stronger sales of motor gasolines in far abroad and FSU and of diesel fuel domestically driven mostly by higher volumes of Gazprom Neft's operations with third-party resources in Russia. As at 31 December 2016, Gazprom Neft Group owned and operated an extensive network of 1,814 filling stations across Russia, FSU countries and Eastern Europe. In 2016, sales by Gazprom Neft Group via filling stations totalled 10.5 mm tonnes, of which 8.2 mm tonnes were sold in Russia.

Sales of mineral fertilisers to far abroad countries and domestically were up, driven by higher output of these products as a result of stabilised operations and idle time reduction.

## Main areas of investments

Capital expenditures in Refining segment were allocated to the following projects:

- Construction of the Urengoy – Surgut gas condensate pipeline (Line 2). The 107 km – 288 km section;
- Phase 2 capacity expansion at the condensate pre-transportation preparation plant;
- Construction and upgrades of facilities at the Urengoy Condensate Pre-Transportation Preparation Plant;
- Construction of a stabilisation unit for Achimov deposit condensate from the Nadym-Pur-Taz region;
- Construction of the Urengoy – Purpe oil and condensate pipeline;
- Construction of the Urengoy oil pumping station;
- Phase 1 and Phase 2 upgrades at the Astrakhan Gas Processing Plant to ensure integrated operations;
- Construction of a plant to remove methanol from the propane fraction with a commercial product dehydration unit at the Surgut Condensate Stabilisation Plant;
- Construction and upgrade of production facilities at the Omsk Refinery (construction of an advanced oil refining facility, a delayed coking unit and a combined primary refining unit), Moscow Refinery (construction of a combined refining unit) and at the refinery operated by OAO Slavneft-YANOS joint venture;
- Construction and upgrade of refining and petrochemical facilities of Gazprom neftekhim Salavat;

The Omsk Refinery completed a revamp project at the sulphuric acid alkylation unit, increasing its capacity from 324 to 430 thousand tonnes per year. The unit's revamp helped boost the processing of the butane-butylene fraction into a high-octane gasoline component, extend operation time between repairs to 365 days and reduce energy consumption.

During the reporting year, Gazprom neftekhim Salavat's Acrylic Acid and Acrylates Complex was put into operation. The plant has an annual production capacity of 80 thousand tonnes of butyl acrylate and 35 thousand tonnes of glacial acrylic acid (polymer grade).

In addition, OAO Slavneft-YANOS joint venture commissioned an airtight fuel oil loading station. The applied airtight fuel oil loading technology enables high-precision loading, improves industrial and environmental safety and reduces losses.

## Reporting year events

In 2016, Gazprom Neft Group considerably expanded its range of marketed lubricants and bituminous materials through the acquisition of a controlling stake in OOO Nova-Brit, the largest manufacturer of innovative bituminous products, and the acquisition of Rospolychem Group, a developer and manufacturer of specialised lubricants. With the acquisition of the interest in OOO Nova-Brit, Gazprom Neft Group entered the market for high-tech bituminous products used in road and airfield construction. The acquisition of Rospolychem enabled the start of lubricant supplies for the Ministry of Defence, pipe rolling industry (including for the needs of PJSC Gazprom's pipeline projects), for special equipment operated in the Far North, and for the plastics industry. This acquisition made Gazprom Neft Group the only Russian manufacturer of expander oils used in the production of large-diameter pipes and enabled it to capture a significant share of the domestic market in the segment of plasticisers for the chemical industry.

## Outlook for the Refining segment

To process the projected volumes of liquid hydrocarbons extracted through natural gas production at gas condensate fields in Western Siberia, the Company plans a capacity expansion and upgrade project at the Urengoy Condensate Pre-Transportation Preparation Plant to bring output up to the



rated capacity, construction of Achimov deposit condensate and oil treatment and transportation facilities, completion of the construction of uncompleted sections of the Urengoy – Surgut gas condensate pipeline, and upgrade and re-equipment of the Surgut Condensate Stabilisation Plant.

PJSC Gazprom continues to implement a project to construct a gas chemical complex near Novy Urengoy, with gases recovered from de-ethanized gas condensate in the Nadym-Pur-Taz region to be used as a key feedstock.

Upgrade of the motor fuel production facilities is planned at the Astrakhan GPP to increase their output while ensuring compliance with Class 5 standards of the Technical Regulations.

Construction design is underway for the Amur GPP project near Svobodny in the Amur Region, to be supplied via the Power of Siberia gas pipeline with gas from the Yakutia and Irkutsk gas production centres currently developed by PJSC Gazprom under the Eastern Gas Programme.

Implementing refinery upgrade programmes and improvements to operational efficiency remain to be Gazprom Neft's strategic priorities in the development of its Russian oil refinery business. It is expected that by 2025 Gazprom Neft's Russian oil refineries will achieve oil refining volumes of 40 mm tonnes with 95% processing depth and 80% yields for light products

Gazprom Neft is focused on the following two key sales segments: motor fuel sales through the corporate retail chain and small wholesale channels, and oil products sales to industrial consumers. Each business line has its specific targets; however, the key target for the sales business is to market 100% of the oil products produced by Gazprom Neft Group's refineries via controlled sales channels to cover, to the maximum extent, the entire value chain of the oil business.

## Electric and heat energy generation and sales

The following table presents assets and capital investments related to the Electric and heat energy generation and sales segment:

	<b>As of December 31,</b>	
	<b>2016</b>	<b>2015</b>
Assets, RUB million	988,571	850,658
Share in total assets of the Group, %	5.9	5.4
	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Capital expenditures, RUB million	63,485	98,963
Share in the Group's total capital expenditures, %	4.7	7.4

Gazprom Group is the largest Russian owner of generating assets. Power stations operated by Gazprom energoholding, in which Gazprom Group's key generating assets (PAO Mosenergo, PAO TGC-1, PAO MIPC and PAO OGK-2) are consolidated, account for c. 17% (c. 39 GW) of the total installed capacity of Russia's Unified Energy System (UES).

Information on Gazprom Group's key generating assets is presented in the table below:

	<b>Generating capacity as of December 31, 2016, GW</b>	<b>Power generation, year ended December 31, 2016, billion kWh</b>	<b>Heat capacity as of December 31, 2016, thousand Gcal/h</b>	<b>Heat production, year ended December 31, 2016, million Gcal</b>
Gazprom energoholding	38,869	153.83	65,856	119.26
Other generating assets in Russia and abroad	1,380	3.73	2,172	6.33
<b>Total</b>	<b>40,249</b>	<b>157.56</b>	<b>68,028</b>	<b>125.59</b>

Other generating assets include Novo-Salavatskaya CHPP with an installed capacity of 882 MW as at 31 December 2016 (including the capacity of the Novo-Salavatskaya CCGT, which was commissioned in 2016), Unit 5 of the Hrazdan TPP with an installed capacity of 467 MW in

Armenia, owned by the Group's subsidiary ZAO Gazprom Armenia and other generating assets of Gazprom Group abroad.

Changes in the installed capacity in 2016 vs 2015 (as at 31 December 2015, Gazprom Group's installed power capacity was 39.1 GW and installed heat capacity was 69.4 thousand Gcal/h) were driven by the launches of new power units built under capacity supply agreements (CSAs), upgrade-driven changes in capacity of generating equipment, and decommissioning of obsolete and low-performing generating equipment in Gazprom energoholding Group companies.

In 2016, the Group generated 156.73 billion kWh of power (up 6.4% year-on-year) and 125.58 mm Gcal of heat (up 7.3% year-on-year) at its generation assets in Russia.

The growth in power generation was largely driven by higher capacity utilisation rates achieved at power stations through the UES System Operator's initiative launched to satisfy growing regional power needs, lower capacity utilisation at nuclear power stations due to an increase in unscheduled repairs, and the increased competitiveness of the Group's power stations in the day-ahead market.

Heat supplies from TPPs grew in 2016 from 2015 due to abnormally cold weather in the second half of the year.

Information on Gazprom energoholding's key generating assets is presented in the table below:

<b>Company</b>	<b>Generating capacity as of December 31, 2016, GW</b>	<b>Power generation, year ended December 31, 2016, billion kWh</b>	<b>Heat capacity as of December 31, 2016, thousand Gcal/h</b>	<b>Heat production, year ended December 31, 2016, million Gcal</b>
PAO Mosenergo	12,963	59.07	42,894	81.83
PAO MIPC	–	–	4,261	6.09
PAO TGC-1	6,952	27.67	14,532	24.44
PAO WGC-2	18,955	67.09	4,169	6.90
<b>Total</b>	<b>38,869</b>	<b>153.83</b>	<b>65,856</b>	<b>119.26</b>

In 2016 Gazprom Group produced 0.83 billion kWh of power generation abroad. As a result, power generation by Gazprom Group totalled 157.56 billion kWh.

#### Sales of power generation, heat and capacity

In 2016, Gazprom Group's net revenue from power and heat sales (net of VAT), was RUB 481.7 bn (in 2015 – RUB 424.7 bn).

All power produced by the Group's generating companies in Russia is sold on a fully liberalised wholesale electricity and capacity market. A small portion of generated power is exported to foreign countries – Norway and Finland. To carry out emergency repairs and fulfil power supply obligations under regulated contracts, the Group's generating companies purchase power on the wholesale market for subsequent resale.

Increased electricity consumption and abnormal temperatures in the second half of the year drove price growth at the day-ahead market, securing extra revenues for Gazprom Group on the domestic market.

In 2016, Gazprom Group sold 170.9 billion kWh of electricity and 99,7 mm Gcal of heat (2015: 66,2 billion kWh and 91,0 mm Gcal, respectively).

Gazprom energoholding's companies sell capacity at prices determined in accordance with the rules of the wholesale electricity and capacity market.

Two mechanisms are used to sell the capacity of Gazprom energoholding's companies at the wholesale market:

- regulated pricing – capacity sales under regulated contracts, capacity supply agreements (CSAs) or sale and purchase agreements for capacity of generating facilities that supply capacity on a “must-run” basis;
- free pricing – trading in capacity at free (unregulated) prices determined based on the results of Competitive Capacity Outtake (CCO), or capacity market auctions.

Before 2015, capacity market auctions were held only for one year ahead (for the next year). In 2015, amendments introduced to the Rules of the Wholesale Electricity and Capacity Market completely changed the capacity auction model. The market switched from purchases based on free power flow zones to purchases based on price bands, enabling capacity purchase for several years ahead. A single CCO capacity price was also introduced, to be applied within every given price band. In 2015, a capacity market auction was held with delivery between 1 January 2016 and 31 December 2019. In 2016, capacity was auctioned with delivery between 1 January 2020 and 31 December 2020. As a result of 2016–2020 capacity market auctions, all the capacity auctioned by PAO Mosenergo, PAO OGK-2 and PAO TGC-1 was sold out.

#### Main areas of investments

Gazprom Group's investment programme is one of the biggest in the Russian power industry. The launch of the Grozny TPP in 2018 will complete the implementation of Gazprom energoholding's ambitious investment programme to build new generating capacity in line with its obligations under CSAs. The CSA investment programme implemented by the Group companies is expected to add 8.9 GW of new capacity in Russia over 2007–2018, with total investments for the same period exceeding RUB 450 bn (inclusive of VAT).

The bulk of capital investments was channelled to new power unit projects at the Novochoerkasskaya GRES, Troitskaya GRES, Groznenskaya GRES of PAO OGK-2, and at the Tsentralnaya CHPP of PAO TGC-1.

In 2016 alone, the Group commissioned 1,090 MW of new generating capacity in Russia. Additionally, the joint venture OOO Novo-Salavatskaya PGU launched a 432 MW Novo-Salavatskaya CCGT (PGU-410-T) (the asset was leased out to the Group's subsidiary OOO Novo-Salavatskaya CHPP).

Outside Russia, in 2016, PAO Centerenergyholding, part of Gazprom energoholding, in conjunction with NIS (a Serbian subsidiary of Gazprom neft Group) continued to implement a project to construct a power station with an installed capacity of up to 208 MW in Pancevo, Serbia, to meet the power and heat needs of a Pancevo-based oil refinery and a petrochemical complex operated by HIP Petrohemija.

Retirement of obsolete and low-performing facilities is also a priority for Gazprom energoholding. The current capacity market auction rules impose strict requirements on the performance of generating equipment, leading to termination of capacity payments. Semi-fixed costs for such facilities may be covered if the operator is granted the status of a "must-run" generator; however, by no means all equipment meets these standards to make the operator eligible. In this way, the government encourages retirement of both physically and functionally obsolete generating facilities. A major challenge here is replacing heat generation capacity of retired facilities. Generating companies of Gazprom energoholding Group make consistent efforts to retire such facilities. In 2016, the Company decommissioned 1,531 MW of low-performing capacity and plans to retire another 806 MW of such facilities by 2020.

#### Reporting year events

In 2016, the Company signed agreements of intent to explore joint implementation of power generating projects in China (with CNPC) and Vietnam (with Petrovietnam Vietnam Oil and Gas Group).

In 2016 developments in the Moscow heat supply market in 2016 that are relevant to Gazprom Group took place. PAO MIPC started taking steps to align its activities around a "single heat supplier" status the Company was granted in February 2015. This process involves full assignment of all PAO Mosenergo's contracts with heat consumers to PAO MIPC, renewal of contracts for heat delivery services with heat buyers. These activities may change the revenue and cost mix with implications for margins of the Group companies.

On 16 December 2016, the Russian Ministry of Energy approved for the first time a heat supply plan for Troitsky and Novomoskovsky Administrative Districts. The plan enables the Group companies to step up their efforts to connect new consumers and thus increase their share in the Moscow heat market going forward.

#### Outlook for the Electric and heat generation and sales segment

Power generation sector is a strategic line of business for Gazprom Group. Enhanced presence in the power generation sector will facilitate the entire Group's business sustainability over the long term and help generate extra revenues. Gazprom Group's Power Generation Strategy was adopted in 2007.

Strategic objectives in the power generation business include:

- optimisation of the generation capacity mix;
- diversification of tariff regulation risks;
- fuel mix diversification;
- operational excellence and cost optimisation.

Gazprom Group is developing its long-term power generation strategy until 2035; this effort includes analyses of the following:

- the results of the implementation of the Group's strategy adopted in 2007;
- the Group's operational and investment performance and improvement potential;
- opportunities to develop the power generation business;
- risk maps and risk mitigation activities.

The update of Gazprom Group's long-term power generation strategy is expected to be completed by the end of 2017.

### **INNOVATION-DRIVEN DEVELOPMENT**

In its evolution as a global energy company and a reliable energy supplier, Gazprom focuses on research and application of new knowledge and technology, as well as on continuous improvement of its innovation capabilities and acceleration of innovation to address a number of strategic, technological and economic issues that such leadership involves.

By introducing new and unique hydrocarbon production and supply projects in Arctic regions, offshore the Okhotsk Sea, in Eastern Siberia and in the Far East, strategically important for the Russian economy, Gazprom drives new innovative and advanced solutions while maintaining its position of the country's largest consumer of innovative products.

In the reporting year, the Company developed PJSC Gazprom's Innovative Development Programme until 2025, approved by the Board of Directors Resolution No. 2762 dated 21 June 2016. The Programme is a document for long-term planning and management, integrated into the Company's overall strategic development planning framework. The Programme covers the Company's gas, oil, and power generation businesses and provides for a range of interrelated activities to develop and introduce new technologies and innovative world-class products and services. The Programme also aims at fostering a favourable environment to promote innovative efforts both at Gazprom and in related industrial production sectors of Russia.

The objective of the Innovative Development Programme is to drive PJSC Gazprom's technological leadership and organisational development to maintain its position as a global energy company and reliable energy supplier.

Technological priorities (key areas of technological development) set by PJSC Gazprom's Innovative Development Programme until 2025 are as follows:

- Hydrocarbon field exploration and appraisal technologies, including development of unconventional resources;
- technologies to improve performance of existing fields;

- hydrocarbon resource development technologies for the continental shelf;
- greenfield development technologies;
- technologies enhancing the performance of trunk gas pipelines and diversifying gas supply methods;
- technologies to improve performance of gas storage facilities;
- technologies to improve gas and gas condensate processing;
- LNG technologies;
- gas distribution and utilisation technologies.

Scientific and research organisations of PJSC Gazprom are key contributors to its effective innovative development. As part of its innovative activities, the Company also collaborates with external institutions, research centres, and anchor universities.

The Company has initiated and is continuing collaboration with small and medium-sized innovative enterprises. PJSC Gazprom enhances its technological, research, and innovative potential through close collaboration with leading global energy companies. Across Europe, its research partners are Uniper Holding GmbH, BASF / Wintershall Holding GmbH, VNG-Verbundnetz Gas AG, and Siemens AG in Germany, N.V. Nederlandse Gasunie (The Netherlands), OMV Aktiengesellschaft (Austria), ENGIE and Schneider Electric in France, Srbijagas (Serbia), and Statoil ASA (Norway). In Asia Pacific, Gazprom fosters research and technology collaboration with KOGAS (South Korea), CNPC (China), PetroVietnam (Vietnam), and the Agency for Natural Resources and Energy of the Japanese Ministry of Economy, Trade and Industry.

In 2016, Gazprom Group's investments in research and development totalled RUB 6.3 bn (2015: RUB 9.9 bn).

As at 31 December 2016, Gazprom Group's subsidiaries held 2,269 intellectual property patents (205 of them obtained in the reporting year) and 991 software and database registration certificates (139 obtained in the reporting year). In its production operations, Gazprom Group uses 405 patented items. The economic effect from using patented items in operations exceeded RUB 7 bn. In the reporting year, PJSC Gazprom and its subsidiaries filed 227 patent applications.

## **PERSONNEL**

Gazprom Group upholds a set of fundamental principles and rights contained in the International Labour Organisation conventions, such as:

- freedom of association and the effective recognition of the right to collective bargaining;
- elimination of all forms of forced or compulsory labour;
- effective abolition of child labour; and
- elimination of discrimination in respect of employment and occupation.

Gazprom also adheres to international standards on hours and conditions of work, remuneration for work, social security, and holidays with pay.

As at 31 December 2016, the total headcount of the Group was 467.4 thousand employees (as compared to 462.4 thousand in 2015). The headcount grew by 5.0 thousand people as Gazprom ramped up its production operations.

The table below shows the structure of Gazprom Group's employees:

	<b>As of December 31, 2016, %</b>
Managers	13.9
Specialists and other personnel	31.6
Workers	54.5

The age composition of the Group's personnel is well balanced. The table below shows the age structure of Gazprom Group's personnel:

	<b>As of December 31, 2016, %</b>
up to 30 years	16.9
30 – 40 years	30.5
40 – 50 years	27.8
50 years and older	24.8

Gazprom has in place a corporate Continuous Vocational Education and Training System designed to upgrade employee skills to meet the ever growing operational and performance requirements and support deployment of new technologies and expansion of the Group's regional footprint. Training is organised in dedicated centres affiliated with PJSC Gazprom's subsidiaries in all regions in which the Company operates across Russia. The Group also has strong relationships with Russia's leading universities to promote career enhancement and professional retraining opportunities.

Gazprom's personnel training and retraining practices allow the Group to efficiently manage its personnel's expertise and build up a talent pool capable of achieving innovative growth goals.

In 2016, 337.5 thousand employees of Gazprom Group were trained under career enhancement and retraining programmes.

PJSC Gazprom has in place the Remuneration Management Policy for Employees of PJSC Gazprom's Entities. The policy sets out unified corporate remuneration standards for Gazprom Group's employees. Its purpose is to provide a framework for attracting and retaining staff with required qualifications and motivate employees to perform as expected.

Current remuneration schemes link fixed salaries and pay rates to qualifications and business skills, and also provide for monthly performance bonuses, premiums and additional allowances for work scope and conditions, ad hoc and annual bonuses.

PJSC Gazprom's social policy gives the Company a competitive advantage, raises its profile in the employment market and aims at attracting highly skilled professionals and retaining them in the Company in the longer run.

The key principle that underlies the implementation of PJSC Gazprom's social policy is the use of social partnership mechanism, i.e. a constructive dialogue between employees and employers on the matters related to the regulation of social and labour relations.

Gazprom Interregional Trade Union, which is part of the Russian Oil, Gas and Construction Workers' Union, is the party to the social partnership representing the interests of employees at PJSC Gazprom's subsidiaries and entities.

The key areas of employees' social security are set out in the General Collective Agreement of PJSC Gazprom, and in the collective agreements of Gazprom's subsidiaries, and provide for a range of social support measures offered to employees, including social benefits, personal insurance, and healthcare benefits.

## **OCCUPATIONAL HEALTH, INDUSTRIAL AND FIRE SAFETY**

Safety and comfort at the workplace are the underlying principle of Gazprom's operations.

The Company is guided in its activities by the Labour Code of the Russian Federation, Federal Law No. 116-FZ On Industrial Safety of Hazardous Production Facilities, and PJSC Gazprom's Occupational Health and Safety (OHS) Policy approved in 2009.

The following goals underpin the Company's Policy:

- create safe labour conditions and protect the lives and health of employees;
- ensure reliable operation of hazardous industrial facilities;
- reduce the risks of incidents at hazardous industrial facilities.

The Policy's key provisions are implemented via the Company's existing Unified Occupational Health and Safety Management System, comprising a set of regulations, activities and guidelines that unify all workflows to promote a safe and healthy working environment.

The organisational framework of the Unified Occupational Health and Safety Management System comprises PJSC Gazprom, its major gas exploration, production, processing, transportation and underground storage subsidiaries, and its subsidiaries supporting the operation of the Russian UGSS, with a total headcount of around 325 thousand employees.

In 2014, the Company obtained a compliance certificate confirming that its Unified Occupational Health and Safety Management System was compliant with OHSAS 18001:2007 as regards gas, gas condensate and oil production, treatment, transportation, processing/refining, distribution and storage operations. The certificate covered PJSC Gazprom's headquarters and 26 subsidiaries. In 2016, the Unified Occupational Health and Safety Management System was adopted in 16 more subsidiaries and certified to OHSAS 18001:2007. The total number of PJSC Gazprom's and its subsidiaries' employees who successfully passed the certification process is 272 thousand persons. As at 31 December 2016, OHSAS 18001:2007 certificates were obtained by 43 with participation of PJSC Gazprom.

A major OHS commitment by PJSC Gazprom consists in reducing the number of emergencies and occupational injury and disease rates on an ongoing basis.

OHS activities carried out by the companies covered by the Company's Unified Occupational Health and Safety Management System helped reduce the number of injured in occupational accidents from 159 to 67 people, with the number of emergencies at hazardous industrial facilities brought down from 17 to 10, and the number of incidents down from 59 to 30 between 2012 and 2016.

Gazprom Neft Group benefits from an integrated management system compliant with OHSAS 18001, ISO 14001 and ISO 9001 international standards and covering both environmental safety and occupational and health safety. Gazprom Neft Group's operations are aligned with the corporate Health, Safety and Environment (HSE) Policy and coordinated at the Corporate Centre level by the Occupational Safety Department. Gazprom Neft Group also has a Health, Safety and Environment Protection Board in place.

At Gazprom energoholding, occupational health and safety issues are addressed in line with the requirements of Russian laws and applicable statutory regulations. CEOs of generating companies are responsible for compliance with these requirements, while relevant activities are coordinated by Chief Engineers of subsidiaries and branches (power plants).

## ENVIRONMENTAL PROTECTION

Gazprom applies a comprehensive environmental approach in regions in which it operates, driven by the principles of sustainability which balance economic growth with environmental conservation for the benefit of present and future generations.

The Company's Environmental Policy is the primary document governing PJSC Gazprom's environmental activities.

The updated version of the Environmental Policy approved by the Company's Management Committee in 2015 reflects key trends in environmental protection, energy efficiency and GHG reduction. The new version of the Environmental Policy sets out additional commitments to environmental safety that the Company undertakes in developing hydrocarbon fields on the Russian continental shelf and Arctic Zone and in minimising the risks of negative impact on the environment, including on particularly vulnerable natural sites and areas and features of high conservation value.

The Environmental Management System (EMS), compliant with ISO 14001:2004 international standard, is a key tool to implement the Company's Environmental Policy.

PJSC Gazprom's EMS covers all management layers of the Company – from the Board of Directors to branches and production facilities of its subsidiaries. PJSC Gazprom's EMS covers 36 wholly-owned subsidiaries that are engaged in the core activities of exploration, production, transportation, storage and processing of gas and gas condensate or are managing capital projects.

PJSC Gazprom's Coordinating Committee for Environmental Protection and Energy Efficiency provides integrated management and overall coordination of environmental activities of the Group's business units. The Company's permanent Working Group for PJSC Gazprom's EMS Improvement provides an ongoing focus on integrated approach and coordination of environmental management activities among PJSC Gazprom's business units.

Environmental targets are set within PJSC Gazprom's EMS based on annually updated list of significant environmental impacts, and environmental activities are grouped into programmes and implemented. The Company has successfully met all Corporate Environmental Targets set for 2014–2016. 2016, PJSC Gazprom's updated environmental targets were approved for 2017–2019, measured against the 2014 baseline:

- reduction of methane emissions into the atmosphere (from GTS maintenance/repair operations);
- reduction of specific emissions of nitrogen oxides into the atmosphere;
- reduction of waste and effluent water discharge into surface water bodies;
- reduction of disposable waste share;
- reduction of above-limit impact charges as an integral indicator of negative environmental impact;
- reduction of specific fuel & energy consumption for own operational needs.

Those Gazprom Group companies that are not covered by PJSC Gazprom's EMS also have in place their own effective environmental management systems. Most of these systems are certified to ISO 14001:2004. Each EMS and its scope are customised to reflect the company's specific profile of operations.

Given the introduction of a new version of ISO 14001:2015 in 2015, the Company has prepared and put in place a plan to update and improve corporate procedures and regulations related to the operation of PJSC Gazprom's EMS, with relevant employee trainings currently underway. The Group is currently engaged in active preparations of its EMS for a recertification audit for the standard to be held in 2017.



The main indicators for Gazprom Group's environmental impact from its operating activities in Russia are presented below:

Main indicators	Year ended December 31,	
	2016	2015
Pollutant emissions into the air, thousand tons	2,868.5	2,830.6
Waste water disposal in surface-water bodies, mmcm	3,855.5	3,853.8
Generation of waste, thousand tons	4,289.8	4,954.0
Lands damaged during the year, thousand ha	27.0	58.1
Recultivated lands, thousand ha	42.5	18.2

In 2016, total air pollution emissions made by Gazprom Group's stationary sources in Russia slightly increased year-on-year to 2,868.5 thousand tonnes.

In 2016, waste water discharge into surface water bodies across Gazprom Group stayed almost flat year-on-year.

Waste generation decreased 13%, mostly due to a 14% decline in bottom ash waste at Gazprom energoholding as the fuel mix shifted towards natural gas.

The area of land disturbed during the year decreased to 27 thousand hectares, due to the completion of construction projects by Gazprom Neft Group, including major seismic surveys. In 2016, land reclamation activities grew 133% year-on-year.

Gazprom Group's environmental costs incurred in operating activities in Russia are disclosed below:

(RUB billion)

	Year ended December 31,	
	2016	2015
Total current environmental protection costs, total	34.10	32.17
including environmental operating costs and fees for environmental protection services	31.91	29.21
including overhaul costs for fixed capital assets used in environmental protection	2.19	2.96
Capital investments into environmental protection and sustainable use of natural resources	22.54	15.75
Negative environmental impact charges	0.82	1.79

In 2016, current environmental protection costs of Gazprom Group in Russia (including operating expenses, service fees and overhaul costs) rose 6% year-on-year. Key drivers include higher waste water tariffs charged by water service companies, and higher costs of oil and product spill readiness activities at Sakhalin Energy.

In 2016, Gazprom Group's capital investments in environmental protection and sustainable use of natural resources in Russia were RUB 22.54 bn, marking a year-on-year increase of 43%. This growth was driven by active implementation of investment programmes by Gazprom Neft to boost its APG utilisation capacity as well as by the construction of waste water treatment plants and land reclamation activities.

In 2016, Gazprom Group paid RUB 0.82 bn of negative environmental impact charges to different level budgets in the Russian Federation, roughly flat year-on-year.

There were several drivers behind the reduction in the total environmental charges in 2016: Resolution of the Russian Government approving new charge rates and cancelling a number of surcharge rates.

Resolution No. 913 On Rates of Charges for Adverse Environmental Impact and Surcharge Rates dated 13 September 2016 approved new charge rates and removed a number of surcharge rates.

Waste disposal fees decreased by 50% due to the reduction in the above-limit impact charges due to APG utilisation rate achieving 95% at some fields of Gazprom Neft. Waste disposal fees decreased by 60% due to the reduction in the above-limit impact charges achieved by Gazprom Neft through drilling waste accumulation management.

In 2016, a total of 544 state environmental inspections of Gazprom Group's entities were held. In over 270 inspections (more than 50% of the total) no irregularities have been identified. Out of the total 637 identified cases of irregularities, 45% did not pose any environmental threat and no fines or penalties were imposed. All breaches are remedied in time. In total, the Group paid RUB 23.7 mm of fines, including RUB 1.9 mm paid for breaches identified by audits in previous years. The Group companies paid a total of RUB 45.8 mm in compensation for environmental damage (including for previous years), including RUB 29.7 mm paid by Gazprom Neft.

Gazprom Group's subsidiaries operating abroad are also committed to minimising their environmental footprint. Gazprom EP International B.V., a single operator of PJSC Gazprom's hydrocarbon field prospecting, exploration and development projects abroad adopts technology-driven and science-based innovations, including to mitigate environmental impacts. Environmental controls are in place at the company's production facilities. In FSU countries, the Group's subsidiaries ZAO Gazprom Armenia, OAO Gazprom transgaz Belarus, and OcOO Gazprom Kyrgyzstan also operate in strict compliance with their respective national laws. Since the dates the Group gained control of these companies, they have been improving their environmental management systems to bring them in line with PJSC Gazprom's corporate standards and ISO 14001. OAO Gazprom transgaz Belarus is covered by PJSC Gazprom's EMS. In 2016, no material fines or penalties were imposed on these subsidiaries by their respective national authorities.

The Company's efforts to reduce its climate footprint are guided by Russia's Energy Strategy to 2030, the Russian State Environmental Protection Programme 2012–2020, and the Climate Doctrine of the Russian Federation.

Reduction of greenhouse gas emissions is an essential part of PJSC Gazprom's corporate strategy. It helps the Company maintain top scores in global sustainability ratings and contribute to the achievement of the national target of no more than 75% from the 1990 emissions level by 2020, approved by Presidential Decree No. 752 dated 30 September 2013.

In 2016, greenhouse gas emissions at facilities of PJSC Gazprom and its wholly-owned subsidiaries engaged in exploration, production, transportation, storage and processing of hydrocarbons, totalled 101.2 mm tonnes of CO<sub>2</sub> equivalent, including GHG emissions of subsidiaries supporting the UGSS' operation. The reduction in emissions was driven by the Group's energy saving efforts, including: lower natural gas consumption in the compression process, reduced venting during GTS repairs, and more efficient use of fuel and energy (FER).

GHG emissions and climate issues grow increasingly important in relations with European partners. Carbon footprint (GHG emissions throughout the product lifecycle) is turning into a key environmental performance measure in the energy market. In 2016, German Zukunft ERDGAS initiated a study to demonstrate that natural gas is greener than other hydrocarbons.

Estimates made by German DBI show that carbon footprint averages 12.2 kg of CO<sub>2</sub> equivalent / GJ for Russian supplies of natural gas to Central Europe, and 9.3 kg of CO<sub>2</sub> equivalent / GJ for supplies via Nord Stream (2015 data). The study also demonstrates that carbon footprint by Russian natural gas has been steadily declining due to annual upgrades of the GTS, gains in its energy efficiency and growing share of exports via Nord Stream.

**ANALYSIS OF FINANCIAL RESULTS OF OPERATIONS**  
**RESULTS OF OPERATION**

(RUB million)

	Year ended December 31,	
	2016	2015
Sales	6,111,051	6,073,318
Net gain from trading activity	3,382	3,704
Operating expenses	(5,244,983)	(4,635,502)
Charge for impairment and other provisions	<u>(143,870)</u>	<u>(213,219)</u>
<b>Operating profit</b>	<b>725,580</b>	<b>1,228,301</b>
Finance income	1,018,997	990,346
Finance expense	(543,370)	(1,409,087)
Share of net income of associates and joint ventures	82,872	106,560
Gain on disposal of available-for-sale financial assets	<u>1,059</u>	<u>9,121</u>
<b>Profit before profit tax</b>	<b>1,285,138</b>	<b>925,241</b>
Current profit tax expense	(218,113)	(102,223)
Deferred profit tax expense	<u>(69,921)</u>	<u>(17,819)</u>
Profit tax	(288,034)	(120,042)
<b>Profit for the year</b>	<b>997,104</b>	<b>805,199</b>
<b>Other comprehensive income (loss):</b>		
Items that will not be reclassified to profit or loss:		
Remeasurements of post-employment benefit obligations	<u>33,118</u>	<u>(169,059)</u>
<b>Total items that will not be reclassified to profit or loss</b>	<b>33,118</b>	<b>(169,059)</b>
Items that will be reclassified subsequently to profit or loss:		
Gain arising from change in fair value of available-for-sale financial assets, net of tax	62,133	43,172
Share of other comprehensive (loss) income of associates and joint ventures	(6,397)	28,699
Translation differences	(297,703)	282,924
Gain (loss) from cash flow hedges, net of tax	<u>49,196</u>	<u>(22,862)</u>
<b>Total items that may be reclassified subsequently to profit or loss</b>	<b>(192,771)</b>	<b>331,933</b>
<b>Other comprehensive (loss) income for the year, net of tax</b>	<b><u>(159,653)</u></b>	<b><u>162,874</u></b>
<b>Total comprehensive income for the year</b>	<b>837,451</b>	<b>968,073</b>
<b>Profit for the year attributable to:</b>		
Owners of PJSC Gazprom	951,637	787,056
Non-controlling interest	<u>45,467</u>	<u>18,143</u>
	<b>997,104</b>	<b>805,199</b>
<b>Total comprehensive income for the year attributable to:</b>		
Owners of PJSC Gazprom	806,903	938,591
Non-controlling interest	<u>30,548</u>	<u>29,482</u>
	<b>837,451</b>	<b>968,073</b>

## Sales

The following table sets out volumes and realized prices:

(RUB million unless indicated otherwise)	Year ended December 31,	
	2016	2015
<b>Sales of gas</b>		
<i>Europe and Other countries</i>		
Gross sales <sup>(1)</sup>	2,685,551	2,776,860
Customs duties	(506,266)	(531,479)
Excise tax	(39,258)	(79,881)
Net sales	2,140,027	2,165,500
Volumes in bcm	228.3	184.4
Average price, US Dollar per mcm (including excise tax and customs duties) <sup>(2)</sup>	176.0	245.6
Average price, RUB per mcm (including excise tax and customs duties)	11,763.3	15,057.3
<i>Former Soviet Union countries</i>		
Gross sales <sup>(1)</sup>	340,437	480,204
Customs duties	(30,793)	(50,544)
Net sales	309,644	429,660
Volumes in bcm	33.2	40.3
Average price, US Dollar per mcm (including customs duties) <sup>(2)</sup>	153.6	194.2
Average price, RUB per mcm (including customs duties)	10,263.1	11,911.0
<i>Russian Federation</i>		
Gross sales (net of VAT)	819,924	805,615
Net sales	819,924	805,615
Volumes in bcm	214.9	221.2
Average price, RUB per mcm (net of VAT)	3,815.5	3,641.3
<i>Total sales of gas</i>		
Gross sales (net of VAT)	3,845,912	4,062,679
Customs duties	(537,059)	(582,023)
Excise tax	(39,258)	(79,881)
Retroactive gas price adjustments	33,175	26,482
Net sales	3,302,770	3,427,257
Volumes in bcm	476.4	445.9
Net sales of refined products (net of excise tax, VAT and customs duties)	1,497,562	1,555,591
Electric and heat energy net sales (net of VAT)	481,716	424,665
Net sales of crude oil and gas condensate (net of VAT and customs duties)	411,958	260,608
Gas transportation net sales (net of VAT)	198,971	193,965
Other revenues (net of VAT)	<u>218,074</u>	<u>211,232</u>
<b>Total sales (net of excise tax, VAT and customs duties)</b>	<b><u>6,111,051</u></b>	<b><u>6,073,318</u></b>

Notes:

<sup>(1)</sup> VAT is not charged on sales to Europe and Other countries as well as Former Soviet Union countries.

<sup>(2)</sup> Calculated on the basis of average exchange rate between RUB and US Dollar.

Total sales (net of excise tax, VAT and customs duties) increased by RUB 37,733 million, or 1 %, to RUB 6,111,051 million for the year ended December 31, 2016 compared to the same period of the prior year. The increase in sales was mainly driven by an increase in sales of crude oil and gas condensate.

Net sales of gas accounted for 54 % of total net sales for the year ended December 31, 2016 (56 % for the same period of the prior year).

Net sales of gas decreased by RUB 124,487 million, or 4 %, from RUB 3,427,257 million for the year ended December 31, 2015 to RUB 3,302,770 million for the year ended December 31, 2016.

Net sales of gas to Europe and Other countries decreased by RUB 25,473 million, or 1 %, to RUB 2,140,027 million for the year ended December 31, 2016 compared to the same period of the prior year. The decrease in sales of gas to Europe and Other countries was driven by the 22 % decrease of the average Russian Ruble prices (including excise tax and customs duties) for the year ended December 31, 2016 compared to the same period of the prior year. At the same time the volumes of gas sold increased by 24 % compared to the same period of the prior year.

Net sales of gas to Former Soviet Union countries decreased by RUB 120,016 million, or 28 %, to RUB 309,644 million for the year ended December 31, 2016 compared to the same period of the prior year. The change was due to the decrease in volumes of gas sold by 18 % and the decrease in average Russian Ruble prices (including customs duties) by 14 % for the year ended December 31, 2016.

Net sales of gas in the Russian Federation increased by RUB 14,309 million, or 2 %, to RUB 819,924 million for the year ended December 31, 2016 compared to the same period of the prior year. This is explained by the 5 % increase of the average Russian Ruble prices (net of VAT) that was partially compensated by a decrease in volumes of gas sold by 3 %.

Net sales of crude oil and gas condensate increased by RUB 151,350 million, or 58 %, to RUB 411,958 million for the year ended December 31, 2016 compared to the same period of the prior year. The increase in sales of crude oil was due to an increase in volumes of crude oil sold and an increase of average prices of Gazprom Neft Group to customers in Europe and Other countries.

### **Operating expenses**

Operating expenses increased by 13 % for the year ended December 31, 2016 to RUB 5,244,983 million from RUB 4,635,502 million for the same period of the prior year. Operating expenses as a percentage of sales increased from 76 % for the year ended December 31, 2015 to 86 % for the year ended December 31, 2016.

The table below presents a breakdown of operating expenses in each period:

(RUB million)	Year ended December 31,	
	2016	2015
Purchased gas and oil	1,157,585	1,048,472
Taxes other than on income	900,397	805,132
Staff costs	641,036	590,981
Transit of gas, oil and refined products	610,275	534,503
Depreciation	571,564	515,200
Materials	288,497	299,182
Cost of goods for resale, including refined products	185,441	193,348
Repairs and maintenance	147,608	161,578
Electricity and heating expenses	98,992	91,822
Foreign exchange rate differences on operating items	52,880	(25,581)
Social expenses	35,516	32,485
Rental expenses	30,152	35,600
Insurance expenses	29,967	27,214
Research and development expenses	28,990	30,588
Transportation services	28,923	32,218
Processing services	15,568	18,810
Derivatives loss (gain)	9,863	(88)
Other	414,638	365,847
	<b>5,247,892</b>	<b>4,757,311</b>
Changes in inventories of finished goods, work in progress and other effects	(2,909)	(121,809)
<b>Total operating expenses</b>	<b>5,244,983</b>	<b>4,635,502</b>

*Purchased gas and oil*

Cost of purchased gas and oil increased by RUB 109,113 million, or 10 %, to RUB 1,157,585 million for the year ended December 31, 2016 compared to RUB 1,048,472 million for the same period of the prior year.

Cost of purchased gas increased by RUB 53,565 million, or 7 %, to RUB 872,892 million for the year ended December 31, 2016 compared to RUB 819,327 million for the same period of the prior year. This increase was related to the completion of the Swap Agreement between PJSC Gazprom and Wintershall Holding GmbH in September 2015 which resulted in acquisition of control over W & G Beteiligungs-GmbH & Co. KG and WIEH GmbH and their subsidiaries which operate as natural gas trading and storage companies.

Cost of purchased oil included in the purchased gas and oil increased by RUB 55,548 million, or 24 %, to RUB 284,693 million for the year ended December 31, 2016 compared to RUB 229,145 million for the same period of the prior year. This change was mainly related to an increase in the demand for oil in Europe and other countries, and an increased activity of Gazprom Germany Group on the Asian oil markets (China and South Korea), and also to an increase in volumes of oil purchased on the domestic market.

### *Taxes other than on income*

Taxes other than on income consist of:

(RUB million)	Year ended December 31,	
	2016	2015
Mineral extraction tax	613,662	591,336
Excise tax	144,648	88,580
Property tax	127,053	112,568
Other taxes	<u>15,034</u>	<u>12,648</u>
<b>Taxes other than on income</b>	<b>900,397</b>	<b>805,132</b>

Mineral extraction tax increased by 4 % to RUB 613,662 million for the year ended December 31, 2016 compared to RUB 591,336 million for the same period of the prior year.

### *Transit of gas, oil and refined products*

Transit of gas, oil and refined products increased by 14 % to RUB 610,275 million for the year ended December 31, 2016 compared to RUB 534,503 million for the same period of the prior year. This increase was mainly driven by an increase in cost of transit of gas through the territory of Ukraine and Germany denominated in Ruble terms and the activity of the GAZPROM Germania Group.

### *Depreciation*

Depreciation increased by RUB 56,364 million, or 11 %, to RUB 571,564 million for the year ended December 31, 2016 compared to RUB 515,200 million for the same period of the prior year. The increase was primarily due to the growth in the fixed assets base.

### *Cost of goods for resale, including refined products*

Cost of goods for resale, including refined products, decreased by RUB 7,907 million, or 4 %, to RUB 185,441 million for the year ended December 31, 2016 compared to RUB 193,348 million for the same period of the prior year. The decrease was mainly explained by a decrease in volumes of other products purchased.

### *Foreign exchange rate differences on operating items*

Foreign exchange rate differences on operating items increased by RUB 78,461 million and amounted to a net loss of RUB 52,880 million for the year ended December 31, 2016 compared to a net gain of RUB 25,581 million for the same period of the prior year. This change was explained by the depreciation of US Dollar and Euro against the Russian Ruble by 17 % and 20 %, respectively, for the year ended December 31, 2016 compared to the appreciation of US Dollar and Euro against the Russian Ruble by 30 % and 17 %, respectively, for the same period of the prior year.

### *Other operating expenses*

Other operating expenses increased by 13 % to RUB 414,638 million for the year ended December 31, 2016 compared to RUB 365,847 million for the same period of the prior year. Other expenses include gas and gas condensate production expense, services from gas distribution companies, bank charges, security services, legal and consulting services, charity and financial aid, and advertising.

### *Changes in inventories of finished goods, work in progress and other effects*

Changes in inventories of finished goods, work in progress and other effects increased by RUB 118,900 million to the negative amount of RUB 2,909 million for the year ended December 31, 2016 compared to the negative amount of RUB 121,809 million for the same period of the prior year. The change in this line item is explained by a decrease in the balances of finished goods for the year ended December 31, 2016 compared to an increase in the balances of finished goods for the same period of the prior year.

### Charge for impairment and other provisions

Charge for impairment and other provisions decreased by RUB 69,349 million, or 33 %, to RUB 143,870 million for the year ended December 31, 2016 compared to RUB 213,219 million for the prior year. The change was mainly driven by a decrease of charges for impairment allowance of property, plant and equipment and assets under construction and a decrease of provision in the amount of RUB 50,737 million for a guarantee to Gazprombank (Joint Stock Company) related to debts of Ostchem Holding Limited for the year ended December 31, 2016, that was partially compensated by an increase of charge for impairment allowance for doubtful accounts receivable, in particular for NJSC Naftogaz Ukraine.

### **Operating profit**

As a result of the factors discussed above, operating profit decreased by RUB 502,721 million, or 41 %, to RUB 725,580 million for the year ended December 31, 2016 from RUB 1,228,301 million for the same period of the prior year. The operating profit margin decreased from 20 % for the year ended December 31, 2015 to 12 % for the year ended December 31, 2016.

### **Net finance income (expense)**

(RUB million)	Year ended	
	December 31,	
	2016	2015
Foreign exchange gain	925,503	878,181
Foreign exchange loss	(471,814)	(1,342,230)
Net exchange gain (loss)	453,689	(464,049)
Interest income	93,494	112,165
Interest expense	(71,556)	(66,857)
<b>Net finance income (expense)</b>	<b>475,627</b>	<b>(418,741)</b>

The net exchange gain of RUB 453,689 million for the year ended December 31, 2016 compared to net exchange loss of RUB 464,049 million for the same period of the prior year was mainly explained by the depreciation of US Dollar and Euro against the Russian Ruble by 17 % and 20 %, respectively, for the year ended December 31, 2016 compared to the appreciation of US Dollar and Euro against the Russian Ruble by 30 % and 17 %, respectively, for the same period of the prior year.

Interest income decreased by 17 % to RUB 93,494 million for the year ended December 31, 2016 from RUB 112,165 million for the same period of the prior year.

Interest expense increased by 7 % to RUB 71,556 million for the year ended December 31, 2016 compared to RUB 66,857 million for the same period of the prior year.

### **Share of net income of associates and joint ventures**

Share of net income of associates and joint ventures decreased by RUB 23,688 million to RUB 82,872 million for the year ended December 31, 2016 compared to RUB 106,560 million for the same period of the prior year. This change was mainly caused by the decrease in the share of net income of Sakhalin Energy Investment Company Ltd. by RUB 47,397 million that was partially compensated by the increase in the share of net income of Gazprombank (Joint-Stock Company) and its subsidiaries by RUB 26,536 million.

### **Profit tax**

Total profit tax increased by RUB 167,992 million, or 140 %, to RUB 288,034 million for the year ended December 31, 2016 compared to RUB 120,042 million for the same period of the prior year. The effective profit tax rate was 22.4 % and 13.0 % for the year ended December 31, 2016 and 2015, respectively.



The change in effective profit tax rate was mainly driven by an increase in non-deductible expenses for tax purposes for the year ended December 31, 2016 compared for the same period of the prior year.

### **Profit for the year attributable to owners of PJSC Gazprom**

As a result of the factors discussed above, profit for the year attributable to owners of PJSC Gazprom increased by RUB 164,581 million, or 21 %, from RUB 787,056 million for the year ended December 31, 2015 to RUB 951,637 million for the year ended December 31, 2016.

Profit for the year attributable to non-controlling interest

Profit for the year attributable to non-controlling interest increased by RUB 27,324 million, or 151 %, to RUB 45,467 million for the year ended December 31, 2016 compared to RUB 18,143 million for the same period of the prior year.

### **Liquidity and capital resources**

The following table summarises the cash flows for the year ended December 31, 2016 and 2015:

(RUB million)	Year ended December 31,	
	2016	2015
Net cash from operating activities	1,571,323	2,030,927
Net cash used in investing activities	(1,445,965)	(1,664,156)
Net cash used in financing activities	(460,479)	(138,305)

#### *Net cash from operating activities*

Net cash from operating activities decreased by RUB 459,604 million, or 23 %, to RUB 1,571,323 million for the year ended December 31, 2016 compared to RUB 2,030,927 million for the same period of the prior year. This change was mainly driven by a decrease in cash from operating activities before working capital changes.

#### *Net cash used in investing activities*

Net cash used in investing activities decreased by RUB 218,191 million, or 13 %, to RUB 1,445,965 million for the year ended December 31, 2016 compared to RUB 1,664,156 million for the same period of the prior year. The change was mainly due to a decrease in cash used for capital expenditures, which was driven by a change in the approach to reflect this flow in 2016, as well as to an increase in interest received for the year ended December 31, 2016. The change in the approach was caused by applying by the Group of Agency agreements for the implementation of investment projects on intercompany transactions. The new approach allowed to speed up the process of VAT refunding from the budget. Based on the changed nature of the settlement transactions with the budget for VAT, the Group made a decision to reflect cash flows for VAT payments as payments to the budget as part of operating activities.

#### *Net cash used in financing activities*

Net cash used in financing activities increased by RUB 322,174 million to RUB 460,479 million for the year ended December 31, 2016 compared to RUB 138,305 million for the same period of the prior year. This change was primarily due to excess of cash used for repayment of borrowings over proceeds from borrowings and the acquisition of treasury shares for the year ended December 31, 2016.

### **Working Capital**

The working capital surplus (current assets less current liabilities) was RUB 1,312,538 million as of December 31, 2016 and RUB 1,869,021 million as of December 31, 2015. The decrease in the working capital by RUB 556,483 million in the year ended December 31, 2016 was primarily due to a decrease in cash and cash equivalents, other current assets and a decrease in inventories. These effects were partially offset by a decrease in current portion of long-term borrowings and accounts payable.

Management believes that the working capital is sufficient to meet the requirements of the Group for at least next twelve months. However, we are dependent on the short-term credit markets to finance our working capital.

### Capital expenditures

Total capital expenditures (excluding the effect of acquisitions of subsidiaries) by segments for the years ended December 31, 2016 and 2015 in RUB terms, amounted to the following:

(RUB million)	Year ended December 31,	
	2016	2015
Transportation	406,828	420,874
Production of crude oil and gas condensate	316,823	324,330
Production of gas	231,530	220,214
Refining	193,243	136,299
Electric and heat energy generation and sales	63,485	98,963
Distribution of gas	41,785	25,962
Gas storage	35,542	48,486
All other segments	54,926	69,701
<b>Total</b>	<b>1,344,162</b>	<b>1,344,829</b>

Total capital expenditures decreased by RUB 667 million, or 0.05 %, from RUB 1,344,829 million for the year ended December 31, 2015 to RUB 1,344,162 million for the year ended December 31, 2016.

### Debts

Net debt balance (defined as the sum of short-term borrowings, current portion of long-term borrowings, short-term promissory notes payable, long-term borrowings, long-term promissory notes payable, net of cash and cash equivalents and balances of cash and cash equivalents restricted as to withdrawal under the terms of certain borrowings and other contractual obligations) decreased by RUB 150,225 million, or 7 %, from RUB 2,083,120 million as of December 31, 2015 to RUB 1,932,895 million as of December 31, 2016. This decrease was mainly resulted from a decrease in borrowings denominated in Ruble terms due to the depreciation of US Dollar and Euro that was partially compensated by a decrease in cash and cash equivalents.

The following table shows our borrowings and promissory notes as of December 31, 2016 and December 31, 2015:

(RUB million)

	<b>As of December 31,</b>	
	<b>2016</b>	<b>2015</b>
<b>Long-term borrowings</b>		
Fixed interest rate borrowings	2,086,181	2,431,823
Weighted average interest rates for fixed rate borrowings	6.34%	6.30%
Variable interest rate borrowings	682,810	958,390
Weighted average interest rates for variable rate borrowings	<u>4.11%</u>	<u>3.90%</u>
<b>Total long-term borrowings</b>	<b>2,768,991</b>	<b>3,390,213</b>
RR denominated borrowings	427,014	362,400
Foreign currency denominated borrowings	<u>2,341,977</u>	<u>3,027,813</u>
<b>Total long-term borrowings</b>	<b>2,768,991</b>	<b>3,390,213</b>
Less: current portion of long-term borrowings	<u>(386,448)</u>	<u>(594,370)</u>
<b>Total long-term debt obligations</b>	<b>2,382,543</b>	<b>2,795,843</b>
<b>Short-term borrowings</b>		
Fixed interest rate borrowings	39,037	17,710
Weighted average interest rates for fixed rate borrowings	9.75%	9.76%
Variable interest rate borrowings	21,595	34,292
Weighted average interest rates for variable rate borrowings	<u>6.67%</u>	<u>2.09%</u>
<b>Total short-term borrowings</b>	<b>60,632</b>	<b>52,002</b>
RR denominated borrowings	44,352	12,766
Foreign currency denominated borrowings	<u>16,280</u>	<u>39,236</u>
<b>Total short-term borrowings</b>	<b>60,632</b>	<b>52,002</b>
Add: current portion of long-term borrowings	<u>386,448</u>	<u>594,370</u>
<b>Total short-term debt obligations</b>	<b>447,080</b>	<b>646,372</b>
<b>Total borrowings</b>	<b>2,829,623</b>	<b>3,442,215</b>

The following table shows the breakdown by currency of our actual foreign currency denominated long-term borrowings as of December 31, 2016 and December 31, 2015 as well as the same balances expressed in rubles:

	<b>As of December 31,</b>	
	<b>2016</b>	<b>2015</b>
U.S. dollar denominated (expressed in millions of U.S. dollars)	21,291	27,494
Euro denominated (expressed in millions of U.S. dollars) <sup>(1)</sup>	15,848	13,539
Other currencies denominated (expressed in millions of U.S. dollars)	<u>1,471</u>	<u>510</u>
<b>Total long-term foreign currency denominated borrowings expressed in millions of U.S. dollars</b>	<b>38,610</b>	<b>41,543</b>
<b>Total long-term foreign currency denominated borrowings expressed in millions of RUB<sup>(2)</sup></b>	<b>2,341,977</b>	<b>3,027,813</b>

Notes:

<sup>(1)</sup> Converted at euro to U.S. dollar exchange rates of 1.05 and 1.09 as of December 31, 2016 and 2015, respectively.

<sup>(2)</sup> Converted at the exchange rate as of period-end.

The following table shows our schedule of repayments of long-term borrowings as of December 31, 2016 and December 31, 2015:

(RUB million)	As of December 31,	
	2016	2015
Between one and two years	708,355	472,657
Between two and five years	956,731	1,452,110
After five years	<u>717,457</u>	<u>871,076</u>
<b>Total</b>	<b>2,382,543</b>	<b>2,795,843</b>

## SHAREHOLDER STRUCTURE AND STOCK MARKET OF PJSC GAZPROM

PJSC Gazprom's charter capital is RUB 118,367,564,500 divided into 23,673,512,900 ordinary shares with a par value of RUB 5 each. The Company has no preferred shares.

As major shareholder of PJSC Gazprom, the Russian Government holds a more than 50% controlling stake (including direct and indirect ownership) in PJSC Gazprom. The Russian Federation does not have a special right to manage PJSC Gazprom's affairs (a "golden share").

The following table summarises quotations for PJSC Gazprom's shares and ADRs:

(%)	As of December 31,	
	2016	2015
The Russian Federation represented by the Federal Agency for State Property Management	38.37	38.37
AO Rosneftegaz <sup>(1)</sup>	10.97	10.97
OAO Rosgazifikatsiya <sup>(2)</sup>	0.89	0.89
ADR holders <sup>(3)</sup>	26.86	27.83
Other registered holders	22.91	21.94

Notes:

<sup>(1)</sup> As at 31 December 2015 and 31 December 2016, the share of the Russian Federation represented by the Federal Agency for State Property Management in AO Rosneftegaz was 100%.

<sup>(2)</sup> As at 31 December 2015 and 31 December 2016, AO Rosneftegaz held 74.55% of shares in OAO Rosgazifikatsiya.

<sup>(3)</sup> The Bank of New York Mellon issued ADRs on PJSC Gazprom's shares.

As at 31 December 2016, the holders of ADRs on the Company's shares accounted for about 26.9% of PJSC Gazprom's charter capital.

As at 31 December 2016, there were no PJSC Gazprom's shares the title to which was transferred to the Company. At the same time, as at the said date, PJSC Gazprom's subsidiaries held 1,573 million ordinary shares of the Company, or 6.6% of the total number of outstanding ordinary shares of PJSC Gazprom (as at 31 December 2015, they held 723 million ordinary shares of PJSC Gazprom, or 3.1% of the total number of shares). Such growth of shares owned by PJSC Gazprom's subsidiaries resulted from the purchase of 3.6% of PJSC Gazprom's shares as 211 million ordinary shares and ADRs on 639 million ordinary shares for the amount of RUB 132 bn by Gazprom Group's subsidiary from Vnesheconombank in July 2016. The Group's management controls the voting rights attached to the repurchased treasury shares.

PJSC Gazprom's shares are included in the first (top) level quotation list of Russian PAO Moscow Exchange and PAO Saint Petersburg Exchange.

ADRs on PJSC Gazprom's shares are traded on London, Berlin and Frankfurt exchanges, PAO Moscow Exchange, the US OTC market, and on the Singapore OTC market among qualified institutional buyers (QIBs). London Stock Exchange (LSE) accounts for the bulk of trade in PJSC Gazprom's ADRs.

The following table summarises quotations for PJSC Gazprom's shares and ADRs:

	As of December 31,		Change, %
	2016	2015	
<b>PAO Moscow Exchange</b>			
Share closing price, RUB			
at year end	154.55	136.09	14
minimum	124.60	130.90	-5
maximum	168.47	163.00	3
Average daily trading volume, mln.	29.91	32.45	-8
Average daily trading volume, RUB billion	4.31	4.67	-8
<b>LSE</b>			
ADR closing price, USD			
at year end	5.05	3.69	37
minimum	3.02	3.62	-17
maximum	5.27	6.24	-16
Average daily trading volume, mln.	15.89	16.43	-3
Average daily trading volume, mln. USD	68.56	78.26	-12

In 2016, PJSC Gazprom's market capitalisation increased by 14% year-on-year; as at 31 December 2016, it was RUB 3.7 tn.

As of December 31, 2016, dividends paid in 2016 based on PJSC Gazprom's performance results for 2015 are as follows:

	Accrued, RUB thousand	Paid, RUB thousand	Unpaid dividends, RUB thousand <sup>(1)</sup>	Proportion of unpaid and accrued dividends, %
Total	186,784,017	186,431,519	352,498	0.19
including dividends on shares:				
held by the Russian Federation represented by the Federal Agency for State Property Management	71,675,337	71,675,337	-	-
held by individuals and corporate entities whose rights to shares are accounted for in the register	26,637,329	26,445,086	192,243	0.72
held by individuals and corporate entities whose rights to shares are accounted for by the depositary maintaining a nominee holder account in the issuer's register <sup>(2)</sup>	88,471,232	88,311,096	160,136	0.18
held by undefined holders	119	-	119	100.00

Notes:

(1) No dividends were paid to individuals or corporate entities who provided no clear data required for dividend payouts in accordance with clause 8, Article 42 of Federal Law No. 208-FZ On Joint-Stock Companies dated 26 December 1995. Dividends accrued on shares held by anonymous holders are paid as soon as title to securities is established.

(2) PJSC Gazprom paid RUB 88,471,232 thousand in dividends to nominee holders on 3 August 2016 as part of execution of the AGM resolutions on payment of dividends based on PJSC Gazprom's 2015 results, dated 30 June 2016. As at 31 December 2016, the nominee holders failed to transfer RUB 160,136,000 in dividends in pursuance of their statutory obligation prescribed by the securities laws of the Russian

Federation for reasons beyond their control (clause 8, Article 42 of Federal Law No. 208-FZ dated 26 December 1995).

## **CORPORATE GOVERNANCE**

The rights of PJSC Gazprom shareholders and regulation of PJSC Gazprom management activity are determined by and carried out in accordance with the Russian Federation laws and may differ from the regulating practice in the companies registered in Great Britain.

Key documents of PJSC Gazprom which provide for the shareholders' rights include:

- Articles of Association of Public Joint Stock Company Gazprom;
- Code of Corporate Governance (Behaviour) of JSC Gazprom;
- Code of Corporate Ethics of PJSC Gazprom;
- Regulations on the General Shareholders Meeting of PJSC Gazprom;
- Regulations on the Board of Directors of PJSC Gazprom;
- Regulations on the Board of Directors' Audit Committee of JSC Gazprom;
- Regulations on the Board of Directors' Nomination and Remuneration Committee of PJSC Gazprom;
- Regulations on the Management Committee of PJSC Gazprom;
- Regulations on the Chairman of the Management Committee of PJSC Gazprom;
- Regulations on the Audit Commission of JSC Gazprom;
- Regulations on the Internal Control System of PJSC Gazprom;
- External Audit Policy for PJSC Gazprom, its subsidiaries and entities;
- Procedures for Documenting of Proposals and Requests of Shareholders Related to the Convocation of the General Shareholders Meeting of PJSC Gazprom;
- Dividend Policy of Joint Stock Company Gazprom;
- Regulations on the Information Disclosure of PJSC Gazprom;
- Procedure for Providing Information about PJSC Gazprom to Shareholders;
- Regulations of JSC Gazprom on Control of Compliance with the Laws on Countering the Unlawful Use of Insider Information and Market Manipulation;
- Anti-Corruption Policy of PJSC Gazprom;
- Regulations on the Hotline for Fighting Fraud, Corruption, and Embezzlement at Gazprom Group.

These documents are available on PJSC Gazprom's website ([www.gazprom.com](http://www.gazprom.com)).

### Development of PJSC Gazprom's corporate governance in 2016

In 2016, PJSC Gazprom continued to improve its corporate governance standards. In 2016, PJSC Gazprom updated, in line with the best practices, its key internal documents protecting shareholder rights.

Pursuant to the Resolution of the Annual General Shareholders Meeting dated 30 June 2016 (Minutes No. 1), PJSC Gazprom updated some internal documents, including those that seek to protect shareholders' corporate governance rights, specifically:

- amended the Articles of Association to refine the procedures for payment of dividend and redemption of shares at the request of shareholders;
- approved a new version of the Regulation on the General Shareholders Meeting of PJSC Gazprom, providing, among other things, for an updated procedure for notifying shareholders of the General Shareholders Meeting and voting results;

- approved a new version of the Regulations on the Board of Directors of PJSC Gazprom, incorporating the Code's recommendations to provide for remote attendance of the Board of Directors' meetings by the Board members through video conferencing, and amendments to the applicable laws;
- approved a new version of the Regulations on the Management Committee of PJSC Gazprom and the Regulations on the Chairman of the Management Committee PJSC Gazprom, providing for some organisational updates.

The Board of Directors of PJSC Gazprom passed resolutions on the Company's internal documents, specifically:

- approved a new version of the Procedures for Documenting of Proposals and Requests of Shareholders Related to the Convocation of the General Shareholders Meeting (Resolution of the Board of Directors of PJSC Gazprom No. 2872 dated 22 December 2016), incorporating the Code's recommendations and amendments to the applicable laws;
- approved the External Audit Policy for PJSC Gazprom, its subsidiaries and entities (Resolution of the Board of Directors of PJSC Gazprom No. 2847 dated 15 November 2016);
- approved the Anti-Corruption Policy of PJSC Gazprom (Resolution of the Board of Directors of PJSC Gazprom No. 2846 dated 15 November 2016). The document was developed as part of the risk management and internal control system and seeks to shape rules and procedures to deter corruption.

The Resolution of PJSC Gazprom's Management Committee (No. 47 dated 8 December 2016) approved a new version of the Procedure for Providing Information about PJSC Gazprom to Shareholders.

Instruction No. 368 dated 25 November 2016 approved the Procedure for a Conflict of Interest Disclosure and Conflict of Interest Resolution.

To preview matters reserved to the Board of Directors, the Board set up a Nomination and Remuneration Committee of the Board of Directors of PJSC Gazprom and approved regulations governing its activities (Board of Directors' Minutes No. 1100 dated 30 September 2016).

Most members of the new Nomination and Remuneration Committee of the Board of Directors of PJSC Gazprom are independent directors.

The Board of Directors of PJSC Gazprom resolved to introduce the role of the Company's Corporate Secretary (Board of Directors' Minutes No. 1100 dated 30 September 2016). The Corporate Secretary's functions are divided, to the extent recommended by the Code, between certain PJSC Gazprom's business units, in line with the regulations governing the Corporate Secretary functions adopted by such business units, approved by the Board of Directors.

#### Corporate Governance Framework

PJSC Gazprom's corporate governance pillars include management and supervisory bodies: the General Shareholders Meeting, the Board of Directors, the Management Committee, the Chairman of the Management Committee, and the Audit Commission. The Department of the Management Committee Administration responsible for internal audit performs fair assessment of the internal control performance and develops recommendations for improvement. The Company's financial and business performance is independently reviewed by an external auditor.

To preview most important matters of PJSC Gazprom's business reserved to the Board of Directors, the Board set up the following committees: the Audit Committee and the Nomination and Remuneration Committee of the Board of Directors of PJSC Gazprom.

The duties and responsibilities of the Company's Corporate Secretary are shared by the following business units of PJSC Gazprom:



- Department of the Management Committee Administration (Yuri Nosov);
- Secretariat of the Management Committee Administration (Nikolai Kruglikov);
- Department Directorate (Alexey Finikov);
- Department Directorate Division (Maksim Babich).

To maintain open and constructive dialogue with the investment community, PJSC Gazprom set up its Coordinating Committee for Shareholder and Investor Relations. The Committee is led by Andrey Kruglov, Deputy Chairman of PJSC Gazprom's Management Committee. The Committee also includes heads of business units responsible for development and implementation of the relevant strategy. Investor relations are governed by the annual plan of the Coordinating Committee.

To monitor the compliance of PJSC Gazprom and its employees with the laws on countering the misuse of insider information and market manipulation and the compliance with insider laws and regulations applicable to the Company, PJSC Gazprom set up a business unit responsible for insider information, which reports to PJSC Gazprom's Board of Directors.

PJSC Gazprom interacts with subsidiaries and other investees through having representation on the management and supervisory bodies of such entities, making decisions on their operations (for entities where the Company is the sole member/shareholder) in line with the applicable laws, exercising the Company's legitimate right to issue instructions, which are binding for its subsidiaries.

Supervision of investees' business performance is the responsibility of relevant business units of PJSC Gazprom. The Department responsible for asset management and corporate relations also coordinates, organises and provides guidelines for representatives of PJSC Gazprom on the management bodies of its investees.

#### The Board of Directors and the Management Committee

The below table presents the information on members of the Board of Directors of PJSC Gazprom as of December 31, 2016:

<b>Name</b>	<b>Year of Birth</b>	<b>Position</b>
Viktor A. Zubkov	1941	Chairman of PJSC Gazprom's Board of Directors Russian Special Presidential Representative for Cooperation with Gas Exporting Countries Forum Deputy Chairman of OOO Gazprom Gazomotornoe Topливо's Board of Directors
Alexey B. Miller	1962	Deputy Chairman of PJSC Gazprom's Board of Directors Chairman of PJSC Gazprom's Management Committee
Andrey I. Akimov	1953	Chairman of the Management Committee of Gazprombank (Joint Stock Company)
Timur A. Kulibayev	1966	Chairman of the Legal Entities Association "Kazakhstan Association of Oil, Gas and Energy Sector Organizations "KAZENERGY" Chairman of the Presidium of the National Chamber of Entrepreneurs of Kazakhstan "Atameken"
Vitaly A. Markelov	1963	Deputy Chairman of PJSC Gazprom's Management Committee

Victor G. Martynov	1953	Rector of “Gubkin Russian State Oil and Gas University”, the Federal State-Funded Educational Institution of Higher Professional Education (National Research University)
Vladimir A. Mau	1959	Rector of “The Russian Presidential Academy of National Economy and Public Administration”, the Federal State-Funded Educational Institution of Higher Professional Education
Alexander V. Novak	1971	Minister of Energy of the Russian Federation
Dmitry N. Patrushev	1977	Member of the Supervisory Board of AO Russian Agricultural Bank Chairman of the Management Board of AO Russian Agricultural Bank
Mikhail L. Sereda	1970	Deputy Chairman of the Management Committee – Head of the Administration of PJSC Gazprom’s Management Committee
Alexey V. Ulyukaev	1956	Member of PJSC Gazprom’s Board of Directors

The below table presents the changes in the Board of Directors in 2016:

Name	Changes
Farit R. Gazizullin	Member of PJSC Gazprom’s Board of Directors until 30 June 2016
Dmitry Nikolayevich Patrushev	Member of PJSC Gazprom’s Board of Directors since 30 June 2016
Alexey Valentinovich Ulyukaev	Member of PJSC Gazprom’s Board of Directors since 30 June 2016. Since November 2016, has not been actually involved in the activities of the Board of Directors due to pre-trial restriction.

In 2016, the Board of Directors held a total of 65 meetings, including 11 meetings held in person and 54 meetings held in absentia.

At these meetings, the Board of Directors passed 232 resolutions, including 49 resolutions in person and 183 resolutions in absentia.

In 2016, the Audit Committee of the Board of Directors of PJSC Gazprom continued its work. The Audit Committee reports to the Company’s Board of Directors.

As at 31 December 2016, the Audit Committee of the Board of Directors of PJSC Gazprom included three members of the Board of Directors of PJSC Gazprom: Victor G. Martynov (Chairman of the Audit Committee); Mikhail L. Sereda; Vladimir A. Mau. In the reporting year, the Committee held 4 meetings in person and reviewed 11 agenda items.

In 2016, the Board of Directors’ Audit Committee reviewed and approved a number of the Company’s draft internal regulations to improve internal controls, external audit procedures and compliance with the Code of Corporate Ethics and the Anti-Corruption Policy.

In September 2016, PJSC Gazprom’s Board of Directors set up its Nomination and Remuneration Committee and approved relevant Regulations on the Committee.

As of 31 December 2016, the Nomination and Remuneration Committee of the Board of Directors of PJSC Gazprom included three members of the Board of Directors of PJSC Gazprom: Mikhail L. Sereda (Chairman of the Nomination and Remuneration Committee); Vladimir A. Mau; Victor G. Martynov. The Nomination and Remuneration Committee held no meetings during 2016. PJSC Gazprom’s Nomination and Remuneration Committee of the Board of Directors started its specific planned activities in January 2017.

The table below presents information on members of the Management Committee as of December 31, 2016:

<b>Name</b>	<b>Year of birth</b>	<b>Position</b>
Alexey B. Miller	1962	Chairman of PJSC Gazprom's Management Committee
Elena A. Vasilieva	1959	Deputy Chairman of PJSC Gazprom's Management Committee – PJSC Gazprom's Chief Accountant
Valery A. Golubev	1952	Deputy Chairman of PJSC Gazprom's Management Committee
Alexander N. Kozlov	1952	Deputy Chairman of PJSC Gazprom's Management Committee
Andrey V. Kruglov	1969	Deputy Chairman of PJSC Gazprom's Management Committee
Vitaly A. Markelov	1963	Deputy Chairman of PJSC Gazprom's Management Committee
Alexander I. Medvedev	1955	Deputy Chairman of PJSC Gazprom's Management Committee
Sergei F. Khomyakov	1953	Deputy Chairman of PJSC Gazprom's Management Committee General Director of PJSC Gazprom's Corporate Protection Service Branch in Moscow
Oleg E. Aksyutin	1967	Head of Department (prospective development)
Nikolay N. Dubik	1971	Head of Department (legal support)
Vladimir K. Markov	1955	Head of Department (relations with the Russian Federation government authorities)
Elena V. Mikhailova	1977	Head of Department (asset management and corporate relations) Deputy Director General for Corporate Relations and Asset Management at OOO Gazprom Mezhregiongaz.
Vyacheslav A. Mikhalenko	1965	Head of Department (gas transportation and underground storage)
Sergei F. Prozorov	1958	Head of Department (managing construction of production facilities)
Kirill G. Seleznev	1974	Head of Department (marketing, gas and liquid hydrocarbons processing, developing electric power and heat generation), General Director of OOO Gazprom Mezhregiongaz
Igor Y. Fedorov	1965	General Director of OOO Gazprom Komplektatsiya
Vsevolod V. Cherepanov	1966	Head of Department (hydrocarbon exploration and production)

There were no changes to the Management Committee in 2016.

#### Compensation for key management personnel

Key management personnel (the members of the Board of Directors and Management Committee of PJSC Gazprom) receive short-term compensation, including salary, bonuses and

remuneration for serving on the management bodies of various Group companies, amounted to approximately RUB 4,685 million and RUB 4,801 million for the years ended 31 December 2016 and 31 December 2015, respectively.

Government officials, who are directors, do not receive remuneration from the Group.

The remuneration for serving on the Boards of Directors of Group companies is subject to approval by the General Meeting of Shareholders of each Group company. Compensation of key management personnel (other than remuneration for serving as directors of Group companies) is determined by the terms of the employment contracts. Key management personnel also receive certain short-term benefits related to healthcare.

According to Russian legislation, the Group makes contributions to the Russian Federation State pension fund for all of its employees including key management personnel.

Key management personnel also participate in certain post-retirement benefit programs. The programs include pension benefits provided by the non-governmental pension fund, NPF GAZFOND, and a one-time retirement payment from the Group.

Employees of the majority of Group companies are eligible for such benefits.

The Group provides medical insurance and liability insurance for key management personnel.

#### Liability insurance for the members of the Board of Directors and the Management Committee

As part of Gazprom Group's insurance arrangements, starting from 2008, liability insurance is offered to members of the Board of Directors (including independent directors but excluding directors who hold public office) and the Management Committee of PJSC Gazprom. The insurance covers damages to shareholders, lenders or other persons resulting from unintentional errors (omission) committed by policyholders in their management roles.

The insurance agreement covers the following risks:

- third-party claims against members of the Board of Directors and Management Committee of PJSC Gazprom for damages resulting from unintentional errors committed by policyholders in their management roles;
- third-party claims against PJSC Gazprom for damages resulting from unintentional errors committed by members of the Board of Directors and Management Committee of PJSC Gazprom in their management roles: claims related to PJSC Gazprom's securities and claims initially filed against members of the Board of Directors or the Management Committee.

Insurance premiums and coverage amount under the insurance agreement signed in 2016 remained unchanged against 2015 at USD 1.575 million and USD 100 million, respectively.

The insurance coverage under the current agreement for liability insurance of members of PJSC Gazprom's Board of Directors and Management Committee is in line with PJSC Gazprom's requirements and Russian and international insurance standards in terms of insured risks and indemnity limits.

#### Shares owned by members of the Board of Directors and the Management Committee of PJSC Gazprom

As of December 31, 2016, the total interest of members of the Board of Directors and members of the Management Committee in PJSC Gazprom's equity was 0.012014%.

#### Internal control system and internal audit

PJSC Gazprom's internal control system is an aggregate of bodies and internal control methods, rules of conduct and acts of employees in achieving PJSC Gazprom's objectives.

Internal control is exercised by PJSC Gazprom's Board of Directors, Audit Committee, Audit Commission, executive bodies (the Management Committee and its Chairman), heads of business units and other employees of PJSC Gazprom.

The Audit Commission's authority is set forth in the Federal Law On Joint-Stock Companies and PJSC Gazprom's Articles of Association. The Revision Commission in number of 9 persons is elected by the General Meeting of Shareholders. The Audit Commission cooperates with the Audit Committee of the Board of Directors. Following an audit of PJSC Gazprom's financial and business operations, the Audit Commission presents its opinion confirming the fairness of data in the Company's statements and other financial documents.

Key roles of the Audit Commission:

- Monitor fair presentation of PJSC Gazprom's financial and accounting statements and other information on the Company's financial and business operations and condition of its assets;
- supervise statutory compliance of PJSC Gazprom's accounting practices and of submission of its financial statements and information to relevant authorities and shareholders;
- enhance the Company's asset management and other financial and business operations of PJSC Gazprom, mitigate financial and operating risks and improve internal controls.

Internal audit assists in achieving the Company's objectives through a structured and consistent approach to assessment and improvement of risk management, control and corporate governance processes.

Duties related to organising and conducting internal audits in PJSC Gazprom are assigned to the Department, a dedicated business unit of the Company; in PJSC Gazprom's subsidiaries and entities these duties are assigned to internal audit departments of such subsidiaries or entities. The Department's key priority is to provide PJSC Gazprom's Audit Committee and management with independent and objective assurances and advice as to the improvement of the Company's performance.

Activities of the Department are governed by PJSC Gazprom's Regulations on Internal Audit (approved by Resolution of the Board of Directors No. 2621 dated 6 November 2015), internal auditors' Code of Ethics (approved by Resolution of the Board of Directors No. 1956 dated 14 March 2012), JSC Gazprom's Internal Audit Development Concept (approved by the Board of Directors' Audit Committee on 25 June 2015), Regulations on the Department (approved by the Board of Directors' Audit Committee and PJSC Gazprom's Order No. 419 dated 23 June 2016), International Standards for the Professional Practice of Internal Auditing, and methodological guidelines on internal auditing of the Federal Agency for State Property Management.

The Department is administratively accountable to the Chairman of PJSC Gazprom's Management Committee within the Administration of the Management Committee and functionally accountable to the Board of Directors (through the Board of Directors' Audit Committee). Head of the Department is appointed and removed from office by the Chairman of the Company's Management Committee upon recommendation of the Deputy Chairman of the Management Committee — Head of the Administration of the Management Committee approved by the Board of Directors (through the Board of Directors' Audit Committee).

PJSC Gazprom selects its auditor annually by a public tender in accordance with applicable Russian laws.

A public tender for the service contract to audit PJSC Gazprom's accounting (financial) statements, Gazprom Group's consolidated accounting statements and Gazprom Group's consolidated IFRS financial statements for 2016 was announced on 25 February 2016.

The agenda item On the Assessment of Candidates for PJSC Gazprom's Auditor Engaged to Audit the Company's Accounting Statements for 2016 was reviewed at the meeting of the Board of Directors' Audit Committee held in person on 19 April 2016.

In 2016, OOO FBK won the public tender among audit firms to conduct statutory annual audit of the PJSC Gazprom and was approved as auditor by the annual General Shareholders Meeting of PJSC Gazprom on 30 June 2016.

The contract price offered by the winner was RUB 228,000,000 (exclusive of VAT) and was approved by Resolution of the Board of Directors No. 2742 dated 19 May 2016.

In 2016, OOO FBK provided other audit-related services to PJSC Gazprom outside the audit contract. In 2016, a fee of RUB 7,686,649.8 (inclusive of VAT) was paid for other audit-related services.

### Anti-Corruption Practices

The Company adheres to core anti-corruption principles, the legal and organisational framework of preventing and countering corruption, and of minimising and/or mitigating corruption offences, while effective local regulations adopted as anti-corruption measures are designed to drive negative sentiment towards corrupt conduct, to prevent or resolve conflicts of interest, and to prevent bad faith and unlawful behaviour.

The Company's Code of Corporate Ethics provides for corporate values and determines the fundamental rules of business conduct stemming from such values, which rule out any conflicts of interest and or cases of corruption, as well as cases of nepotism, with relatives directly or indirectly reporting to each other.

The Code's provisions are mandatory for PJSC Gazprom's employees (including all members of the Management Committee and the Board of Directors employed by PJSC Gazprom) and the Company-controlled corporate entities, while being non-binding for individuals working under service contracts signed with PJSC Gazprom, as well as for contractors and consultants acting as designated agents for and on behalf of PJSC Gazprom before third parties.

PJSC Gazprom and its subsidiaries organise awareness days to communicate to its employees the effective rules of business, including anti-corruption corporate ethics, to ensure strict compliance therewith.

The Company set up the Corporate Ethics Commission, comprised of employees from different business units of PJSC Gazprom, to prevent, eliminate or mitigate conflicts of interest or their implications.

The Ethics Commission monitors the performance of its peers at subsidiaries and collects information on events held by them to meet corporate requirements and restrictions, including nepotism, receiving of (giving) gifts, etc. The progress on and the results of these efforts are reported to members of the Ethics Commission at the Commission meetings held in person.

In 2016, the Company continued to enhance its anti-corruption framework: the Anti-Corruption Policy of PJSC Gazprom and anti-corruption amendments to the Regulations on the Internal Control System of PJSC Gazprom were adopted by resolutions of the PJSC Gazprom's Board of Directors.

Based on its Anti-Corruption Policy, PJSC Gazprom will continue the enhancement of its local regulations to expand anti-corruption measures.

## **RISK MANAGEMENT**

PJSC Gazprom's risk management system is defined as an aggregate of the organisational structure, internal regulations, corporate culture standards, methodologies and procedures aimed at providing adequate assurances that PJSC Gazprom's goals will be achieved, and supporting the management and employees of PJSC Gazprom's business units and subsidiaries in decision

making in an uncertain environment. As an integral part of PJSC Gazprom's corporate governance framework, it covers all management levels and business lines across the Company. PJSC Gazprom's risk management system complies with the principles set forth in the Russian Code of Corporate Governance.

The Board of Directors, the Board's Audit Committee, the Management Committee, Gazprom Group's business units and entities, and PJSC Gazprom's business unit responsible for the risk management system development within the Administration of the Management Committee are involved in the operation of the risk management system. Risk owners are PJSC Gazprom's business units, Gazprom Group's entities or employees responsible for the development, implementation and monitoring of risk management activities.

The risk management and internal control systems are interrelated.

PJSC Gazprom's business units and subsidiaries are charged with risk identification and assessment, development and implementation of risk management activities, monitoring of risks and activities.

### **Strategic and country risks**

#### Risks related to the global economy

An unfavourable economic environment can lead to a slowdown in energy demand and drive the cost of borrowed capital.

**Risk management/mitigation.** To ensure growth of revenue from energy sales PJSC Gazprom diversifies its markets and sales channels and expands the uses of natural gas. To maintain financial stability PJSC Gazprom optimises leverage.

#### European gas market risks

The EU pursues a policy of diversifying its gas supply sources and increasing the share of natural gas exchange trade, which affects PJSC Gazprom as one of the main suppliers of natural gas to the EU countries.

**Risk management/mitigation.** PJSC Gazprom ensures reliable and flexible gas supplies through long-term contracts. In September 2016, OOO Gazprom export held a gas auction to try out a new mechanism of gas sales in Europe. Additionally, to minimise the risk of lower supply levels a set of initiatives continues to be implemented to both build new infrastructure and bolster demand for natural gas, as well as strengthen the Company's position in the sectors with a potential for extra supplies.

#### Political risks

Starting from 2014, Russia is under sanctions imposed by the EU, the United States and other countries over the conflict in Ukraine. The continuation of the conflict is very likely to extend both the list of restrictive measures and the duration of the sanctions.

**Risk management/mitigation.** PJSC Gazprom pursues a policy of ensuring technological independence and import substitution to reduce the impact the economic restrictions imposed/reintroduced against Russia have on the Company.

#### Natural gas transit risks

Gas transit via FSU countries, in particular Ukraine, is associated with the risk of the counterparties defaulting on their transit obligations, which exposes Gazprom Group to the risk of improper performance of its obligations under gas supply contracts.

**Risk management/mitigation.** A number of measures are taken to reduce reliance on transit countries, including diversification of export routes, expanding access to UGSF abroad, and development of LNG trade.

### Russian regulatory risks for the gas industry

PJSC Gazprom's operations as a natural monopoly are regulated by Federal Law No. 147-FZ dated 17 August 1995 On Natural Monopolies. The Government holds an interest of over 50% in the share capital of PJSC Gazprom.

**Risk management/mitigation.** PJSC Gazprom interacts with government authorities on a regular basis to improve the pricing policy and taxation of companies in the gas industry; objective supporting cases are prepared to inform decision making by PJSC Gazprom's Board of Directors.

### Unconventional gas development risks

Unconventional gas production has been growing over the last ten years, primarily from shale deposits in the US, along with limited volumes in several other regions around the world.

In North America, it had a notable effect on the structure of gas supply sources and gas consumption, and drove the development of new LNG export projects, with the first one launched Q1 2016.

Certain countries in South America, Europe and South-East Asia, as well as one European country (the UK) remain interested in unconventional gas production; however, the risk that these regions will discontinue gas imports in the mid-term is still assessed as insignificant.

**Risk management/mitigation.** PJSC Gazprom continuously monitors the evolution of the shale gas industry and developments in other unconventional hydrocarbons industries around the world. The monitoring results, including the economics of unconventional gas production and its potential as a competition to PJSC Gazprom in its existing or prospective markets, are reviewed by PJSC Gazprom's Board of Directors on a regular basis, which enables the Company to build an effective region-specific marketing policy relying on different gas distribution mechanisms.

### Renewable energy risks

Renewable energy output can be expected to grow in some countries, which may squeeze gas consumption in these markets.

**Risk management/mitigation.** The use of natural gas, inter alia, for power generation offers consumers economic, technological and environmental benefits, which, PJSC Gazprom believes, will support natural gas as the most common energy source. In most cases, renewable power generation supplements power generation from other sources and may entail certain risks for the natural gas market if aggressive policies of subsidising renewable energy are maintained at the national and/or supranational level.

### **Customs, currency and tax regulation risks**

#### Risk of changes in the Russian currency regulation and tax legislation

Currency regulation and tax legislation risks persist, along with the risk of a heavier tax burden on companies operating in the fuel and energy sector. Changes in the Russian currency regulation and tax legislation, as well as tax legislation changes in the countries in which Gazprom Group has a presence may affect the operations of PJSC Gazprom and Gazprom Group's entities.

**Risk management/mitigation.** PJSC Gazprom consistently monitors changes in the currency and tax legislation, and relevant requirements are strictly complied with. PJSC Gazprom liaises with government authorities to ensure timely adjustment of its operations in line with changes in Russian and international laws.

#### Risks related to changes in Russian rules on customs control and duties

Customs authorities may introduce additional customs requirements if the rules of customs control and export duty payment are amended.



**Risk management/mitigation.** PJSC Gazprom complies with the requirements of customs laws, tracking proposed amendments to regulations at the earlier drafting stages, and submits its proposals while interacting with Russian government authorities.

### **Financial risks**

#### Foreign exchange, interest rate and inflation risks

High exchange rate volatility coupled with income and expenses denominated in different currencies affect PJSC Gazprom's performance.

**Risk management/mitigation.** To minimise losses from exchange rate volatility, the Company hedges its foreign exchange and interest rate risks.

#### Credit and liquidity risks

Delayed or incomplete discharge of contractual obligations by some counterparties entails risks for PJSC Gazprom's operations.

**Risk management/mitigation.** Relations with credit institutions are subject to credit risk limits revised on a regular basis and reflecting, inter alia, the credit rating calculated by PJSC Gazprom, its subsidiaries and entities. Performance of contractual obligations is monitored.

### **Market risks**

If oil prices and gas exchange quotations drop or remain at the current level over a long period of time, resulting risks may lead to a decline in revenues. There are also volume risks associated with a certain flexibility that buyers have in terms of gas offtake.

**Risk management/mitigation.** These risks are managed by modifying the existing, or entering into new, contracts aligned with the market situation, and by determining approved types of transactions and financial instruments and counterparties to enter into such transactions.

### **PJSC Gazprom's operating risks**

#### Risks of early termination and suspension of subsoil licenses

Non-compliance with the licence agreements exposes PJSC Gazprom to risks of early termination or suspension of subsoil licences for the survey, exploration and production of hydrocarbons.

**Risk management/mitigation.** Regular monitoring, control of compliance with licence requirements and timely amendment of licence agreements minimise the likelihood of licence revocation and suspension.

#### Cost risks

Increased prices for equipment, technical devices, spare parts, as well as works and services, which form the actual cost of capital construction projects, constitute one of the most significant investment risks.

**Risk management/mitigation.** Competitive procurement, whereby the suppliers offering goods of adequate quality and submitting the lowest price bids are selected, helps cut the costs of procurement and sourcing of feedstock, materials, spare parts, works and services.

#### Facilities risks

The key operations, including hydrocarbon production, transportation, processing/refining and storage, carry process and engineering, natural and climatic risks, as well as risks of adverse actions by personnel or third parties.

**Risk management/mitigation.** The Unified Gas Supply System (UGSS) ensures reliable gas supplies. Stable operation of the system is achieved by implementing advanced and innovative diagnostic methods, carrying out timely overhaul and maintenance, revamping and upgrading existing facilities. Insurance coverage is provided to protect subsidiaries' property interests,

which includes property insurance (including offshore facilities), business interruption insurance for GPPs, and liability insurance for construction, repair and operation of production facilities.

#### Hydrocarbon reserve estimation risks

PJSC Gazprom's strategic and financial goals depend on hydrocarbon reserves, and inaccuracies in reserve estimation entail risks for PJSC Gazprom's operations.

**Risk management/mitigation.** Independent reserve estimation procedures have been developed and are implemented in accordance with the Petroleum Resources Management System (PRMS) standards. The Company's reserves estimated under Russian reserves classification standards are recorded in its books only after the annual review and approval by the State Reserves Commission of the Russian Ministry of Natural Resources.

#### Environmental risks

The key operations, including hydrocarbon production, transportation, refining/processing and storage, carry environmental risks that may lead to legal, financial and reputational implications.

**Risk management/mitigation.** The Company is committed to maintaining its environmental policy, implementing programmes and initiatives to reduce its environmental footprint, carrying out environmental activities, taking out environmental risk insurance, and introducing environmental protection technologies. Most subsidiaries have in place and continuously improve environmental management systems certified to ISO 14001:2004.

## **BRANCHES AND REPRESENTATIVE OFFICES OF PJSC GAZPROM**

Below is the information on branches and representative offices of PJSC Gazprom as of December 31, 2016:

<b>Name</b>	<b>Location</b>
Branch Avtopredpriyatie of PJSC Gazprom	Moscow
Branch Corporate Premises Management of PJSC Gazprom	Moscow
Branch Bogorodskoye Reception House	Moscow
Branch Souyz Holiday Hotel	Moscow Region
Branch Morozovka Holiday Hotel	Moscow Region
Branch Corporate Security Services of PJSC Gazprom	Moscow
Branch Central Interregional Security Division of PJSC Gazprom	Moscow Region
Branch North-Western Interregional Security Division of PJSC Gazprom	St. Petersburg
Branch Southern Interregional Security Division of PJSC Gazprom	Krasnodar
Branch Volga Interregional Security Division of PJSC Gazprom	Samara
Branch North Urals Interregional Security Division of PJSC Gazprom	Novy Urengoi
Branch South Urals Interregional Security Division of PJSC Gazprom	Yekaterinburg
Branch Siberian Interregional Security Division of PJSC Gazprom	Tomsk
Branch Far Eastern Interregional Security Division of PJSC Gazprom	Khabarovsk
Representative office in Ukraine	Kyiv
Representative office in the People's Democratic Republic of Algeria	Algiers
Representative office in the Islamic Republic of Iran	Tehran
Representative office in Republic of Turkey	Ankara
Representative office in the People's Republic of China	Beijing
Representative office in India	New Delhi
Representative office in Turkmenistan	Ashgabat
Representative office in the Republic of Kazakhstan	Astana
Representative office in Republic of Latvia	Riga
Representative office in the Federative Republic of Brazil	Rio de Janeiro
Representative office in Republic of Moldova	Kishinev
Representative office in Qatar	Doha
Representative office in Kingdom of Belgium	Brussels
Representative office in Japan	Tokyo

## CONVERSION TABLE

Metric measure	U.S. measure
1 bcm of natural gas	35,316 billion cubic feet (bcf) of natural gas
1 bcm of natural gas	6,49 barrels of oil equivalent (boe)
1 ton of oil	7,33 barrels of oil equivalent (boe)
1 ton of gas condensate	8,18 barrels of oil equivalent (boe)
1 kilometre	Approximately 0.62 miles

## GLOSSARY OF MAJOR TERMS AND ABBREVIATIONS

Terms and abbreviations	Description
Brent	Benchmark brand of oil produced in the North sea
Urals	Russian brand of export oil mixture
Adjusted EBITDA	Earnings before interest, taxes, depreciation, and amortization adjusted by changes in impairment provisions
ADR of PJSC Gazprom	American Depository Receipt issued for PJSC Gazprom shares
APG	Associated petroleum gas
Asia Pacific	Asia-Pacific Region, which includes inland countries of Asia, America and Pacific Ocean Area
bcm	Billion cubic meters
boe	Barrel of oil equivalent
bboe	Billion barrels of oil equivalent
Category A+B <sub>1</sub> +C <sub>1</sub> hydrocarbon reserves	Explored reserves estimated under Russian reserves classification with high geological certainty and corresponding to previously used A+B+C <sub>1</sub> . Recovery factors for oil, gas and gas condensate reserves are determined based on field geology with account for existing technologies.
Central Europe	Bulgaria, Bosnia-Herzegovina, Hungary, Macedonia, Poland, Romania, Serbia, Montenegro, Slovakia, Slovenia, Croatia, Czech Republic
cf	Cubic feet
CIS	Commonwealth of independent states – former Soviet Union republics excluding Latvia, Lithuania and Estonia
CS	Compressor station
EMS	Environmental Management System
EU	European Union
Europe	For the purposes of the Report includes Western and Central Europe
Europe and other countries	Countries other than Russia and the FSU countries.
FSU	Former Soviet Union republics, except for the Russian Federation
Gazprom Group, Group, Gazprom, the Company	An aggregate of entities which includes PJSC Gazprom (Head Office) and its subsidiaries
Gazprom Neft Group, Gazprom Neft	An aggregate of entities which includes PAO Gazprom Neft (Head Office) and its subsidiaries. Gazprom Group controls the Gazprom Neft Group.
Gazprom Neftekhim	An aggregate of entities which includes OOO Gazprom Neftekhim Salavat

<b>Terms and abbreviations</b>	<b>Description</b>
Salavat Group, Gazprom Neftekhim Salavat	(Head Office) and its subsidiaries. Gazprom Group controls the Gazprom Neftekhim Salavat Group.
Gazprom energoholding, Gazprom energoholding Group	An aggregate of entities which includes OOO Gazprom energoholding (Head Office) and its subsidiaries. Gazprom Group controls the Gazprom energoholding Group.
GTS	Gas Transportation System
IFRS	International Financial Reporting Standards accepted in EU
ISO 14001	International Organization for Standardization
ISO 9001	International Organization for Standardization
Joint operation	Joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligation for the liabilities, relating to the arrangement. Where the Group acts as a joint operator, the Group recognises in relation to its interest in a joint operation: its assets, including its share of any assets held jointly; its liabilities, including its share of any liabilities incurred jointly; its revenue from the sale of its share of the output arising from the joint operation; its share of the revenue from the sale of the output by the joint operation; its expenses, including its share of any expenses incurred jointly.
Joint venture	Joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. With regards to joint arrangements, where the Group acts as a joint venture, the Group recognises its interest in a joint venture as an investment and accounts for that investment using the equity method.
kWh	Kilowatt-hour
LHG	Liquefied hydrocarbon gases
LNG	Liquefied Natural Gas
LSE	London Stock Exchange
mcm	Thousand cubic meters
mmcm	Million cubic meters
m	metre
MW	Megawatt
Net debt	The sum of short-term borrowings, current portion of long-term borrowings, short-term promissory notes payable, long-term borrowings, long-term promissory notes payable and restructured tax liabilities, net of cash and cash equivalents and balances of cash and cash equivalents restricted as to withdrawal under the terms of certain borrowings and other contractual obligations
OHSAS 18001	Occupational Health and Safety Management Systems
RUB	Russian Rouble

<b>Terms and abbreviations</b>	<b>Description</b>
PRMS Standards	International classification and assessment of hydrocarbon reserves under PRMS (Petroleum Resources Management System). These standards do not only include the assessment of physical presence of hydrocarbons but also provide the economic viability of recovering the reserves and consider the period of commercial development of fields (term of development license).
sq. km	Square kilometer
tcf	Trillion cubic feet
tcm	Trillion cubic meters
ton	Metric ton
Total debt	Long-term and short-term loans and borrowings, long-term and short-term promissory notes, restructured tax payable
TPP	Thermal Power Plant
UGSF	Underground Gas Storage Facility
UGSS	Unified Gas Supply System of Russia
USD	The United States Dollars
VAT	Value Added Tax
Western Europe	Austria, Andorra, Belgium, Germany, Greece, Denmark, Ireland, Iceland, Spain, Italy, Cyprus, Liechtenstein, Luxembourg, Malta, Monaco, The Netherlands, Norway, Portugal, San Marino, the United Kingdom , Turkey, Finland, France, Switzerland, Sweden

## **ADDRESSES AND CONTACTS**

### **Full name**

Public Joint Stock Company Gazprom

### **Abbreviated name**

PJSC Gazprom

### **Location**

Moscow, Russian Federation

Mailing address: 16 Nametkina str., Moscow, GSP-7, 117997

Phone: +7 (495) 719-30-01

Fax: +7 (495) 719-83-33

### **Web-site**

[www.gazprom.ru](http://www.gazprom.ru) – in Russian,

[www.gazprom.com](http://www.gazprom.com) – in English

### **E-mail**

[gazprom@gazprom.ru](mailto:gazprom@gazprom.ru)

### **Certificate on entry in the Unified State Register of Legal Entities**

issued by the Interregional Inspectorate of the Russian Ministry of Taxes and Levies for the Moscow city on 2 August, 2002,

OGRN - 1027700070518

### **Taxpayer's identification number (INN)**

7736050003

### **Contact for shareholders of PJSC Gazprom**

Ivan V. Troynikov

Phone: +7 (812) 609-76-27

Fax: +7 (812) 609-76-91

E-mail: [I.Troynikov@adm.gazprom.ru](mailto:I.Troynikov@adm.gazprom.ru)

### **Contact for investors:**

Ivan V. Khromushin

Phone: +7 (812) 609-41-29

Fax: +7 (812) 609-43-34

E-mail: [ir@gazprom.ru](mailto:ir@gazprom.ru)

### **Auditor of PJSC Gazprom**

FBK Ltd.

Member of non-profit partnership «Audit Chamber of Russia» (NP ACR) being a self-regulatory organization of auditors

Member of the self-regulated organisation Non-Profit Partnership Audit Chamber of Russia.

Location and mailing address: 44/1 Myasnitskaya St. bldg. 2 AB, Moscow, 101990, Russian Federation

Phone: +7 (495) 737-53-53

Fax: +7 (495) 737-53-47

Website: [www.fbk.ru](http://www.fbk.ru)



**Registrar**

Closed Joint Stock Company Specialized Registrar – Holder of the register of gas industry (ZAO DRAGa)

Location and mailing address: 71/32, Novocheryumushkinskaya str., Moscow 117420, Russian Federation

Phone: +7 (495) 719-40-44

Fax: +7 (495) 719-45-85

Website: [www.draga.ru](http://www.draga.ru)

**Depository bank (ADR of PJSC Gazprom)**

The Bank of New York Mellon

Web site: [www.bnymellon.com](http://www.bnymellon.com)