

# The Power Within





# Factbook “Gazprom in Figures 2012–2016”

**Preface.** Gazprom in Figures 2012–2016 Factbook contains information and statistics prepared for the annual General Shareholders Meeting of PJSC Gazprom in 2017. The Factbook is based on PJSC Gazprom’s corporate reports and information derived from Russian and foreign information publications.

The terms “PJSC Gazprom” and the Company as used in this Factbook refers to the parent company of Gazprom Group, i.e. to Public Joint Stock Company Gazprom (until 17 June 2015 – Open Joint Stock Company Gazprom, JSC Gazprom).

Similarly, the terms “Gazprom Neft Group” and “Gazprom Neft” refer to PAO Gazprom neft and its subsidiaries, “Gazprom energoholding” refers to OOO Gazprom energoholding and its subsidiaries, “Gazprom neftekhim Salavat” refers to OAO Gazprom neftekhim Salavat and its subsidiaries.

Gazprom’s overall results as stated in the Factbook are recorded in compliance with the principles for preparing Gazprom Group’s consolidated financial statements prepared under IFRS (hereafter, the “IFRS consolidated financial statements”) and/or for the whole of Gazprom Group companies included for the purposes of Gazprom Group’s IFRS consolidated financial statements.

In accordance with IFRS 11 Joint Arrangements, starting from 1 January 2012 the volumes of hydrocarbon reserves, production and processing of hydrocarbons provided in the Factbook include share in the results of entities where Gazprom has investments classified as joint operations. For the previous periods, the results of the respective entities were excluded from the results of Gazprom Group and were provided separately as results of associated and jointly controlled companies attributable to the share of the Group.

Some figures of PJSC Gazprom and its subsidiaries were derived from management accounts. Figures calculated using these methods may differ due to differences in methodologies for preparing consolidated financial statements and maintaining management accounts.

Figures representing barrels of oil equivalent (boe) were calculated using the specified conversion ratios. The Group maintains its management accounts in metric units.

The Group’s financial results are derived from Gazprom Group’s IFRS consolidated financial statements. Gazprom Group’s accounting (financial) statements are expressed in Russian rubles. Equivalent amounts in USD and EUR were calculated at the specified exchange rates and do not represent the Group’s financial statements data.

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	As at and for the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Share in the world natural gas industry</b>					
Gas reserves*	18.3%	16.6%	16.8%	16.9%	17.1%
Gas production*	13.6%	13.5%	12.1%	11.2%	11.2%
<b>Share in the Russian fuel and energy complex</b>					
Russian natural gas reserves	72.0%	72.3%	72.3%	71.6%	71.7%
Gas production**	74.6%	73.1%	69.3%	66.0%	65.6%
Crude oil and gas condensate production**	10.6%	10.9%	11.0%	11.1%	11.5%
Primary processing of oil and stable gas condensate**	18.8%	19.4%	18.9%	18.5%	18.4%
Electric power energy production**	16.2%	15.3%	14.6%	14.3%	14.6%
<b>Total length of trunk pipelines and pipeline branches on the territory of Russia, thousand km</b>	<b>168.3</b>	<b>168.9</b>	<b>170.7</b>	<b>171.2</b>	<b>171.4</b>

\* Based on International Natural Gas Center CEDIGAZ and PJSC Gazprom figures. Statistics on international production and trade are adjusted to Russian standard terms and conditions using 1.07 ratio.

\*\* Based on Federal State Statistics Service, Ministry of Energy of Russia and PJSC Gazprom figures.

Major financial results and ratios of Gazprom Group

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Statement of comprehensive income figures</b>					
Sales, RUB mm	4,766,495	5,249,965	5,589,811	6,073,318	6,111,051
Operating expences, RUB mm	3,421,847	3,600,908	3,943,669	4,635,502	5,244,983
Operating profit, RUB mm	1,350,677	1,587,209	1,310,424	1,228,301	725,580
Adjusted EBITDA, RUB mm	1,645,921	2,009,475	1,962,558	1,874,726	1,322,199
Profit for the year, RUB mm	1,252,415	1,165,705	157,192	805,199	997,104
Profit for the year attributable to owners of PJSC Gazprom, RUB mm	1,224,474	1,139,261	159,004	787,056	951,637
Basic and diluted earnings per share for profit attributable to the owners of PAO Gazprom, RUB	53.35	49.64	6.93	34.29	42.19
<b>Balance sheet figures</b>					
Total assets, RUB mm	11,956,836	13,436,236	15,177,470	17,052,040	16,918,938
Current assets, RUB mm	2,420,803	2,862,670	3,461,155	3,993,722	3,234,346
Inventories, RUB mm	462,746	569,724	671,916	804,364	711,199
Current liabilities, RUB mm	1,492,066	1,391,465	1,855,947	2,124,701	1,921,808
Total debt, RUB mm	1,500,592	1,801,928	2,688,824	3,442,215	2,829,623
Net debt, RUB mm	1,071,214	1,112,798	1,650,633	2,083,120	1,932,895
Equity, excluding non-controlling interest, RUB mm	8,170,733	9,319,590	9,816,558	10,589,586	11,094,531
Equity, including non-controlling interest, RUB mm	8,479,945	9,634,354	10,120,021	10,914,622	11,441,839
<b>Capital expenditures*, RUB mm</b>	1,233,210	1,213,850	1,221,328	1,344,829	1,344,162
<b>Statement of cash flows figures</b>					
Cash flows from operating activities, RUB mm	1,472,779	1,741,804	1,915,769	2,030,927	1,571,323
Capital expenditures, RUB mm	1,349,114	1,397,195	1,262,140	1,641,024	1,369,052
Cash flows from investing activities, RUB mm	1,287,216	1,466,512	1,441,305	1,664,156	1,445,965
Cash flows from financing activities, RUB mm	253,870	33,262	262,587	138,305	460,479
Cash and cash equivalents as at the end of the reporting year, RUB mm	425,720	689,130	1,038,191	1,359,095	896,728
Self-financing ratio	109%	125%	152%	124%	115%
<b>Return ratios**</b>					
Return on operating profit	28%	30%	23%	20%	12%
Return on adjusted EBITDA	35%	38%	35%	31%	22%
Return on profit for the year	26%	22%	3%	13%	16%
Return on assets (ROA)	11%	9%	1%	5%	6%
Return on equity (ROE)	15%	13%	2%	8%	9%

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Ratios of total and net debt**</b>					
Total debt / equity and non-controlling interest	18%	19%	27%	32%	25%
Total debt / total debt, equity and non-controlling interest	15%	16%	21%	24%	20%
Total debt / total assets	13%	13%	18%	20%	17%
Total debt / adjusted EBITDA	0.91	0.90	1.37	1.84	2.14
Net debt / adjusted EBITDA	0.65	0.55	0.84	1.11	1.46
<b>Liquidity ratios**</b>					
Current liquidity ratio	1.62	2.06	1.86	1.88	1.68
Quick liquidity ratio	1.31	1.65	1.50	1.50	1.31
<b>Other ratios**</b>					
EV / EBITDA	2.7	2.2	2.4	2.8	4.2
P / E	2.7	2.8	18.8	4.0	3.7
P / S	0.7	0.6	0.6	0.5	0.6

\* Capital expenditures are derived from Segment Information in PJSC Gazprom's IFRS consolidated financial statements.

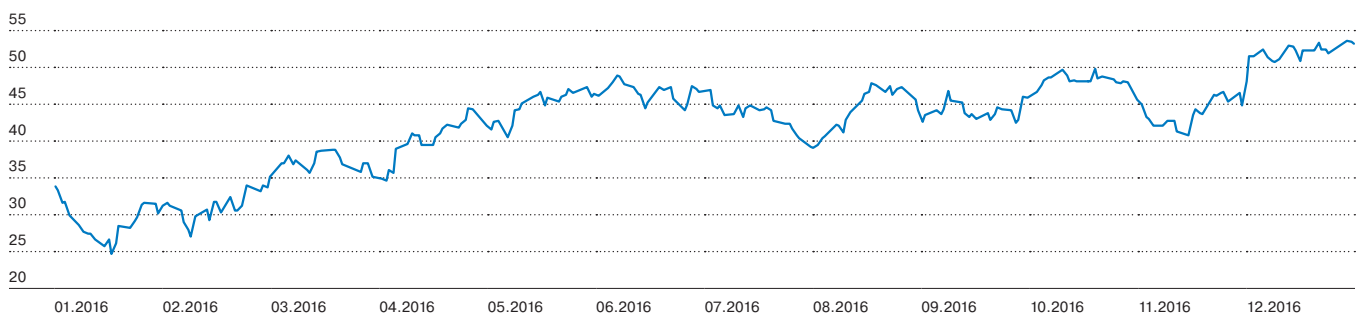
\*\* Calculation methods are provided in the "Calculation of Financial Ratios" section.



Indicator*	Measure	As at and for the year ended 31 December				
		2013	2014	2015	2016	
Consumer price index	%	6.6%	6.5%	11.4%	12.9%	5.4%
Producer price index	%	5.1%	3.7%	5.9%	10.7%	7.4%
Average RUB/USD currency exchange rate for the period	RUB/USD	31.08	31.90	38.60	61.32	66.83
RUB/USD currency exchange rate at the end of the period	RUB/USD	30.37	32.73	56.26	72.88	60.66
Average RUB/EUR currency exchange rate for the period	RUB/EUR	39.92	42.39	50.99	67.99	73.99
RUB/EUR currency exchange rate at the end of the period	RUB/EUR	40.23	44.97	68.34	79.70	63.81
Brent oil price (dated)**	USD/barrel	109.99	110.28	55.98	35.74	54.94
Urals oil price (average CIF MED/RDAM)**	USD/barrel	108.09	109.10	53.40	33.11	53.27
Brent average annual oil price (Dated)**	USD/barrel	111.67	108.66	98.95	52.39	43.73
Urals (average CIF MED/RDAM) average annual oil price**	USD/barrel	110.37	107.71	96.94	51.42	42.10

\* Economic indicators and exchange rates based on the data provided by Central Bank of Russia and the Federal State Statistics Service. The average exchange rates calculated based on the working days exchange rates provided by Central Bank of Russia.  
 \*\* Source: Platts.

**Urals oil price dynamics in 2016, USD/barrel**



Source: Platts

Indicator	Measure	As at and for the year ended 31 December				
		2012	2013	2014	2015	2016
Price per share on PAO Moscow Exchange						
as at the end of the year	RUB	143.91	138.75	130.31	136.09	154.55
minimum	RUB	137.18	107.17	117.87	130.90	124.60
maximum	RUB	199.69	158.00	153.25	163.00	168.47
Price per ADR on LSE						
as at the end of the year	USD	9.46	8.55	4.65	3.69	5.05
minimum	USD	8.70	6.48	3.73	3.62	3.02
maximum	USD	13.53	9.82	9.06	6.24	5.27
Number of ordinary shares issued	mm shares	23,674	23,674	23,674	23,674	23,674
Number of ordinary shares held by the subsidiaries of PJSC Gazprom	mm shares	724	723	723	723	1,573
Number of ordinary shares issued less shares by the subsidiaries of PJSC Gazprom, as at the end of the year*	mm shares	22,950	22,951	22,951	22,951	22,101
Market capitalization**	USD bn	111.6	99.9	54.8	44.2	60.3
change (y-o-y)	%	-9.0%	-10.5%	-45.1%	-19.3%	36.4%
MICEX index	points	1,475	1,504	1,397	1,761	2,233
change (y-o-y)	%	5.2%	2.0%	-7.1%	26.1%	26.8%
RTS index	points	1,527	1,443	791	757	1,152
change (y-o-y)	%	10.5%	-5.5%	-45.2%	-4.3%	52.2%
Daily average trading volume, MICEX	mm shares	39.4	43.9	52.5	32.5	29.9
Daily average trading volume, LSE	mm ADRs*	32.1	25.0	27.6	16.4	15.9
Dividend per share***	RUB	5.99	7.20	7.20	7.89	8.0397
Share capital structure						
Shareholding controlled by the Russian Federation****						
Federal Agency for State Property Management	%	38.37%	38.37%	38.37%	38.37%	38.37%
OAo Rosneftgaz	%	10.74%	10.97%	10.97%	10.97%	10.97%
OAo Rosgazifikatsiya	%	0.89%	0.89%	0.89%	0.89%	0.89%
ADR holders*****	%	26.96%	25.78%	28.05%	27.83%	26.86%
Other holders of record	%	23.04%	23.99%	21.72%	21.94%	22.91%
Total	%	100%	100%	100%	100%	100%

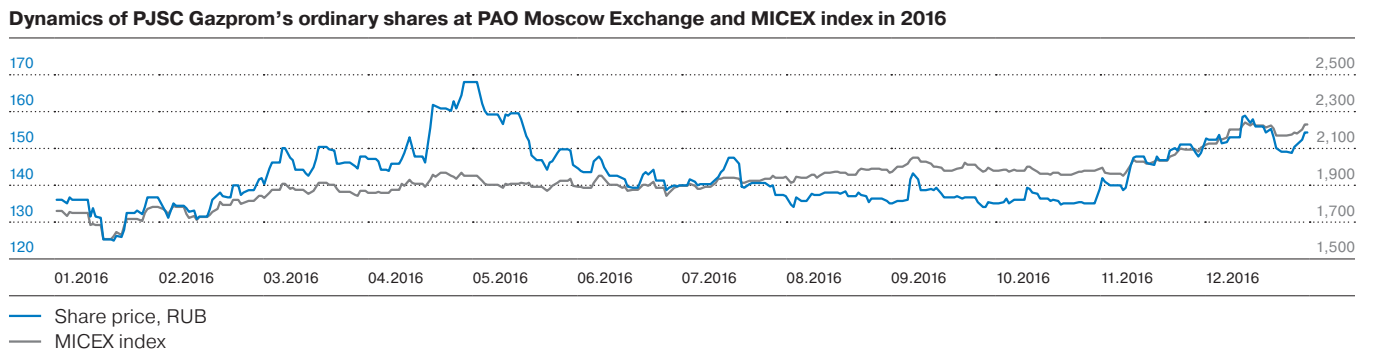
\* As at 31 December of the respective year, there were no ordinary shares of PJSC Gazprom which belong to the Company.

\*\* Market capitalization based on PAO Moscow Exchange share price converted into USD.

\*\*\* For 2016 – recommended dividends.

\*\*\*\* The Government of the Russian Federation is controlling over 50% of PAO Gazprom.

\*\*\*\*\* The Bank of New York Mellon issued ADRs on PAO Gazprom's shares.

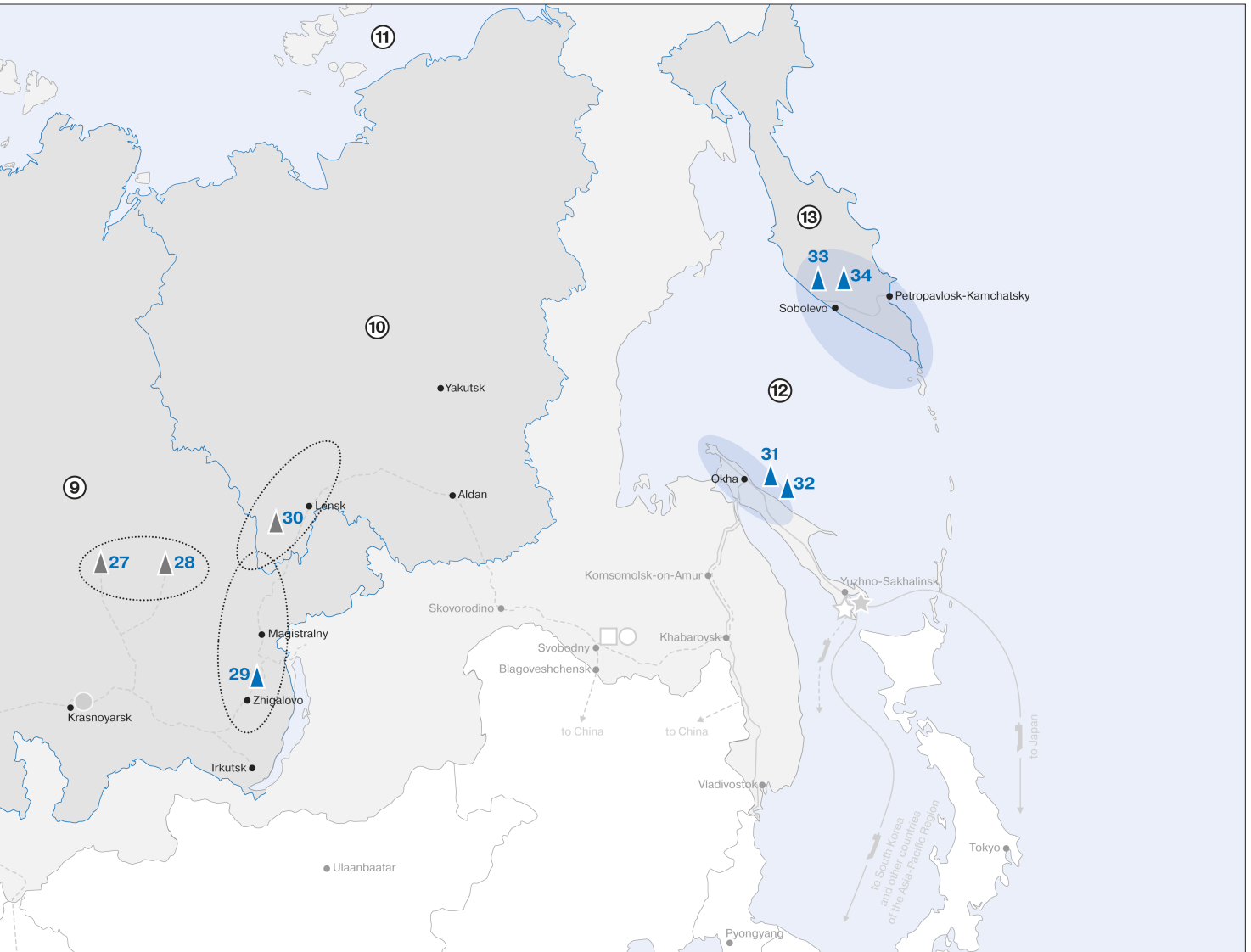


## Hydrocarbon fields of Gazprom Group and joint ventures on the territory of the Russian Federation, areas of geological exploration for hydrocarbons



Note. Data as at 31 December 2016.





**Fields**

<b>1</b> Astrakhanskoye	<b>13</b> Novoportovskoye	<b>25</b> Priobskoye
<b>2</b> Orenburgskoye	<b>14</b> Yamburgskoye	<b>26</b> Zimnee
<b>3</b> Eastern section of Orenburg OGC field	<b>15</b> Vostochno-Messoyakhskoe*	<b>27</b> Kuymbinskoye*
<b>4</b> Shtokmanovskoye	<b>16</b> Urengoyevskoye	<b>28</b> Sobinskoye
<b>5</b> Dolginskoye	<b>17</b> Zapolyarnoye	<b>29</b> Kovyktinskoye
<b>6</b> Prirazlomnoye	<b>18</b> Uzhno-Russkoye	<b>30</b> Chayandinskoye
<b>7</b> Kruzenshternskoye	<b>19</b> Sutorminskoye and Severo-Karamovskoye	<b>31</b> Kirinskoye
<b>8</b> Kharasaveiskoye	<b>20</b> Krainee	<b>32</b> Yuzhno-Kirinskoye
<b>9</b> Severo-Tambeyskoye	<b>21</b> Vyngayakhinskoye	<b>33</b> Kshukskoye
<b>10</b> Bovanenkovskoye	<b>22</b> Novogodnee	<b>34</b> Nizhne-Kvakchinskoye
<b>11</b> Severo-Kamennomysskoye	<b>23</b> Vyngapurovskoye	
<b>12</b> Kamennomysskoye-more	<b>24</b> Yety-Purovskoye	

\* Field license holders are Group's joint ventures.

## Reserves

Hydrocarbon reserves of Gazprom Group are classified in accordance with both Russian and international methodologies, the latter being part of the Petroleum Resources Management System (PRMS). PRMS is international reserves classification standard that has replaced SPE definitions published in 1997.

### Russian Reserves Classification System

Starting from 2016, Russia has been applying a new oil and flammable gases classification system approved by the Ministry of Natural Resources and Environment of the Russian Federation (Decree No. 477 dated 1 November 2013). Reserves are now classified into the following categories: A (producing, developed), B<sub>1</sub> (producing, undeveloped, explored), B<sub>2</sub> (undeveloped, estimated), C<sub>1</sub> (explored) and C<sub>2</sub> (estimated). Resources are categorised into D<sub>0</sub>, D<sub>1</sub> (localised), D<sub>1</sub> and D<sub>2</sub>.

Corporate reporting statements will indicate an aggregate of categories A+B<sub>1</sub>+C<sub>1</sub>, or explored reserves of high geological certainty and corresponding to previously used categories A+B+C<sub>1</sub>. The new classification introduces recoverable gas reserves, which were previously assumed to equal gas-in-place reserves. Estimation of recoverable gas, condensate or oil reserves will be based on field development project documents approved since 2016 onward.

According to the new classification, recoverable gas reserves will be accounted for in the corporate reports. Since the recovery rate is always less than 100%, gas reserves included in the reports may decrease. This change in gas reserves will be gradual, depending on the approval of new field development project documents that will be used to estimate recoverable reserves. In addition, the approved project documents will be used to estimate reserves recoverable within the economically viable life of fields. Re-classification of existing reserves and inclusion of new reserves in the State Register of Hydrocarbon Reserves in accordance with the new classification will take place from 1 January 2016 till 1 January 2021 (Paragraph 2 of Resolution No. 01-15/132-pr passed by the Ministry of Natural Resources and Environment of the Russian Federation). Comparison of the new classification with the international one will be carried out after a transition period associated with the approbation of the new classification at Gazprom Group's fields.

### PRMS International Standards

Estimation of recoverable reserves under PRMS International Standards takes into account both the probability of hydrocarbon occurrence in a given geological formation and economic viability of extraction. Factors influencing the economic viability of a given deposit and accounted for in the estimation include costs of exploration, drilling, production and transportation, taxes, current market prices for hydrocarbons, etc.

### PRMS International Standards classify reserves as proved, probable and possible

Proved reserves include reserves confirmed with a high degree of certainty through analysis of the development history and/or volume method analysis of relevant geological and engineering data. Proved reserves are those with a higher than 90% probability of extraction based on available evidence, the probability assessment accounting for technical and economic factors.

Probable reserves are those located within the geological structure with a lesser degree of certainty because fewer wells have been drilled and/or certain operational tests have not been conducted. Probable reserves have a higher than 50% probability of extraction based on available evidence; the probability assessment also takes into account technical and economic factors.

It is clear that estimation of proved and probable reserves of natural gas involves multiple uncertainties. Its accuracy depends on the quality of available information and interpretation in engineering and geological terms. Results of drilling, testing and production after the date of audit might cause reserves to be revised upwards or downwards. Changes in the price of natural gas, gas condensate or oil may also affect proved and probable reserves estimates, future net revenues and net present value, because estimation of reserves is always based on prices and costs as at the audit date.

### Differences between PRMS International Standards and SEC Standards

- **Certainty of Existence.** Under PRMS International Standards, reserves in undeveloped drilling sites that are located more than one standard interwell distance from a commercial producing well may be classified as proved reserves if there is "reasonable certainty" that they exist. Under SEC Standards, it must be "demonstrated with certainty" that reserves exist before they may be classified as proved reserves.
- **Duration of Licence.** Under PRMS Standards, proved reserves are projected for the entire economically viable life of a given field. Under SEC Standards, oil and gas reserves may not be classified as proved if they are extracted after the licence expires unless the licence holder has the right to renew it and there is a demonstrable history of licence renewal. According to the Federal Law on Subsoil Resources, the licence holder may request renewal of its existing licence if there are extractable reserves remaining upon expiry of the licence's initial validity period provided that the licence holder complies with material provisions of the licence agreement.

Gazprom prepares field development plans (to be submitted for government approval) based on the economic life of a given field, even where such life exceeds the initial term of the relevant licence. Gazprom complies with all material provisions of its licence agreements and thus may

renew the existing licences for the full economic life of relevant fields upon expiry of their initial validity periods. However, Gazprom does not have an absolute legal right or significant demonstrable history of licence renewals. It makes it uncertain whether Gazprom's extractable

reserves, which it plans to recover after the current licence expires, may be considered proved under SEC Standards. SEC experts have not provided any definitive guidance on whether such extractable reserves could be considered proved in these circumstances under SEC Standards.

**Hydrocarbon reserves of Gazprom Group in Russia**

(taking into account share in reserves of companies,  
investments in which are classified as joint operations)

## Metric units

	As at 31 December				
	2012	2013	2014	2015	2015
<b>Natural gas, bcm</b>					
Reserves, Russian classification	35,169.8	35,696.6	36,101.4	36,147.3	36,443.9
of which evaluated according PRMS	94,%	93,%	94,%	94,%	95,%
Proved	19,133.0	18,939.3	18,894.7	18,791.2	18,596.5
Probable	4,254.1	4,325.2	4,616.0	4,913.8	5,258.6
Proved + probable	23,387.1	23,264.5	23,510.7	23,705.0	23,855.1
<b>Gas condensate, mm tonnes</b>					
Reserves, Russian classification	1,386.1	1,384.4	1,447.0	1,499.5	1,534.9
of which evaluated according PRMS	89%	89%	92%	92%	94%
Proved	633.8	638.8	642.3	699.5	759.2
Probable	174.9	193.6	206.3	233.8	259.7
Proved + probable	808.7	832.4	848.6	933.3	1,018.9
<b>Crude oil, mm tonnes</b>					
Reserves, Russian classification	1,992.2	2,019.0	2,053.1	2,082.0	2,078.5
of which evaluated according PRMS	89%	89%	91%	92%	93%
Proved	819.5	834.8	830.5	792.7	789.5
Probable	588.8	572.4	543.9	562.7	589.2
Proved + probable	1,408.3	1,407.2	1,374.4	1,355.4	1,378.7

## Oil equivalent

	As at 31 December				
	2012	2013	2014	2015	2016
<b>Natural gas, mm boe</b>					
Reserves, Russian classification	228,252.0	231,670.9	234,298.1	234,596.0	236,520.9
Proved	124,173.2	122,916.1	122,626.6	121,954.9	120,691.3
Probable	27,609.1	28,070.5	29,957.8	31,890.6	34,128.3
Proved + probable	151,782.3	150,986.6	152,584.4	153,845.5	154,819.6
<b>Gas condensate, mm boe</b>					
Reserves, Russian classification	11,338.3	11,324.4	11,836.5	12,265.9	12,555.5
Proved	5,184.5	5,225.4	5,254.0	5,721.9	6,210.3
Probable	1,430.7	1,583.6	1,687.5	1,912.5	2,124.3
Proved + probable	6,615.2	6,809.0	6,941.5	7,634.4	8,334.6



	As at 31 December				
	2012	2013	2014	2015	2016
<b>Crude oil, mm boe</b>					
Reserves, Russian classification	14,602.8	14,799.3	15,049.2	15,261.1	15,235.4
Proved	6,006.9	6,119.1	6,087.6	5,810.5	5,787.0
Probable	4,315.9	4,195.7	3,986.8	4,124.6	4,318.8
Proved + probable	10,322.8	10,314.8	10,074.4	9,935.1	10,105.9
<b>Total, mm boe</b>					
Reserves, Russian classification	254,193.1	257,794.6	261,183.8	262,123.0	264,311.8
Proved	135,364.6	134,260.6	133,968.2	133,487.3	132,688.6
Probable	33,355.7	33,849.8	35,632.1	37,927.7	40,571.5
Proved + probable	168,720.3	168,110.4	169,600.3	171,415.0	173,260.1

**Note.** For management accounting purposes, Gazprom Group measures hydrocarbon reserves and production in metric units. In this Factbook, 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 Annual Report 2015.

### Change in Gazprom Group's hydrocarbon reserves (Russian classification of reserves) in Russia, 2013–2016 (taking into account share in reserves of companies, investments in which are classified as joint operations)

	Natural gas, bcm	Gas condensate*, mm tonnes	Crude oil, mm tonnes
Reserves as at 31 December 2012	35,169.8	1,386.1	1,992.2
Additions to reserves as a result of exploration	647.8	5.4	48.2
Transfer of reserves discovered in 2013 to the Undistributed Subsoil Fund of Russia** and to other companies, acquisition from other companies	-137.2	-1.9	-1.4
Receipt of licenses, including	484.1	3.6	-
due to new fields discovery***	0.9	0.1	-
due to resolution of the Russian government, without tendering process	483.2	3.5	-
Return of licenses	-	-	-
Acquisition of assets	13.7	0.5	-
Disposal of assets	-	-	-
Revaluation	5.6	1.2	22.3
Production (including losses)	-487.2****	-10.5	-42.3
<b>Reserves as at 31 December 2013</b>	<b>35,696.6</b>	<b>1,384.4</b>	<b>2,019.0</b>
Additions to reserves as a result of exploration	822.5	114.2	24.7
Transfer of reserves discovered in 2014 to the Undistributed Subsoil Fund of Russia** and to other companies, acquisition from other companies	-91.1	-6.9	2.3
Receipt of licenses, including	182.3	2.8	5.8
due to new fields discovery***	-	-	-
due to resolution of the Russian government, without tendering process	-	-	-
Return of licenses	-	-	-0.1
Acquisition of assets	-	-	-
Disposal of assets	-	-	-
Revaluation	-66.0	-37.0	44.7
Production (including losses)	-442.9****	-10.5	-43.3

	Natural gas, bcm	Gas condensate*, mm tonnes	Crude oil, mm tonnes
<b>Reserves as at 31 December 2014</b>	<b>36,101.4</b>	<b>1,447.0</b>	<b>2,053.1</b>
Additions to reserves as a result of exploration	531.1	68.5	20.6
Transfer of reserves discovered in 2015 to the Undistributed Subsoil Fund of Russia** and to other companies, acquisition from other companies	-62.9	-4.7	0.9
Receipt of licenses, including	-	-	4.2
due to new fields discovery***	-	-	-
due to resolution of the Russian government, without tendering process	-	-	-
Return of licenses	-	-	-
Acquisition of assets	-	-	-
Disposal of assets	-	-	-
Revaluation	-5.0	-0.1	47.1
Production (including losses)	-417.3****	-11.2	-43.9
<b>Reserves as at 31 December 2015</b>	<b>36,147.3</b>	<b>1,499.5</b>	<b>2,082.0</b>
Additions to reserves as a result of exploration	457.4	38.0	19.3
Transfer of reserves discovered in 2016 to the Undistributed Subsoil Fund of Russia** and to other companies, acquisition from other companies	-2.4	-1.7	-2.0
Receipt of licenses, including	257.5	10.9	15.0
due to new fields discovery***	-	-	-
due to resolution of the Russian government, without tendering process	-	-	-
Return of licenses	-0.6	-	-
Acquisition of assets	-	-	-
Disposal of assets	-	-	-
Revaluation	2.0	-0.1	11.1
Production (including losses)	-417.3****	-11.7	-46.9
<b>Reserves as at 31 December 2016</b>	<b>36,443.9</b>	<b>1,534.9</b>	<b>2,078.5</b>

\* Any changes in gas condensate reserves due to production are recognized as converted into stable gas condensate (C<sub>s</sub>). The production volume of unstable gas condensate of Gazprom Group see in Production section.

\*\* Under the law of the Russian Federation, 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.

\*\*\* Including licenses received by Gazprom Group in previous years.

\*\*\*\* Excluding dissolved gas.

### Replacement ratio of Gazprom group's hydrocarbon reserves, Russian classification of reserves

(taking into account share in reserves of companies,  
investments in which are classified as joint operations)

	For the year ended 31 December				
	2012*	2013	2014	2015	2016
Natural gas	1.18	1.33	1.86	1.27	1.10
Gas condensate	2.31	0.52	10.88	6.12	3.25
Crude oil	1.67	1.14	0.57	0.47	0.41
<b>Total</b>	<b>1.24</b>	<b>1.29</b>	<b>1.95</b>	<b>1.32</b>	<b>1.09</b>

\* Excluding share of Gazprom Group in reserves and production of companies, investments in which are classified as joint operations.

### Years of Gazprom Group's hydrocarbon reserves, Russian classification of reserves

(taking into account share in reserves of companies,  
investments in which are classified as joint operations)

	For the year ended 31 December				
	2012*	2013	2014	2015	2016
Natural gas	73	73	82	87	87
Crude oil	54	48	47	47	44

\* Excluding share of Gazprom Group in reserves and production of companies, investments in which are classified as joint operations.

### Natural gas reserves of Gazprom Group in Russia, PRMS standards, bcm

(taking into account share in reserves of companies,  
investments in which are classified as joint operations)

	As at 31 December				
	2012	2013	2014	2015	2016
<b>PJSC Gazprom and its major 100% subsidiaries*</b>					
Proved	18,133.7	18,036.7	18,023.7	17,942.5	17,780.9
Probable	4,068.2	4,072.4	4,303.7	4,587.6	4,930.2
Proved + probable	22,201.9	22,109.1	22,327.4	22,530.1	22,711.1
<b>PAO Gazprom Neft and its subsidiaries</b>					
Proved	193.8	216.7	223.5	239.5	243.0
Probable	133.1	111.3	168.3	182.1	183.0
Proved + probable	326.9	328.0	391.8	421.6	426.0
<b>ZAO Purgaz</b>					
Proved	172.9	158.3	145.0	132.3	120.6
Probable	12.9	12.9	12.9	12.9	12.9
Proved + probable	185.8	171.2	157.9	145.2	133.5
<b>OAO Severneftegazprom</b>					
Proved	613.7	510.0	484.9	459.8	434.6
Probable	36.8	125.7	125.7	125.7	125.7
Proved + probable	650.5	635.7	610.6	585.5	560.3
<b>Total (excluding share in reserves of companies, investments in which are classified as joint operations)</b>					
Proved	19,114.1	18,921.7	18,877.1	18,774.1	18,579.1
Probable	4,251.0	4,322.3	4,610.6	4,908.3	5,251.8
Proved + probable	23,365.1	23,244.0	23,487.7	23,682.4	23,830.9
<b>Companies, investments in which are classified as joint operations (attributable to the share of Gazprom Group)</b>					
Proved	18.9	17.6	17.6	17.1	17.4
Probable	3.1	2.9	5.4	5.5	6.8
Proved + probable	22.0	20.5	23.0	22.6	24.2
<b>Total (including share in reserves of companies, investments in which are classified as joint operations)</b>					
Proved	19,133.0	18,939.3	18,894.7	18,791.2	18,596.5
Probable	4,254.1	4,325.2	4,616.0	4,913.8	5,258.6
Proved + probable	23,387.1	23,264.5	23,510.7	23,705.0	23,855.1

\* For the list of companies, see Glossary.

### Gas condensate reserves of Gazprom Group in Russia, PRMS classification, mm tonnes

(taking into account share in reserves of companies,  
investments in which are classified as joint operations)

	As at 31 December				
	2012	2013	2014	2015	2016
<b>PJSC Gazprom and its major 100% subsidiaries*</b>					
Proved	633.8	634.4	637.3	691.9	751.7
Probable	174.9	190.3	202.8	230.2	257.0
Proved + probable	808.7	824.7	840.1	922.1	1,008.7
<b>PAO Gazprom Neft and its subsidiaries</b>					
Proved	x	4.4	5.0	7.6	7.5
Probable	x	3.3	3.5	3.6	2.7
Proved + probable	x	7.7	8.5	11.2	10.2
<b>Total</b>					
Proved	633.8	638.8	642.3	699.5	759.2
Probable	174.9	193.6	206.3	233.8	259.7
Proved + probable	808.7	832.4	848.6	933.3	1,018.9

\* For the list of companies, see Glossary.

### Oil reserves of Gazprom Group in Russia, PRMS standards, mm tonnes

(taking into account share in reserves of companies,  
investments in which are classified as joint operations)

	As at 31 December				
	2012	2013	2014	2015	2016
<b>PJSC Gazprom and its major 100% subsidiaries*</b>					
Proved	58.9	55.5	55.6	44.7	44.6
Probable	105.0	121.0	45.9	35.0	35.0
Proved + probable	163.9	176.5	101.5	79.7	79.6
<b>PAO Gazprom Neft and its subsidiaries</b>					
Proved	654.9	683.9	675.9	655.6	652.8
Probable	418.8	393.8	432.8	458.7	486.1
Proved + probable	1,073.7	1,077.7	1,108.7	1,114.3	1,138.9
<b>ZAO Purgaz</b>					
Proved	713.8	739.4	731.5	700.3	697.4
Probable	523.8	514.8	478.7	493.7	521.1
Proved + probable	1,237.6	1,254.2	1,210.2	1,194.0	1,218.5
<b>OAO Severneftegazprom</b>					
Proved	105.7	95.4	99.1	92.4	92.1
Probable	65.0	57.6	65.1	69.0	68.1
Proved + probable	170.7	153.0	164.2	161.4	160.2



	As at 31 December				
	2012	2013	2014	2015	2016
<b>Total (excluding share in reserves of companies, investments in which are classified as joint operations)</b>					
Proved	819.5	834.8	830.5	792.7	789.5
Probable	588.8	572.4	543.9	562.7	589.2
Proved + probable	1,408.3	1,407.2	1,374.4	1,355.4	1,378.7

\* For the list of companies, see Glossary.

### Hydrocarbon reserves (Russian classification of reserves) of Gazprom Group in Russia

(taking into account share in reserves of companies, investments in which are classified as joint operations)

	As at 31 December				
	2012	2013	2014	2015	2016
<b>Natural gas, bcm</b>					
Ural Federal District	23,144.2	22,456.6	22,032.2	21,613.5	21,309.0
Northwest Federal District	87.4	86.9	85.8	85.1	307.3
South Federal District and North Caucasian Federal District	2,510.5	2,498.9	2,997.4	2,985.3	2,973.1
Volga Federal District	717.8	696.2	684.1	663.5	648.9
Siberian Federal District	1,737.5	1,755.1	1,936.7	1,971.6	2,103.3
Far Eastern Federal District	1,181.0	1,197.2	1,197.2	1,402.1	1,488.3
Continental shelf of the Russian Federation	5,791.4	7,005.7	7,168.0	7,426.2	7,614.0
<b>Total</b>	<b>35,169.8</b>	<b>35,696.6</b>	<b>36,101.4</b>	<b>36,147.3</b>	<b>36,443.9</b>
<b>Gas condensate, mm tonnes</b>					
Ural Federal District	713.8	712.4	675.7	695.2	690.6
Northwest Federal District	20.6	20.6	20.5	20.5	31.3
South Federal District and North Caucasian Federal District	374.3	371.5	447.5	444.7	441.9
Volga Federal District	57.4	56.9	56.5	56.0	55.7
Siberian Federal District	92.8	91.4	92.6	92.3	97.0
Far Eastern Federal District	26.4	27.3	27.3	29.6	30.5
Continental shelf of the Russian Federation	100.8	104.3	126.9	161.2	187.9
<b>Total</b>	<b>1,386.1</b>	<b>1,384.4</b>	<b>1,447.0</b>	<b>1,499.5</b>	<b>1,534.9</b>
<b>Crude oil, mm tonnes</b>					
Ural Federal District	1,532.9	1,550.9	1,560.1	1,541.6	1,531.3
Northwest Federal District	4.8	4.8	4.8	5.6	19.8
South Federal District and North Caucasian Federal District	7.3	8.0	7.9	8.0	7.9
Volga Federal District	156.2	159.0	159.9	200.2	202.5
Siberian Federal District	188.5	191.4	198.9	205.0	201.3
Far Eastern Federal District	55.1	57.5	57.6	58.4	54.6
Continental shelf of the Russian Federation	47.4	47.4	63.9	63.2	61.1
<b>Total</b>	<b>1,992.2</b>	<b>2,019.0</b>	<b>2,053.1</b>	<b>2,082.0</b>	<b>2,078.5</b>

**Note.** Until 2016 hydrocarbon reserves are given under A+B+C, classification, since 1 January 2016 – under A+B<sub>1</sub>+C<sub>1</sub> classification. 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.

### Hydrocarbon reserves (Russian classification of reserves) of the associated and jointly controlled companies in Russia attributable to the share of Gazprom Group

#### Metric units

	As at 31 December				
	2012	2013	2014	2015	2016
Gas, bcm	732.2	851.5	971.7	1 035.5	999.1
Gas condensate, mm tonnes	62.0	80.1	97.0	112.1	104.5
Crude oil, mm tonnes	518.3	542.0	575.4	566.9	571.5

#### Oil equivalent

	As at 31 December				
	2012	2013	2014	2015	2016
Gas, mm boe	4,752.0	5,526.2	6,306.3	6,720.4	6,484.2
Gas condensate, mm boe	507.2	655.2	793.5	917.0	854.8
Crude oil, mm boe	3,799.1	3,972.9	4,217.7	4,155.4	4,189.1
<b>Total, mm boe</b>	<b>9,058.2</b>	<b>10,154.4</b>	<b>11,317.5</b>	<b>11,792.8</b>	<b>11,528.1</b>

**Note.** For management accounting purposes, Gazprom Group measures hydrocarbon reserves and production in metric units. In this Factbook, 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 Annual Report 2015.

## Licenses

### License areas set out by federal districts of the Russian Federation, as at 31 December 2016, thousand square km

License category*	Ural FD	Northwest FD	South FD and North Caucasian FD	Volga FD	Siberiam FD	Far Eastern FD	Continental shelf of the Russian Federation
<b>Gazprom Group</b>							
Licenses for prospecting, exploration and production of hydrocarbons (SEPL)	26.5	–	2.8	2.6	46.1	–	319.2
Licenses for exploration and production of hydrocarbons (EPL)	69.0	1.5	5.3	2.8	20.8	12.6	12.1
Licenses for geological survey (SL)	16.8	0.2	0.3	3.2	3.8	–	–
<b>Total</b>	<b>112.3</b>	<b>1.7</b>	<b>8.4</b>	<b>8.6</b>	<b>70.7</b>	<b>12.6</b>	<b>331.3</b>
<b>Companies investments in which are classified as joint operations</b>							
Licenses for prospecting, exploration and production of hydrocarbons (SEPL)							
Licenses for exploration and production of hydrocarbons (EPL)	4.1	–	–	–	18.9	–	–
Licenses for geological survey (SL)	0.1	–	–	–	–	–	–
<b>Total</b>	<b>4.2</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>18.9</b>	<b>–</b>	<b>–</b>

\* License types in accordance with Russian legislation.

### Licenses for the main hydrocarbon fields as at 31 December 2016

Field name	Year of production start	Subsidiary – license holder	Gazprom Group share*, %	Field type**	License category***	License expiration year****
<b>Gazprom Group</b>						
<b>Western Siberia (Ural FD)</b>						
Urengoykoye	1978			OGC	EPL	2038
Severo-Urengoykoye	1987	OOO Gazprom Dobycha Urengoy	100%	OGC	EPL	2030
Yen-Yakhinskoye	1985			OGC	EPL	2038
Pestsovoye	2004			OGC	EPL	2041
Yamburgskoye	1991			OGC	EPL	2054
Zapolyarnoye	2001	OOO Gazprom Dobycha Yamburg	100%	OGC	EPL	2114
Tazovskoye	–			OGC	SEPL	2025
Severo-Parusovoye	–			OGC	EPL	2027
Medvezhye	1972			OGC	EPL	2086
Yamsoveiskoye	1997			OGC	EPL	2039
Ubielynoye	1992	OOO Gazprom Dobycha Nadym	100%	OGC	EPL	2018
Kharasaveiskoye	–			GC	EPL	2033
Bovanenkovskoye	2012			OGC	EPL	2042
Novoportovskoye	2012*****	OOO Gazpromneft Yamal	100%	OGC	EPL	2150

Field name	Year of production start	Subsidiary – license holder	Gazprom Group share*, %	Field type**	License category***	License expiration year****
Komsomolskoye	1993			OGC	EPL	2049
Yety-Purovskoye	2004	OOO Gazprom Dobycha Noyabrsk	100%	OGC	EPL	2038
Zapadno-Tarkosalynskoye	1996			OGC	SEPL	2116
Gubkinskoye	1999	ZAO Purgaz	51%	OGC	EPL	2033
Uzhno-Russkoye	2007	OAO Severneftegazprom	50,001% (of ordinary shares)	OGC	EPL	2043
Zapadno-Tambeyskoye	–			OGC	EPL	2028
Kruzenshternskoye	–			GC	EPL	2028
Malyginskoye	–			GC	EPL	2028
Severo-Tambeyskoye	–	PJSC Gazprom		GC	EPL	2028
Tasiyskoye	–			GC	EPL	2028
Antypajutinskoye	–			G	EPL	2028
Tota-Yakhinskoe	–			G	EPL	2028
Sugmutskoye	1995			O	EPL	2089
Sutorminskoye	1982	AO Gazpromneft-Noyabrskneftegaz	100%	OGC	EPL	2067
Muravlenkovskoye	1982			OG	EPL	2072
Sporyshevskoye	1996			O	EPL	2083
Southern part of Priobskoye	1999	OOO Gazpromneft-Khantos	100%	O	EPL	2038
Vyngapurovskoye (Khanty-Mansi Autonomous Area)	1982	OOO Zapolyarneft	100%	OGC	EPL	2034
<b>Southern Russia (South FD)</b>						
Astrakhanskoye	1986	OOO Gazprom Dobycha Astrakhan	100%	GC	EPL	2019
Zapadno-Astrakhanskoye	–	PJSC Gazprom		GC	SEPL	2029
<b>South Ural region (Volga FD)</b>						
Orenburgskoye	1974	OOO Gazprom Dobycha Orenburg	100%	OGC	EP	2038
Eastern section of Orenburg OGC field	1994*****	OOO Gazprom Neft Orenburg	100%	OGC	EPL	2138
<b>Eastern Siberia and the Far East (Siberian and Far Eastern FDs)</b>						
Chayandinskoye	–			OGC	EPL	2028
Kovyktinskoye (including Khandinkaya square)	–			GC	EPL	2037
Tas-Yuryakhskoye	–	PJSC Gazprom		OGC	EPL	2031
Sobolokh-Nedzhelinskoye	–			GC	EPL	2031
Part of Srednetyungskoye	–			GC	EPL	2031
Verkhnevilyuchanskoye	–			OGC	EPL	2031
Chikanskoye	–			GC	EPL	2028
Sobinskoye	–	OOO Gazprom dobycha Krasnodar	100%	OGC	SEPL	2028

Field name	Year of production start	Subsidiary – license holder	Gazprom Group share*, %	Field type**	License category***	License expiration year****
<b>Continental shelf of the Russian Federation</b>						
Shtokmanovskoye (including western part)	–			GC	EPL	2043
Kirinskoye	2013			GC	EPL	2028
Yuzhno-Kirinskoye	–			GC	SEPL	2039
Mynginskoye	–	PJSC Gazprom		GC	SEPL	2039
Ledovoye	–			GC	EPL	2033
Rusanovskoye	–			GC	SEPL	2043
Ludlovskoye	–			G	SEPL	2043
Leningradskoye	–			GC	SEPL	2043
Kamennomyskoye-more	–			G	EPL	2057
Severo-Kamennomyskoye	–	OOO Gazprom dobycha Yamburg		GC	EPL	2076
Semakovskoye	–			G	EPL	2028
Prirazlomnoye	2013	OOO Gazprom Neft shelf	100%	O	EPL	2043
Dolginskoye	–	OOO Gazpromneft-Sakhalin	100%	O	EPL	2035
<b>Companies, investments in which are classified as joint operations</b>						
<b>Western Siberia (Ural FD)</b>						
Zapadno-Salymskoye	2004	Salym Petroleum Development N.V.	50%	O	EPL	2130
Sovetskoye (Khanty-Mansi Autonomous Area)	1966	OOO Tomskneft VNC	50%	O	EPL	2145
<b>Eastern Siberia and the Far East (Siberian and Far Eastern FDs)</b>						
Krapivinskoye	1984			O	EPL	2044
Sovetskoye (the Tomsk Region)	1966	OOO Tomskneft VNC	50%	O	EPL	2038
Pervomayskoye (the Tomsk Region)	1981			O	EPL	2041
Luginetskoye	1982			OGC	EPL	2039
<b>Associated and jointly controlled companies</b>						
<b>Western Siberia (Urals FD)</b>						
Vostochno-Messoyakhskoe	2013*****	AO Messoyakhaneftegaz	50%	OGC	SEPL	2140
Zapadno-Messoyakhskoe	–			OG	SEPL	2020
<b>Eastern Siberia and the Far East (Siberian and Far Eastern FDs)</b>						
Kuymbinskoye	2010*****	OOO Slavneft-Krasnoyarskneftegas	50%	OGC	SEPL	2171
Piltun-Astokhsokoe	1999	Sakhalin Energy Investment Company Ltd.	50% + 1 share	OGC	SEPL	2021
Lunskoe	2009			OGC	SEPL	2021

\* The aggregate share of the Group in the authorized capital of the investment objects, as reflected in the consolidated financial statements of Gazprom Group under IFRS.

\*\* In accordance with the current Russian state classification: OGC – oil, gas, condensate field; OG – oil and gas field; GC – gas condensate field; G – gas field; O – oil field.

\*\*\* Russian legislation provides for several types of licenses applicable to the study, exploration and production of natural resources, including: licenses for geological survey (SL); licenses for exploration and production of hydrocarbons (EPL); and licenses for geological survey, exploration and production of hydrocarbons (SEPL). Abbreviations are stated according to the classification determined by the Russian legislation.

\*\*\*\* While license holders of Gazprom Group meet the main terms and conditions of license agreements, they have a right to prolong current licenses to complete exploration and development of fields. Gazprom plans to prolong licenses for the period till the completion of profitable development of fields.

\*\*\*\*\* Pilot production.

## Production

### Hydrocarbon production of Gazprom Group in Russia

(taking into account share in production of companies, investments in which are classified as joint operations)

#### Metric units

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Natural and associated gas, bcm	487.99	488.39	444.90	419.52	420.13
Gas condensate, mm tonnes	12.85	14.66	14.49	15.34	15.85
Crude oil, mm tonnes	42.26	42.41	43.53	44.04	47.15

#### Oil equivalent

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Natural and associated gas, mm boe	3,167.06	3,169.65	2,887.40	2,722.68	2,726.64
Gas condensate, mm boe	105.11	119.92	118.53	125.48	129.65
Crude oil, mm boe	309.77	310.87	319.07	322.81	345.61
<b>Total, mm boe</b>	<b>3,581.94</b>	<b>3,600.44</b>	<b>3,325.00</b>	<b>3,170.97</b>	<b>3,201.91</b>

**Note.** For management accounting purposes, Gazprom Group measures hydrocarbon reserves and production in metric units. In this Factbook, 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 Annual Report 2015.

### Daily average hydrocarbon production of Gazprom Group in Russia

(taking into account share in production of companies, investments in which are classified as joint operations)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Natural and associated gas, mmcm / day	1,333.3	1,338.0	1,218.9	1,149.4	1,147.9
Gas condensate, thousand tonnes / day	35.1	40.2	39.7	42.0	43.4
Crude oil, thousand tonnes / day	115.5	116.2	119.3	120.7	128.8

**Gazprom Group's hydrocarbon production in Russia**

(taking into account share in production of companies, investments in which are classified as joint operations)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Natural and associated gas, bcm</b>					
PJSC Gazprom and its major 100% subsidiaries*	437.90	436.29	393.73	368.20	368.60
PAO Gazprom Neft and its subsidiaries	8.73	11.36	11.86	12.53	13.64
ZAO Purgaz	15.04	14.62	13.25	12.70	11.74
OAQ Severneftegazprom	25.35	25.12	25.04	25.05	25.12
<b>Total (excluding share in production of companies, investments in which are classified as joint operations)</b>	<b>487.02</b>	<b>487.39</b>	<b>443.88</b>	<b>418.48</b>	<b>419.10</b>
Companies, investments in which are classified as joint operations (attributable to the share of Gazprom Group)	0.97	1.00	1.02	1.04	1.03
<b>Total (including share in production of companies, investments in which are classified as joint operations)</b>	<b>487.99</b>	<b>488.39</b>	<b>444.90</b>	<b>419.52</b>	<b>420.13</b>
<b>Gas condensate, mm tonnes</b>					
PJSC Gazprom and its major 100% subsidiaries*	12.84	14.65	14.47	15.31	15.83
PAO Gazprom Neft and its subsidiaries	0.01	0.01	0.02	0.03	0.02
<b>Total</b>	<b>12.85</b>	<b>14.66</b>	<b>14.49</b>	<b>15.34</b>	<b>15.85</b>
<b>Crude oil, mm tonnes</b>					
PJSC Gazprom and its major 100% subsidiaries*	1.70	1.69	1.73	1.74	1.55
PAO Gazprom Neft and its subsidiaries	31.63	32.15	33.56	34.30	37.74
<b>Total (excluding share in production of companies, investments in which are classified as joint operations)</b>	<b>33.33</b>	<b>33.84</b>	<b>35.29</b>	<b>36.04</b>	<b>39.29</b>
Companies, investments in which are classified as joint operations (attributable to the share of Gazprom Group)	8.93	8.57	8.24	8.00	7.86
<b>Total (including share in production of companies, investments in which are classified as joint operations)</b>	<b>42.26</b>	<b>42.41</b>	<b>43.53</b>	<b>44.04</b>	<b>47.15</b>

\* For the list of companies, see Glossary.



### Hydrocarbon production of Gazprom Group in Russia set out by Federal Districts

(including companies, investments in which are classified as joint operations)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Natural gas, bcm</b>					
Ural Federal District	450.96	452.34	409.96	385.18	385.46
Northwest Federal District	2.33	2.38	2.25	2.14	2.06
South Federal District and North Caucasian Federal District	12.89	11.86	11.24	11.15	11.28
Volga Federal District	17.52	17.27	16.73	16.22	15.65
Siberian Federal District	4.29	4.43	4.23	3.82	4.55
Far Eastern Federal District	–	0.20	0.39	0.40	0.41
Continental shelf of the Russian Federation	–	0.01	0.10	0.61	0.72
<b>Total</b>	<b>487.99</b>	<b>488.39</b>	<b>444.90</b>	<b>419.52</b>	<b>420.13</b>
<b>Gas condensate, mm tonnes</b>					
Ural Federal District	8.04	10.18	10.30	11.14	11.59
Northwest Federal District	0.13	0.14	0.13	0.12	0.12
South Federal District and North Caucasian Federal District	4.13	3.78	3.56	3.51	3.56
Volga Federal District	0.22	0.19	0.16	0.15	0.14
Siberian Federal District	0.33	0.37	0.31	0.31	0.31
Far Eastern Federal District	–	0.0	0.01	0.01	0.01
Continental shelf of the Russian Federation	–	–	0.02	0.10	0.12
<b>Total</b>	<b>12.85</b>	<b>14.66</b>	<b>14.49</b>	<b>15.34</b>	<b>15.85</b>
<b>Crude oil, mm tonnes</b>					
Ural Federal District	32.95	32.70	32.83	32.39	34.45
Northwest Federal District	0.04	0.05	0.03	0.04	0.03
South Federal District and North Caucasian Federal District	0.16	0.14	0.11	0.09	0.09
Volga Federal District	1.23	1.77	2.46	2.76	2.85
Siberian Federal District	7.88	7.75	7.84	7.87	7.58
Far Eastern Federal District	–	–	–	0.0	–
Continental shelf of the Russian Federation	–	–	0.26	0.89	2.15
<b>Total</b>	<b>42.26</b>	<b>42.41</b>	<b>43.53</b>	<b>44.04</b>	<b>47.15</b>

### Useful life of APG by Gazprom Group in Russia

(excluding companies, investments in which are classified as joint operations)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>APG usage, bcm</b>					
PJSC Gazprom and its main subsidiaries with 100% participation*	1.3	1.3	1.4	1.9	1.8
PAO Gazprom Neft and its subsidiaries	4.2	5.4	6.2	6.5	7.6
<b>Total</b>	<b>5.5</b>	<b>6.7</b>	<b>7.6</b>	<b>8.4</b>	<b>9.4</b>
<b>Level of useful life of APG, %</b>					
PJSC Gazprom and its main subsidiaries with 100% participation*	83.2	90.9	93.5	95.6	97.8
PAO Gazprom Neft and its subsidiaries	65.7	79.5	80.5	79.6	79.2
<b>Total</b>	<b>69.2</b>	<b>81.4</b>	<b>82.9</b>	<b>82.7</b>	<b>82.2</b>

\* For the list of companies, see Glossary.

### Hydrocarbon production of the associated and jointly controlled companies in Russia attributable to the share of Gazprom Group

Metric units

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Natural and associated gas, bcm	11.9	13.0	18.2	25.5	27.2
Gas condensate, mm tonnes	1.1	1.3	2.3	4.7	5.2
Crude oil, mm tonnes	10.8	10.2	10.0	9.6	9.9

Oil equivalent

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Natural and associated gas, mm boe	77.2	84.4	118.1	165.5	176.5
Gas condensate, mm boe	9.0	10.6	18.8	38.4	42.5
Crude oil, mm boe	79.2	74.8	73.3	70.4	72.6
<b>Total, mm boe</b>	<b>165.4</b>	<b>169.8</b>	<b>210.2</b>	<b>274.3</b>	<b>291.6</b>

**Note.** For management accounting purposes, Gazprom Group measures hydrocarbon reserves and production in metric units. In this Factbook, 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 Annual Report 2015.

## Geological exploration, production drilling and production capacity

### Key figures of Gazprom Group's geological exploration activities

(excluding companies, investments in which are classified as joint operations)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Exploration drilling, thousand m	126.4	146.4	165.4	143.6	111.6
Completed exploration wells, units	54	53	41	43	40
including producing wells	46	37	31	38	34
Seismic exploration 2D, thousand linear km	1.9	1.4	6.6	0.3	1.1
Seismic exploration 3D, thousand square km	8.4	13.3	12.6	20.0	20.6
Reserves growth due to geological exploration, mm boe	3,955.5	4,183.5	5,942.2	3,835.1	3,404.0
Drilling efficiency, boe / m	31,293.5	28,575.8	35,926.2	26,706.8	30,501.8

### Key figures of geological exploration activities of companies, investments in which are classified as joint operations

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Exploration drilling, thousand m	14.0	11.6	13.1	3.2	7.4
Completed exploration wells, units	5	5	4	1	2
including producing wells	4	3	3	1	1
Seismic exploration 2D, thousand linear km	481	–	–	–	–
Seismic exploration 3D, thousand square km	1,085	858	494	459	130

### Gazprom Group's production drilling

(excluding companies, investments in which are classified as joint operations)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Production wells, completed construction, units</b>					
natural gas	212	93	38	73	64
crude oil	724	788	832	802	725
at UGSFs	17	43	22	27	13
<b>Total</b>	<b>953</b>	<b>924</b>	<b>892</b>	<b>902</b>	<b>802</b>
<b>Production wells drilled, thousand m</b>					
natural gas	367.7	239.7	125.6	153.2	227.2
crude oil	2,566.6	3,002.1	2,948.5	3,163.0	2,735.8
at UGSF	24.2	36.7	27.6	47.5	23.7
<b>Total</b>	<b>2,958.5</b>	<b>3,278.5</b>	<b>3,101.7</b>	<b>3,363.7</b>	<b>2,986.7</b>

### Production drilling of companies, investments in which are classified as joint operations

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Oil production wells, completed construction, units	243	211	188	206	231
Oil producing wells drilled, thousand m	827	697	694	789	785

### Gazprom Group's production capacity

(excluding companies, investments in which are classified as joint operations)

	As at 31 December				
	2012	2013	2014	2015	2016
<b>Fields in operation*, units</b>					
Commercial production	118	122	126	135	138
Pilot production	6	11	13	11	13
<b>Total</b>	<b>124</b>	<b>133</b>	<b>139</b>	<b>146</b>	<b>151</b>
Gas production wells, units	7,717	7,744	7,816	7,881	7,916
including those in operation	7,226	7,263	7,293	7,358	7,441
Oil production wells, units	7,296	7,868	8,218	9,058	9,316
including those in operation	6,738	7,246	7,604	8,461	8,681
Comprehensive and preliminary gas treatment units, units	179	170	171	170	171
Comprehensive gas treatment units aggregate installed capacity, bcm per year	1,072.9	1,099.7	1,119.7	1,119.7	1,119.7
Booster compressor stations, units	49	49	52	53	58
Booster compressor station's installed capacity, MW	5,015.2	5,046.4	5,265.4	5,080.3	5,669.8

\* Since 2016, information on Gazprom Group's fields under development is presented taking into account fields in pilot production, as well as fields at the stage of commercial development, which as of December 31 of the reporting period did not produce hydrocarbons. Data for 2012–2015 recalculated in order to ensure comparability.

### Production capacity of companies, investments in which are classified as joint operations

	As at 31 December				
	2012	2013	2014	2015	2016
Fields in operation, units	34	35	39	41	42
Gas production wells, units	9	9	8	7	7
including those in operation	2	–	1	3	3
Oil production wells, units	3,439	3,590	3,635	3,768	3,733
including those in operation	2,927	3,017	3,086	3,163	3,379

## Promising fields

### Producing fields operated by Gazprom Group

Field	Description	Annual design capacity	Year of launch	Year of achieving design capacity	Project status (as at 31 December 2016)
<b>Nadym-Pur-Taz area (Western Siberia)</b>					
Pestovoye (Early Cretaceous deposits)	Located in the Nadym District of the Yamal-Nenets Autonomous Area, 150 km to the northwest of Novy Urengoy	2.1 bcm of gas	2020–2021	2025–2026	Development design and follow-up exploration in progress
Nydinsky block of the Medvezhye field	Located within the Medvezhye field in the Pur District of the Yamal-Nenets Autonomous Area, Tyumen Region	2.7 bcm of gas	2011	2020–2021	Gas extraction from Aptian-Albian formations; exploration completed for multi-well platforms of Berriasian — Valanginian formations; development design is underway for Berriasian — Valanginian deposits of the Nydinsky block of the Medvezhye oil and gas condensate field
Urengoykoye (Achimov deposits)	Deposits have been divided into blocks to facilitate phased development				
	Block 1	9.6 bcm of gas and 2.95 mm tonnes of unstable gas condensate	2008	2021–2023	Production in progress; field operated by AO Achimgaz (a joint venture with Wintershall Holding GmbH)
	Block 2	8.7 bcm of gas and 2.84 mm tonnes of unstable gas condensate	2009		Production in progress; development design completed to achieve full capacity
	Blocks 4–5	15.5 bcm of gas	2020–2021	2024–2027	Development design completed; preparation of engineering documents in progress, project documentation approved by PJSC Gazprom
<b>Yamal Peninsula and adjacent offshore areas</b>					
Bovanenkovskoye field	The largest field on the Yamal Peninsula in terms of reserves; the field is located in the central part of the peninsula and is the best explored				
Senomanian-Aptian deposits		115 bcm of gas	2012	2021–2024	Gas production, production drilling and follow-up exploration in progress; construction and installation in progress
Neocomian-Jurassic deposits		25 bcm of gas	2024–2025	2029–2030	PJSC Gazprom approved [design documents]; follow-up exploration in progress
Novoportovskoye	Located in the south-eastern corner of the Yamal Peninsula, where no infrastructure is available	8 mm tonnes of oil	2016	2021	Oil production and production drilling in progress; infrastructural facilities put in operation to support year-round oil production and shipment by sea

Field	Description	Annual design capacity	Year of launch	Year of achieving design capacity	Project status (as at 31 December 2016)
<b>Volga</b>					
Astrakhanskoye	Located in the Volga Delta; capable of yielding 50–60 bcm of gas per annum. Production is restricted to 12 bcm per annum for environmental concerns and expensive technology used.		1986		Gas production in progress; an option of switching over to sour gas injection technology is considered for the deposit as it will dramatically reduce emissions and eliminate the need to utilise associated sulphur.
<b>Volga–Urals Area</b>					
Vostochny block of the Orenburg oil and gas condensate field	Located 40 km away from Orenburg in a region that benefits from well-developed infrastructure and close vicinity to distribution markets	6.2 mm toe	1994	2021	In the pilot production phase since 1994; ongoing use of multi-stage hydraulic fracturing technology; oil production and production drilling in progress.
<b>Continental shelf in Russia's Arctic</b>					
Prirazlomnoye	Located on the continental shelf of the Russian Federation in the Pechora Sea, 55 km from the settlement of Varandey, 240 km from the river port of Naryan-Mar (Pechora River) and 980 km away from the Murmansk sea port. The sea depth within the field area is only 17–20 metres.	4.8 mm tonnes of oil	2014	2023	Oil production and production drilling in progress; the project design provides for a total of 32 wells to be drilled
<b>Eastern Siberia and the Russian Far East</b>					
Chayandinskoye	Located in the Lensk District of the Republic of Sakha (Yakutia)	25 bcm of gas			Exploration has been completed and drilling of production wells has begun. Work is ongoing to prepare the field for production, including road filling, filling of CGTU and gas well cluster sites, foundations and other construction. Drilling of gas production wells continued.
		1.9 mm tonnes of oil	2015 (launch of pilot production)	To be adjusted based on the results of the pilot production phase	Nine wells were drilled for the pilot production phase. The first well was operated in the pilot mode. The second well is currently in the pilot production phase. Filling of roads and infrastructure sites has been completed. Work is ongoing to construct foundations.
<b>Continental shelf of the Russian Federation in the Okhotsk Sea</b>					
Kirinskoye	Located on the continental shelf of the Russian Federation in the Okhotsk Sea, to the northeast of Sakhalin Field development is part of Sakhalin III Project	5.5 bcm of gas	2014	2021–2022	Gas production and production drilling in progress; Work is ongoing to design production capacity additions at the Kirinskoye gas condensate field.
<b>Note.</b> Dates of launch and reaching design capacity may be subject to changes depending on the developments in the energy market.					

## Fields explored by Gazprom Group

Field	Description	Annual design capacity	Year of launch	Year of achieving design capacity	Project status (as at 31 December 2016)
<b>Yamal Peninsula and adjacent offshore areas</b>					
Kharasaveyskoye	To be put in operation after the Bovanenkovskoye field achieves design capacity	32 bcm of gas	2023–2024	2026–2027	Field development plan approved
Cenomanian-Aptian deposits					Design work in progress
Neocomian-Jurassic deposits		18 bcm of gas	2026–2027	2028–2029	Follow-up exploration in progress
Kruzenshternskoye	Part of the Bovanenkovskoye field	33 bcm of gas	2027–2028	2031–2033	Follow-up exploration in progress
<b>Continental shelf in Russia's Arctic</b>					
Shtokman	Located in the central area of the Barents Sea to the northwest of Yamal and 650 km to the northeast of Murmansk; Gas is planned to be shipped via the Unified Gas Supply System or as LNG to remote markets.	71.7 bcm expandable to 95 bcm of gas	To be specified based on the Investment Case		The Investment Case will be revised into a comprehensive development plan for the Shtokman gas condensate field.
<b>Ob and Taz Bays</b>					
Severo-Kamennomysskoye	Located in the offshore area of the Ob Bay in the Yamal-Nenets Autonomous Area (Tyumen Region) and is a priority development area in offshore areas of the Ob and Taz Bays	14.5 bcm of gas	2025–2027	2030–2032	Basis of design and design specifications are being developed
Kamennomysskoye-Sea		15.1 bcm of gas	2023–2025	2025–2027	Field construction design in progress
<b>Eastern Siberia and the Russian Far East</b>					
Kovyktinskoye	Located in the Zhigalovo and Kazachinskoye Districts of the Irkutsk Region	25 bcm of gas	The field will be put in operation after the Chayandinskoye oil and gas condensate field achieves its maximum capacity.		Follow-up exploration is in progress. Comprehensive engineering surveys have been launched. Helium membrane separation technology is being tested in field conditions.
<b>Continental shelf of the Russian Federation in the Okhotsk Sea</b>					
Yuzhno-Kirinskoye	Located on the continental shelf of the Russian Federation in the Okhotsk Sea, to the northeast of Sakhalin. Field development is part of Sakhalin III Project.	21 bcm of gas	2023	2033–2034	Preparations are underway to begin production, including follow-up exploration, offshore and onshore engineering surveys, development of design documents for the phase 1 development project (construction of initial wells), preparations for production drilling.

**Note.** - Dates of launch and reaching design capacity may be subject to changes depending on the developments in the energy market.

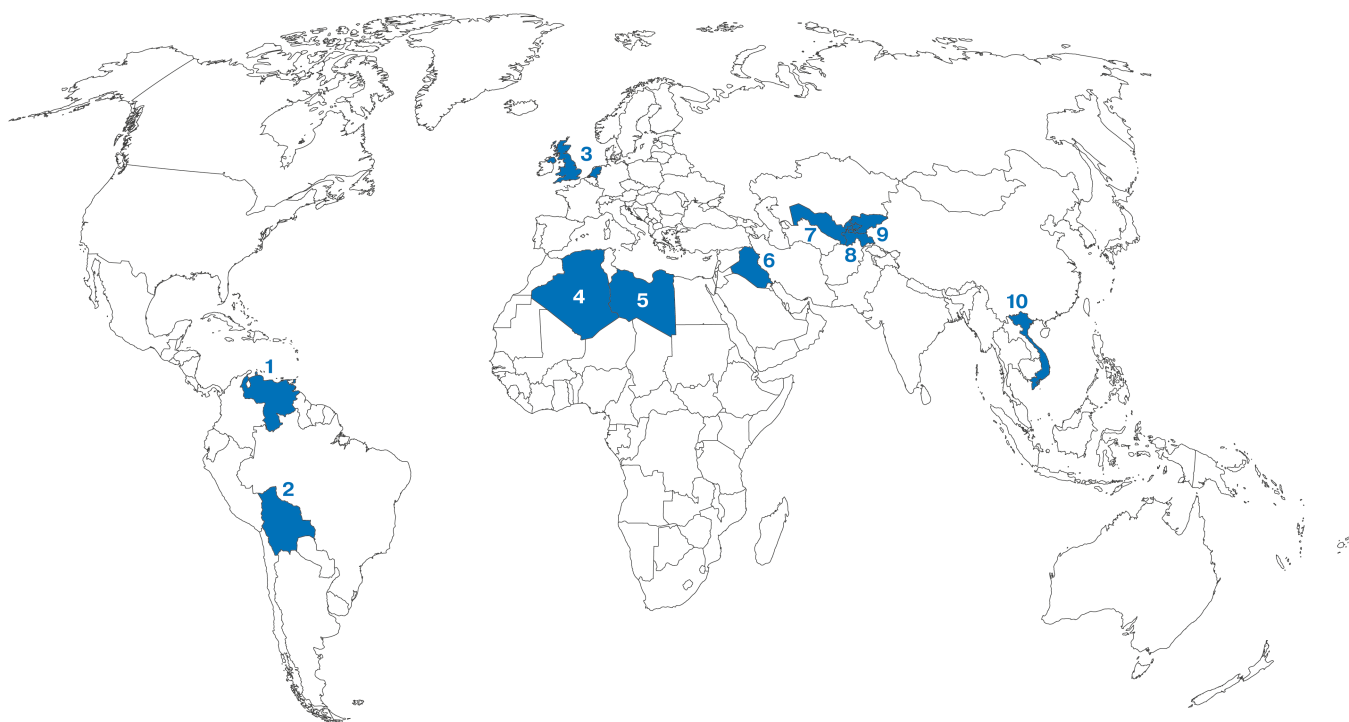
## Fields of joint ventures of Gazprom Group

Field	Description	Partner	Annual design capacity	Year of launch	Year of operation at design capacity	Project status (as at 31 December 2016)
<b>Gydan Peninsula</b>						
Vostochno-Messoyakhsky licence block	Located in the northern part of the Western Siberian oil and gas province in the south-west of the Gydan Peninsula; one of the largest fields by explored reserves.	Rosneft	5.6 mm tonnes of oil	2016	2020	Full-scale development started in September 2016. 82 wells drilled and commissioned. Key infrastructure (central oil gathering facility, metering station, pressurised pipeline, and gas turbine power plant) and social facilities commissioned. Programme for exploration, production drilling and construction of the Vostochno-Messoyakhsky licence block drafted and approved.
<b>Eastern Siberia and the Russian Far East</b>						
Kuyumbinskoye	Located in the Baikitsky Municipality of the Evenk Municipal District in the Krasnoyarsk Territory. Makes part of the Yurubcheno-Tokhomsкая oil and gas pool. The area is hard to access and has no all-season roads.	Rosneft	10.9 mm tonnes of oil	2018	2032	Pilot production Early oil infrastructure facilities launched for temporary supply of oil to PJSC Transneft's system. Production drilling and infrastructure construction underway.

**Note.** Dates of launch and reaching design capacity may be subject to changes depending on the developments in the energy market.



## Projects of Gazprom Group in exploration and production hydrocarbons abroad



<b>1 Venezuela</b> Junin-6 block 	<b>2 Bolivia</b> Ipati, Aquio and Azero licence blocks Ipati and Aquio licence blocks	<b>3 UK and the Netherlands</b> Winchelsea, Sillimanite fields Wingate field	<b>4 Algeria</b> El-Assel licence block	<b>5 Libya</b> Licence blocks No. 19 and No. 64
<b>6 Iraq</b> Badra field, Garmian block (Kurdistan) Halabja and Shakal blocks (Kurdistan)	<b>7 Uzbekistan</b> Djel field Shakhpakhty field	<b>8 Tajikistan</b> Sarikamysh and Western Shohambyar licence blocks	<b>9 Kyrgyzstan</b> Kugart and Vostochniy Mailisu-IV licence blocks	<b>10 Vietnam</b> Offshore Blocks 112 (incl. extension), and 129-132 Blocks 05-2 and 05-3

- Hydrocarbon prospecting and exploration
- Oil production
- Gas and gas condensate production

**Note.** Data as at 31 December 2016.

### Key figures of Gazprom's hydrocarbon geological exploration abroad

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Exploration drilling, thousand m	24.0	18.1	17.6	28.3	9.7
Exploration wells, completed construction, units	7	4	5	4	8
including productive wells, units	1	1	4	2	7
2D seismic survey, thousand linear km	0.7	0.4	–	–	1.5
3D seismic survey, thousand sq. km	0.4	1.4	1.7	1.4	0.8

**Note.** Consolidated figures of geological exploration in foreign countries include results of the projects where companies of Gazprom Group have control and participate as operators.

### Gazprom Group's hydrocarbon production capacity in foreign countries

	As at 31 December				
	2012	2013	2014	2015	2016
Exploration drilling, thousand m	50	51	47	53	47
Exploration wells, completed construction, units	234	289	235	168	172
including productive wells, units	111	94	96	74	81
2D seismic survey, thousand linear km	903	863	904	963	931
3D seismic survey, thousand sq. km	623	543	623	661	681

**Note.** Consolidated figures of geological exploration in foreign countries include results of the projects where companies of Gazprom Group have control and participate as operators.

### Gazprom Group oil and gas exploration drilling abroad

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Production wells, completed construction, units</b>					
natural gas	2	1	3	–	2
crude oil	12	27	46	35	38
<b>Total</b>	<b>14</b>	<b>28</b>	<b>49</b>	<b>35</b>	<b>40</b>
<b>Production wells, completed construction, units</b>					
natural gas	3.0	1.9	7.9	–	1.6
crude oil	18.4	63.6	86.0	75.0	40.9
<b>Total</b>	<b>21.4</b>	<b>65.5</b>	<b>93.9</b>	<b>75.0</b>	<b>42.5</b>

**Note.** The data shows Group's hydrocarbon production capacity in foreign countries for the respective periods provided by NIS (Serbia).

## Hydrocarbon production abroad, projects with participation of Gazprom Group

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Natural and associated gas, bcm</b>					
Badra	–	–	–	7	14
Wingate	742	394	622	877	686
Moc Tinh and Hai Thach	–	331	1,786	1,884	2,142
Shakhpakthy	301	319	334	357	363
Incahuasi	–	–	–	–	740
<b>Gas condensate, mm tonnes</b>					
Wingate	5	2	4	5	3
Moc Tinh and Hai Thach	–	59	366	436	573
Incahuasi	–	–	–	–	75
<b>Oil, mm tonnes</b>					
Badra	–	–	309	1,383	2,575
Junin-6 block	–	106	262	524	823
Garmian block	–	–	–	219	193

**Note.** Production volumes are given in total for the project, not specifying Gazprom Group's share.

## International prospecting and exploration projects of Gazprom Group

### Algeria

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
Hydrocarbon exploration and development at the El-Assel licence block located in the Berkine geological basin in the east of Algeria in the Sahara Desert.	2009	■	Implemented under an Agreement on joint exploration and production of hydrocarbons; Gazprom Group's share: 49%. Gazprom Group's representative: Gazprom EP International B.V. (operator). Partner: Algerian state oil and gas company Sonatrach. Customer: Algerian National Agency for the Valorisation of Hydrocarbon Resources (ALNAFT).	Commitments for exploration stages 1, 2, and 3 fully met. Development plans prepared for fields ZERN, ZER, RSH, and RSHN. The project is at the exploration stage pending the submission of a statement on the commercial value of the fields.

### Bolivia

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
Hydrocarbon exploration and development at the Ipati and Aquio licence blocks. The Incahuasi field was discovered during the exploration stage at the Ipati and Aquio licence blocks in 2011. Project highlights: — Launched in 2016. — Design capacity of Phase 1 CGTU — 2.4 bcm of natural gas per year.	2010	—	Implemented under a Farmout Agreement. Gazprom Group finances 20% of the project costs. Gazprom Group's representative: GP Exploración y Producción, S.L. Partners: Total E&P Bolivia S.A. (operator), 50%; TecPetrol, 20%; and YPFB Chako, 10%.	Construction of Phase 1 of the Incahuasi field completed. The field was put on stream in August 2016 and achieved the production target of 6.5 mmcm of gas per day in November 2016. Increase the capacity of the first stage of the BCS underway at the field.
Hydrocarbon exploration and development at the Azero licence block.	2013	—	Implemented under a service contract for oil exploration and production services. Gazprom Group finances 50% of the project costs at the exploration stage. At the development stage, the Group will finance 22.5% of the project costs. Gazprom Group's representative: GP Exploración y Producción, S.L. Partners: Bolivian state oil and gas company YPFB, 55%; Total E&P Bolivia S.A. (operator), 22.5%.	Geological survey completed, with logging data reprocessed and reinterpreted.

## UK and the Netherlands

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
Construction, production, and follow-up exploration at the UK's offshore Wingate gas field (licence blocks P1239, P1733). The field has been producing since 2011. Design capacity: 0.5 bcm of natural gas per year.	2008	–	Implemented under a joint operation agreement. Gazprom Group's project participant share: 20%. Gazprom Group's representative: Gazprom UK Resources S.A. Partners: Wintershall Noordzee B.V.* (operator), 49.5%; XTO UK, 15.5%; and Gas Union, 15.0%.	Six production wells drilled, development of the field in the first phase is carried out from three production wells.
Exploration at UK's offshore licence blocks: UK's P1902 (block 44/23c) and P1903 (blocks 44/23d and 44/24c).	2012	–	Implemented under a joint operation agreement. Gazprom Group finances 20% of the project costs. Gazprom Group's representative: Gazprom International UK Ltd. Partners: Wintershall Noordzee B.V.* (operator), 49.5%; XTO UK, 15.5%; and Gas Union, 15.0%.	Exploration well 44/23g-14 completed at the Winchelsea prospect (the well that has discovered the field of same name). Assessment of the geological model underway.
Exploration at Licence Block D12b on the Dutch continental shelf	2011	–	Implemented under a joint operation agreement. Gazprom Group finances 17.591% of the project costs. Gazprom Group's representative: Gazprom International UK Ltd. Partners: Wintershall Noordzee B.V.* (operator), 30.129%; EBN B.V., 40.0%; ONE, 7.037%; and GDF SUEZ E&P NEDERLAND B.V., 5.243%.	A prospecting well was drilled at the Sillimanite cross-border prospect in 2015. The Sillimanite cross-border field has been discovered. Available data are being interpreted and integrated into the field's model.
Exploration at Licence Block 44/19a on the UK's continental shelf	2014	–	Implemented under a joint operation agreement. Gazprom Group finances 29.319% of the project costs. Gazprom Group's representative: Gazprom International UK Ltd. Partners: Wintershall Noordzee B.V.* (operator), 50.214%; ONE U.K., 11.728%; and GDF SUEZ E&P UK Ltd., 8.739%.	

\* As at 31 December 2016, Gazprom Group's share in the company was 50%.

## Venezuela

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
Development of Junin-6 heavy oil field in the Orinoco River basin	2009	–	To implement projects in Latin America, Russian oil and gas majors have established the National Oil Consortium (NOC), which holds 40% in PetroMiranda JV, engaged in oil production under the project. Gazprom Neft's share in NOC: 20%.	The block is currently at the follow-up exploration and pilot production stage. A follow-up exploration programme is underway, with a full-scale development programme currently at the design stage, and the Early Production project continued.

## Vietnam

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
Hydrocarbon prospecting and exploration on the Vietnamese continental shelf				
Block 112 (including extension)	2000	■	Implemented on the PSA terms. Gazprom Group finances 100% of the project costs at the exploration stage. At the development stage, the Group will finance 50% of the project costs. Gazprom Group's representative: AO Gazprom Zarubezhneftegaz. Partners: Petrovietnam, Petrovietnam Exploration & Production Corporation. Operator: Vietgazprom joint operating company.	The minimum commitments for the three exploration phases at Block 112 have been fully met, and Bao Wang and Bao Den gas and condensate fields have been discovered. Geological and geophysical data from the Bao Wang field are being analysed.
Blocks 129–132	2008	■	Implemented on the PSA terms. Gazprom Group finances 100% of the project costs at the exploration stage. At the development stage, the Group will finance 50% of the project costs. Gazprom Group's representative: AO Gazprom Zarubezhneftegaz. Partners: Petrovietnam, Petrovietnam Exploration & Production Corporation. Operator: Vietgazprom joint operating company.	Two deep-water prospecting wells completed at Blocks 130 and 131. The Than Bien field has been discovered by exploration drilling. Data from the drilling and testing of prospecting wells are being processed and analysed, 2D seismic survey materials are being reinterpreted, and reserves of the Than Bien field undergo a preliminary estimation based on drilling data from well TB-1X. An offshore 3D seismic programme is under development.
Hydrocarbon production at blocks 05–2 and 05–3 in the Vietnamese waters of the South China Sea. Sales of hydrocarbons. Two gas and condensate fields (Moc Tinh and Hai Thach) and an oil field (Kim Cuong Tay) have been discovered within the boundaries of the blocks. Highlights of the joint development project at the Moc Tinh and Hai Thach fields: <ul style="list-style-type: none"> <li>— Launched in 2013;</li> <li>— Design capacity: 2.0 bcm of natural gas per year;</li> <li>— Design capacity reached in 2016.</li> </ul>	2012	–	Implemented on the PSA terms. Gazprom Group's share in the project: 49%. Gazprom Group's representative: Gazprom EP International B.V. Partner: Petrovietnam. Operator: Bien Dong operating company.	The production wells provided for under the development project have been completed at the Moc Tinh and Hai Thach fields, which have reached their design capacity.

## Iraq

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
<p>Development of the Badrah field</p> <p>Project stage: commercial operation</p> <p>Project highlights:</p> <ul style="list-style-type: none"> <li>— Launched in 2014;</li> <li>— Design capacity: 5.7 mm tonnes of oil per year;</li> <li>— Design capacity to be reached in 2017.</li> </ul> <p>The project is expected to span 20 years, with potential extension for another five years.</p>	2010	■	<p>Implemented on the terms of a Service Contract.</p> <p>Gazprom Group's representative: Gazprom Neft Badra B.V. (operator).</p> <p>Gazprom Neft Group's share in the project: 30%.</p> <p>Partners: KOGAS, 22.5%; Petronas, 15%; TPAO, 7.5%; Iraqi Government (represented by Oil Exploration Company), 25%.</p>	<p>Oil production is underway.</p> <p>A third oil treatment line commissioned. Gas programme infrastructure construction underway.</p>
<hr/>				
Zagros Project (Kurdistan)	2012			
Project stage: exploration.				
<hr/>				
<p>Shakal block:</p> <ul style="list-style-type: none"> <li>— Commercial production to be launched in 2018.</li> </ul>		■	<p>Implemented on the PSA terms.</p> <p>Gazprom Group's representative: Gazprom Neft Middle East B.V. (operator).</p> <p>Gazprom Neft Group's share in the project: 80%.</p>	<p>Interpretation of 3D seismic data from the north-western block completed, with the geological model updated and the resource base re-estimated.</p>
<hr/>				
Garmian block		■	<p>Implemented on the PSA terms</p> <p>Gazprom Group's representative: Gazprom Neft Middle East B.V. (operator).</p> <p>Gazprom Neft Group's share in the project: 40%.</p> <p>Partner: WesternZagros.</p>	<p>Oil production underway, with operator rights transferred from WesternZagros to Gazprom Neft Middle East B.V. by the Ministry of Natural Resources of the Kurdistan Regional Government.</p>
<hr/>				
Halabja Project (Kurdistan)	2013	■	<p>Implemented on the PSA terms</p> <p>Gazprom Group's representative: Gazprom Neft Middle East B.V. (operator).</p> <p>Gazprom Neft Group's share in the project: 80%.</p> <p>Production share: 80%.</p>	<p>Standard interpretation of 2D seismic data completed, and the block's conceptual geological model updated.</p>

## Kazakhstan and Russia

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
<p>Development of the Tsentralnoye cross-border offshore field in the Caspian Sea (a joint project between the Russian Federation and the Republic of Kazakhstan). The field was discovered in 2008 as part of a prospecting and exploration project at the Tsentralnaya geological structure, which involved the Group.</p>	2013	—	<p>Implemented in line with the Agreement on the demarcation of the seabed in the northern part of the Caspian Sea for the purpose of exercising sovereign rights to use mineral resources.</p> <p>The project involves OOO Tsentrcasp-Neftegaz (established by PJSC LUKOIL and PJSC Gazprom on parity terms) from the Russian side, and JSC National Company KazMunayGas from the Kazakhstan side.</p>	<p>In September 2016, LLC Tsentralnaya Oil and Gas Company obtained a licence for exploration and production of hydrocarbons at the Tsentralnoye field, valid for 27 years.</p>

## Kyrgyzstan

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
Exploration at Vostochniy Mailisu-IV and Kugart oil and gas prospects.	2006	■	Implemented in line with the Agreement on the general principles of subsoil exploration and PJSC Gazprom's exploration licences. Gazprom Group's representative: AO Gazprom Zarubezhneftegaz (operator). Gazprom Group finances 100% of the project costs at the exploration stage.	The exploration programme updated, and subsoil licences extended until October 2019. A 2D seismic survey and gravity surveys completed.

## Libya

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
Hydrocarbon exploration and development at licence Blocks 19 (offshore Mediterranean) and 64 (onshore, in the northern part of the Gadames oil and gas bearing basin).	2007	■	Implemented on the PSA terms. Gazprom Group's representative: Gazprom Libya B.V. (operator). Partner: Libyan National Oil Corporation. Gazprom Group finances 100% of the project costs at the exploration stage.	Force majeure continuing under relevant PSAs.

## Tajikistan

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
Exploration at Sarikamysh, Sargazon, Rengan, and Western Shohambary oil and gas prospects. The licences for Sargazon and Rengan were returned in 2012 due to high geological, technical, and economic risks related to their development.	2006	■	Implemented in line with the Agreement on the general principles of subsoil exploration and PJSC Gazprom's exploration licences. Gazprom Group's representative: AO Gazprom Zarubezhneftegaz (operator). Gazprom Group finances 100% of the project costs at the exploration stage.	Geophysical surveys under the exploration programme have been fully completed at the Sarikamysh prospect. The construction of the ShakhriNAV-1p ultra-deep prospecting well (6,450 m) has been completed.



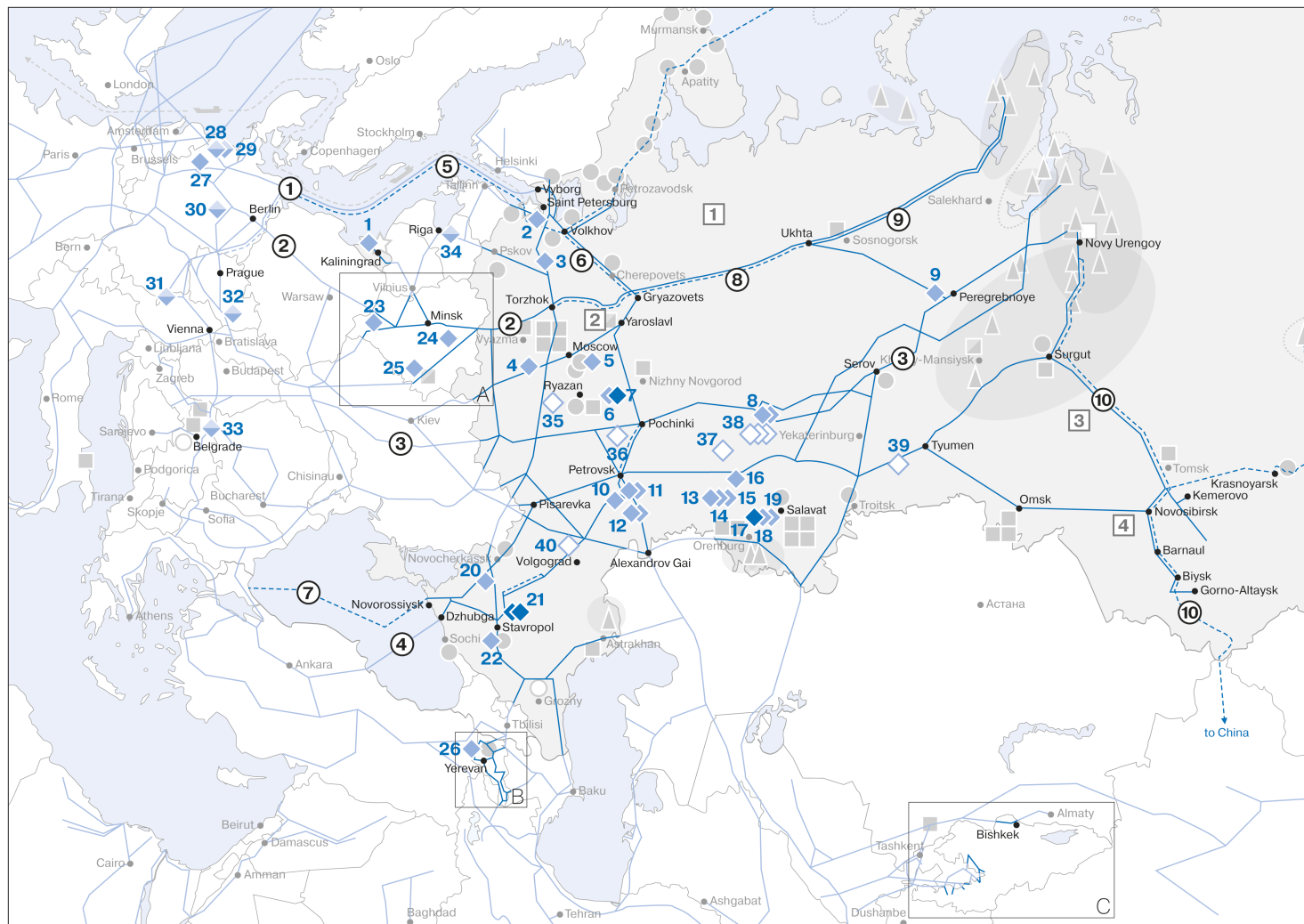
## Uzbekistan

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2016)
Prospecting, exploration, and production of hydrocarbons in the Ustyurt region of the Republic of Uzbekistan (seven investment blocks). Licences for six investment blocks have been returned due to the lack of potential.	2006	■	Implemented on the terms of subsoil exploration licences for investment blocks. Gazprom Group's representative: AO Gazprom Zarubezhneftegaz (operator). Partner: Uzbekneftegaz National Holding Company. Gazprom Group finances 100% of the project costs at the exploration stage.	The Djel field at the Shakhpakhtinsky licence block has been discovered by exploration carried out as part of the Company's licence obligations. The parties are drafting an Agreement on the general principles of developing the Djel gas and condensate field on PSA terms.
Refurbishment of the infrastructure at the Shakhpakhty field in the Ustyurt region of the Republic of Uzbekistan, and follow-up development of remaining gas reserves are underway.	2004	■	Implemented on the PSA terms. Gazprom Group's representative: AO Gazprom Zarubezhneftegaz. Partners: Uzbekneftegaz National Holding Company, Gas Project Development Central Asia AG (50% held by the Group). Operator: OOO Zarubezhneftegaz — GPD Central Asia (established by Gas Project Development Central Asia AG and AO Gazprom Zarubezhneftegaz on a parity basis). The costs are compensated by natural gas supplies. Gas remaining after costs are compensated is distributed pro rata between the parties to the PSA.	The parties continue implementing the PSA, including the workover of existing wells, with more than 0.3 bcm of natural gas produced annually under the project.

### International prospecting and exploration projects of associated companies and joint ventures

Company	Countries of operation	Gazprom Group's interest	Overview and results
Wintershall AG	Libya	49% equity share acquired by the Group in 2007 as a result of the asset swap agreement with BASF.	The company owns C96 and C97 oil concessions in Libya and acts as the project operator. Nine fields are in operation. In August 2013, Force Majeure was invoked by the company and lasted till September 2016. As at 31 December 2016, production was confined to C96 block at 35–40 thousand barrels per day. In 2016, the company produced 504 thousand tonnes of oil and 137 mmcm of associated gas (flat year-on-year).
Wintershall Noordzee B.V.	The Netherlands, United Kingdom, Denmark	50% equity share acquired by the Group in 2015 as a result of the asset swap agreement with BASF.	The company owns varied level stakes in 51 licenses in the British, Danish, and Dutch sectors of the North Sea. A number of oil and gas fields are discovered within these license areas. Key producing assets are K18-Golf, Wingate, Q1-B and Q1-D gas fields. In 2016, the company produced 1.0 bcm of gas. The company also carries out construction at the Ravn oil field in the Danish sector of the North Sea.

## Assets and projects of Gazprom Group in transportation and underground gas storage



### Major trunk gas pipelines

- Gazprom Group's existing gas pipelines
- Other existing gas pipelines
- Gas pipelines under construction and projected gas pipelines

### Underground gas storage facilities

- ◆ Existing UGSFs, active capacity more than 5 bcm
- ◆ Existing UGSFs, active capacity less than 5 bcm
- ◆ Existing UGSFs co-invested by Gazprom Group
- ◇ UGSFs under construction and projected UGSFs

### Key gas export routes

- ① Nord Stream gas pipeline
- ② Yamal — Europe gas pipeline
- ③ Urengoy — Uzhgorod gas pipeline
- ④ Blue Stream gas pipeline

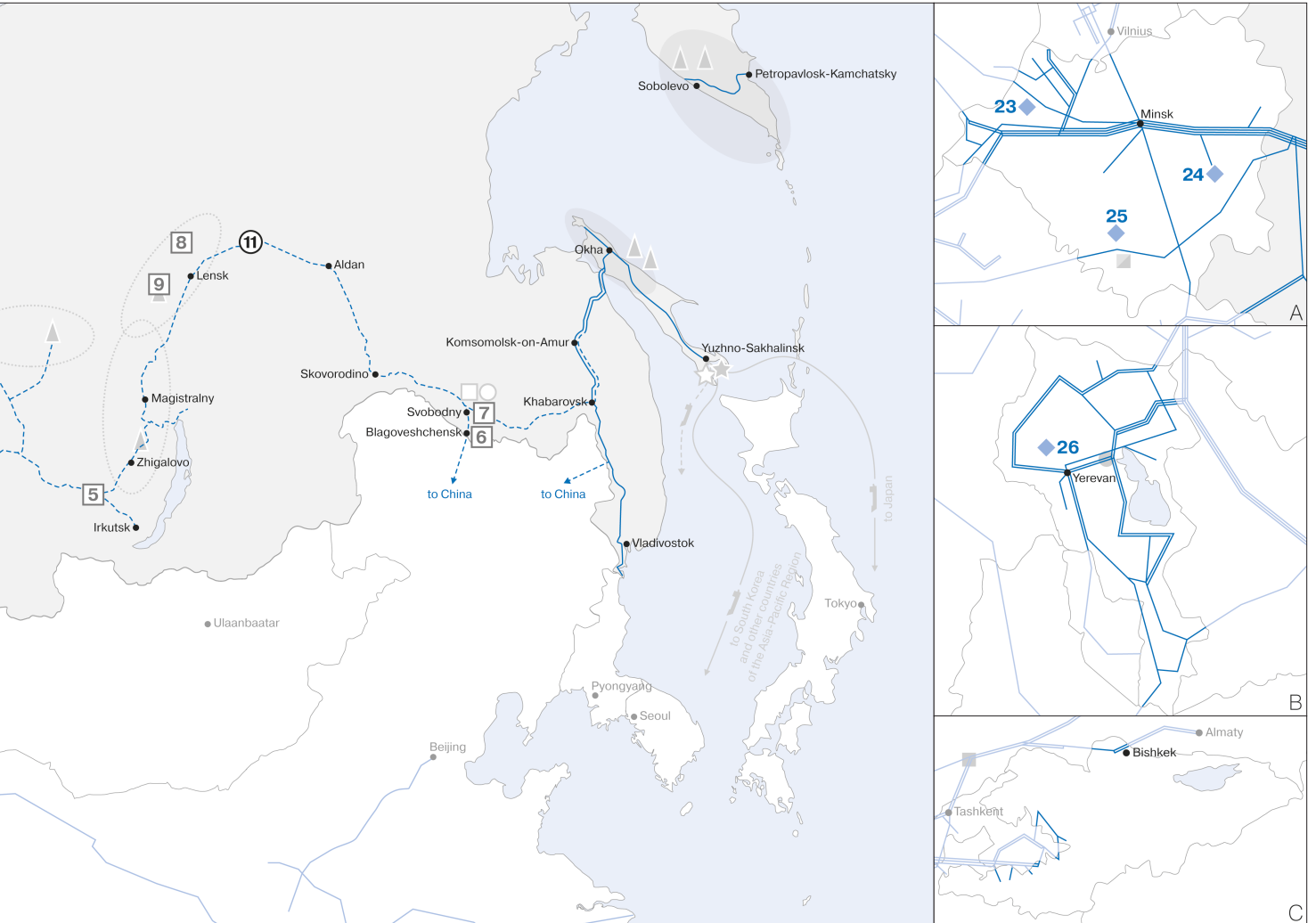
### Gas transportation projects

- ⑤ Nord Stream 2 gas pipeline
- ⑥ Expansion of UGSS' gas transportation capacity at the Gryazovets — Slavyanskaya CS section in the North-West region
- ⑦ Turkish Stream gas pipeline
- ⑧ Ukhta — Torzhok 2 gas pipeline
- ⑨ Bovanenkovo — Ukhta gas pipeline (second line)
- ⑩ Power of Siberia 2 gas pipeline
- ⑪ Power of Siberia gas pipeline

### Exploration areas for UGSFs

- ① Arkhangelskaya
- ② Skalinskaya
- ③ Tiginskaya
- ④ Kolmakovskaya
- ⑤ Angarskaya
- ⑥ Blagoveshchenskaya
- ⑦ Belogorskaya
- ⑧ Tas-Yuryakhskaya (helium)
- ⑨ Chayandinskaya (helium)

Note. Data as at 31 December 2016.



**UGSFs of Gazprom Group in operation**

1	Kaliningradskoye	15	Kirushinskoye
2	Gatchinskoye	16	Amanakskoye
3	Nevskoye	17	Sovhoznoye
4	Kaluzhskoye	18	Musinskoye
5	Shchelkovskoye	19	Kanchurinskoye
6	Uvyazovskoye	20	Kushchevskoye
7	Kasimovskoye	21	Severo-Stavropolskoye
8	Karashurskoye	22	Krasnodarskoye
9	Punginskoye	23	Pribugskoye (Belarus)
10	Peschano-Umetskoye	24	Osipovichskoye (Belarus)
11	Elshano-Kurdumskoye	25	Mozyrskoye (Belarus)
12	Stepnovskoye	26	Abovyanskoye (Armenia)
13	Dmitrievskoye	27	Rehden (Germany)
14	Mikhailovskoye		

**Existing UGSFs co-invested by Gazprom Group**

28	Jemgum (Germany)
29	Etzel (Germany)
30	Katharina (Germany)
31	Haidach (Austria)
32	Dambořice (Czech Republic)
33	Banatski Dvor (Serbia)
34	Inchukalinskoye (Latvia)

**UGSFs under construction and projected UGSFs**

35	Novomoskovskoye
36	Bednodemyanovskoye
37	Arbuzovskoye
38	Udmurtsky reserve complex
39	Shatrovskoye
40	Volgogradskoye

## Transportation

### Upgrade and overhaul of gas transportation system in Russia

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Gas trunk pipelines and pipeline branches put into operation*, km	3,213	703	1,277	933	771
Capital repairs, km	2,487	1,819	1,581	1,441	823
Number of technical faults per 1 thousand km	0.09	0.05	0.03	0.05	0.03

\* Starting from 2015, the data is formed taking into account commissioning of objects not provided by the investment program of the corresponding year.

### Major technical characteristics of Gazprom Group's gas transportation assets in Russia

	As at 31 December				
	2012	2013	2014	2015	2016
Length of gas trunk pipelines and pipeline branches (in single-lane measuring), thousand km	168.3	168.9	170.7	171.2	171.4
Linear compressor stations, units	222	247	250	250	253
Gas pumping units (GPUs), units	3,738	3,820	3,825	3,829	3,852
GPUs installed capacity, thousand MW	43.9	45.9	46.1	46.2	46.7

### Breakdown of Russian trunk pipelines by time of service, thousand km

	As at 31 December				
	2012	2013	2014	2015	2016
Up to 10 years	22.2	21.1	20.6	19.9	19.9
from 11 to 20 years	20.4	20.0	20.7	19.1	19.1
from 21 to 30 years	61.7	56.5	50.6	47.3	47.2
from 31 to 40 years	36.8	41.7	46.6	49.2	49.1
from 41 to 50 years	18.8	19.7	20.6	23.3	23.0
Over 50 years	8.4	9.9	11.6	12.4	13.1
<b>Total</b>	<b>168.3</b>	<b>168.9</b>	<b>170.7</b>	<b>171.2</b>	<b>171.4</b>

## Gas received into and distributed from Gazprom's GTS in Russia, bcm

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Injections into GTS</b>					
Gas inflow into GTS, including:	613.7	621.0	588.7	574.2	573.8
Central Asian gas	31.7	29.3	26.4	20.0	18.0
Azerbaijani gas	1.6	1.4	0.2	–	–
Gas withdrawn from UGSFs in Russia and Latvia	44.3	32.7	32.7	24.3	44.9
Decrease in the amount of gas within GTS	8.2	5.7	6.1	4.1	3.9
<b>Total</b>	<b>666.2</b>	<b>659.4</b>	<b>627.5</b>	<b>602.6</b>	<b>622.6</b>
<b>Distribution from GTS</b>					
Supply inside Russia, including:	362.3	354.6	356.5	342.3	351.7
Central Asian gas	0.0	0.0	0.0	0.0	0.0
Supply outside Russia, including:	209.3	220.2	196.2	196.8	209.4
Central Asian gas	31.6	29.3	26.4	20.0	18.0
Azerbaijani gas	1.6	1.4	0.2	–	–
Gas pumped into UGSFs in Russia	44.1	38.4	35.1	27.1	24.7
Technical needs of the gas transportation system and UGSFs	40.9	40.6	33.2	32.3	32.3
Increase in the amount of gas within GTS	9.6	5.6	6.5	4.1	4.5
<b>Total</b>	<b>666.2</b>	<b>659.4</b>	<b>627.5</b>	<b>602.6</b>	<b>622.6</b>

## Gas transportation volumes of Nord Stream and Blue Stream pipelines, bcm

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Nord Stream pipeline (through Portovaya CS)	11.8	23.8	35.6	39.1	43.8
Blue Stream pipeline (through Beregovaya CS)	14.7	13.7	14.4	15.7	13.1

### Major technical characteristics of gas transportation assets of Gazprom Group's subsidiaries abroad

	As at and for the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Belarus</b>					
(OAO Gazprom transgaz Belarus and a part of Yamal – Europe gas pipeline on the territory of Belarus)					
Length, thousand km	7.9	7.9	7.9	7.9	7.9
Compressor stations, units	10	10	10	10	10
Gas inflow to gas transportation system	64.5	69.1	65.2	64.2	60.3
including transit	44.3	48.8	45.1	45.4	41.7
<b>Armenia</b>					
(ZAO Gazprom Armenia)					
Length, thousand km	1.9	1.8	1.7	1.6	1.6
Compressor stations, units	–	–	–	–	–
Gas inflow to gas transportation system	2.5	2.4	2.5	2.3	2.2
including transit	–	–	–	–	–
<b>Kyrgyzstan</b>					
(OsOO Gazprom Kyrgyzstan)*					
Length, thousand km	x	x	0.7	0.7	0.7
Compressor stations, units	x	x	1	1	1
Gas inflow to gas transportation system	x	x	4.3	4.6	4.5
including transit	x	x	4.0	4.4	4.2

\* Figures provided since the year when control was taken over by the Group.

**Gazprom Group's major gas transportation projects**

Project	Purpose	Project highlights			Project status (as at 31 December 2016)
		Length	Number / total capacity of compressor stations	Annual capacity	
Gnyazovets — Vyborg pipeline loopings to the second line on Gryasovets — Volkhov section (expansion)	Increasing gas supplies to consumers in Saint Petersburg and the Leningrad Region	213 km	–	7.0 bcm	2018–2019  Project documents developed.
Nord Stream 2	Gas supplies to consumers in Western and Central Europe	C. 1,200 km (to be adjusted based on the results of a detailed project)	–	55 bcm	Q4 2019  The work on the basic design of the offshore section is being completed, work on detailed (work) design has begun. Gazprom and Allseas signed Agreement of intent for the first line of the pipeline with the option to lay the second string. National reports on environmental impact (EIA) are underway, as well as a consolidated EIA, as stipulated in the Convention on Environmental Impact Assessment in a Transboundary Context — the ESPOO Convention. An application for a building permit has been submitted in Sweden. The formation of a package of final documentation for obtaining national construction permits along the pipeline route from the relevant authorities of Denmark, Germany, Russia and Finland is underway.
Turkish Stream	Supplies of Russian gas to Turkey across the Black Sea and further on to Turkey's borders with neighbouring countries	942 km (offshore section), 195 km (onshore section)	The company will consider benefits of building compressor stations in Turkey based on the design documents to be developed by the Turkish partners for the onshore section of the pipeline.	31.5 bcm	December 2019  FEED documentation up to a mark of 660 km along the route identical to the route of the South Stream project developed. Engineering survey along the route to the mark of 940 km is underway. Negotiations are being held with the Turkish side on choosing the location of the shore terminal. A contract was concluded with the Allseas Group for the construction of the first thread of the offshore section of the Turkish Stream with the option to lay the second thread. The required number of pipes fully covering the requirements for the construction of a single line of the offshore gas pipeline manufactured and located on temporary storage areas in the Black Sea ports. On the territory of the Russian Federation, construction of shore junction facilities is underway, and one of two microtunnels has been completed for crossing the coastline of the sea.



Project	Purpose	Project highlights			Project status (as at 31 December 2016)
		Length	Number / total capacity of compressor stations	Annual capacity	
UGSS expansion to ensure gas supply to the Turkish Stream pipeline (Western route)*	Gas transportation in Russia to ensure gas supply to the Turkish Stream pipeline and consumers in Russia; until December 2014, the project was intended to supply gas to the South Stream pipeline.	865 km	4 compressor stations / 574 MW	33.5 bcm	2014–2016  In 2016, project facilities were commissioned to allow for 31.5 bcm of gas supplies per annum to the Turkish Stream offshore pipeline.
Murmansk — Volkhov gas pipeline	Gas transportation from the Shtokman field to the Russian UGSS	1,365 km	Up to 10 compressor stations / 1,225 MW	Up to 46 bcm (depending on gas production levels at the Shtokman field)	Construction and commissioning will be scheduled after the investment decision is made on the Shtokman field.
Bovanenkovo — Ukhta gas pipeline (Line 2)	Gas pipeline system to carry gas from Yamal fields	1,264 km	9 compressor stations / 830 MW	57.5 bcm	Linear section of Line 2 and two compressor stations commissioned, with further capacity to be added incrementally.
Ukhta – Torzhok gas pipeline (Line 2) (Yamal)	Additional gas supplies to Russia's North-West to expand the domestic gas infrastructure and ensure export supplies via Nord Stream 2	970 km	7 compressor stations / 625 MW	45 bcm	2014–2019  Construction and installation in progress
Power of Siberia	Gas supplies from the Chayandinskoye oil and gas condensate field and the Kovytkinskoye gas condensate field to the gas infrastructure of the Far Eastern Federal District, and gas exports to China market	2,962 km, including 2,159 km of the Chayandinskoye — skoye — China border	9 compressor stations (1,234 MW), including 8 compressor stations (1,186 MW) between Chayandinskoye and China border	Up to 48 bcm	The project documentation for the construction of a linear part of the main gas pipeline of compressor stations has been developed in the Chayandinskoye oil and gas field — China border, from the beginning of construction it was welded into a string of 604 km and the full complex of works was carried out 445 km of the linear part of the main gas pipeline. The construction of the base of the linear production control of the main gas pipeline and the shift housing estate in Lensk is underway. The suppliers of the main process equipment for the compressor station and the linear part of the main gas pipeline at the specified site were identified.
Power of Siberia 2	Gas supplies from Western Siberia to China; diversification of gas exports	2,622 km	12 compressor stations (to be updated)	30 bcm	The feasibility study has been completed. PJSC Gazprom and CNPC continue negotiating the commercial and technical framework of gas supplies.
Expansion of UGSS transportation capacity in Northwest Russia, Gryazovets — CS Slavyanskaya section	Additional gas supplies to consumers in Northwest Russia and gas exports	870 km	8 compressor stations / 1,500 MW	C. 80 bcm	Design and survey in progress.  Staged commissioning starting from December 2019

\*The Eastern Corridor project with the planned annual capacity of 65 bcm was suspended.

## Underground gas storage

### Gazprom's UGSFs in Russia

	As at 31 December				
	2012	2013	2014	2015	2016
Number of UGSFs, units	25	26	26	26	26
Total active capacity, bcm	68.16	70.41	71.10	73.56	73.62
Number of productive wells at UGSFs, units	2,621	2,689	2,685	2,686	2,681

### Gas storage in Russia

	Injection season				
	2012	2013	2014	2015	2016
<b>Gas injection into UGSFs, mmcm</b>					
Q1	357.6	55.7	189.4	–	–
Q2	23,793.6	21,407.9	14,963.8	10,158.4	8,468.8
Q3	18,006.8	13,784.8	16,790.1	14,498.1	14,209.2
Q4	1,938.7	3,120.1	3,191.2	2,425.3	1,973.1
<b>Total for the season</b>	<b>44,096.7</b>	<b>38,368.5</b>	<b>35,134.5</b>	<b>27,081.8</b>	<b>24,651.1</b>
	Withdrawal season				
	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017
<b>Gas withdrawal from UGSFs, mmcm</b>					
Q3	143.9	63.2	41.9	92.8	114.2
Q4	14,418.3	9,777.0	8,262.5	5,172.1	18,834.6
Q1 of the next year	21,815.7	21,662.3	16,353.2	24,653.1	26,175.1
Q2 of the next year	1,091.9	2,714.6	2,653.2	1,234.2	2,014.5
<b>Total for the season</b>	<b>37,469.8</b>	<b>34,217.1</b>	<b>27,310.8</b>	<b>31,152.2</b>	<b>47,138.4</b>
Maximum potential daily output during gas withdrawal season, mmcm per day	671.1	727.8	770.4	789.9	801.3

### Main projects of development of underground storage of gas in Russia

Regions of the Russian Federation	UGSF	UGSF type	Project parameters	
			Aggregate active capacity, bcm	Maximum potential daily capacity, mmcm
Volgograd Region	Volgogradskoye	Deposits of salt rock	0.8	70
Kaliningrad Region	Kaliningradskoe	Deposits of salt rock	0.8	12
Ryazan Region	Kasimovskoe	Water bearing structures	11.0	170
Republic of Udmurtia	Udmurtsky reserve complex	Water bearing structures	2.8	45
Tyumen Region	Punginskoe	Depleted field	3.5	43

\* The categories of investment projects are given in line with the classification used in PJSC Gazprom's Investment Programme for 2017.

## UGSFs with Gazprom Group participation abroad

Country	UGSF	Groups's participation, UGSF operator	UGSF capacities as at 31 December 2016						
			Aggregate active capacity, bcm		Daily capacity employed by Gazprom Group, mmcm	CS	GPU	Aggregate active capacity, bcm	Exploitation wells / caverns
			Total	Including employed by Gazprom Group					
Austria	Haidach	Gazprom Germania GmbH (22.2%) and Wingas GmbH (33.3%) participate as co-investors. Technical operator — RAG. System operators: astora GmbH & Co.KG (1/3) and OOO GHA (2/3).	2.8	2.3 (of which OOO Gazprom Export — 1.6)	23.4 (of which OOO Gazprom Export — 16.8)	1	4	62	17
Serbia	Banatski Dvor	OOO Gazprom Export (51%) participates as co-investor. Operator — Podzemno skladiste gasa Banatsi Dvor d.o.o.	0.5	0.2 (of which OOO Gazprom Export — 0.2 )	2.5 (of which OOO Gazprom Export — 2.5)	1	2	5	18
Germany	Jemgum	Shared ownership of Wingas GmbH (5/6). Technical operator — Wintershall Deutschland. Commercial operator (share of Wingas GmbH) — astora GmbH & Co.KG.	0.5	0.4 (not employed by Gazprom Export)	11.0 (not employed by Gazprom Export)	1	4	38	5
	Katharina	OOO Gazprom Export (50%) participates as co-investor. UGSF operator — Erdgasspeicher Peissen GmbH.	0.3	0.3 (of which OOO Gazprom Export — 0.3)	23.2 (of which OOO Gazprom Export — 23.2)	1	3	37	6
	Rehden	Owned by Wingas GmbH. Operator — astora GmbH & Co.KG.	4.7	4.7 (of which OOO Gazprom Export — 0.5)	62.0 (of which OOO Gazprom Export — 10.0)	1	7	88	16
	Etzel	Gazprom Germania GmbH (33.3% in caverns and 16% in pipeline) participates as co-investor. Operator — Etzel Kavernenbetriebsgesellschaft GmbH & Co. KG.	0.9	0.3 (not employed by Gazprom Export)	21.0 (not employed by Gazprom Export)	1	3	24	6
Czech Republic	Dambrice	OOO Gazprom Export (50%) participates as co-investor. Operator — Moravia Gas Storage a.s.	0.1	0.1 (of which OOO Gazprom Export — 0.1)	3.7 (of which OOO Gazprom Export — 3.7)	1	3	10.5	14
Belarus	Pributskoye	Ownership of	0.5	0.5	8.0	1	5	7.1	40
	Osipovichskoye	DAO Gazprom transgaz Belarus	0.4	0.4	6.0	1	6	4.4	42
	Mozyrskoye		0.3	0.3	20.0	1	2	4.6	15
Latvia	Inchukalnskoye	PJSC Gazprom (34%) participates as co-investor	2.3	1.6	15.6	1	6	33.1	93
Armenia	Abovianskoye	Ownership of ZAO Gazprom Armenia	0.2	0.2	6.0	1	9	9.9	21

**UGSF capacity used by OOO Gazprom Export according to leasing agreements,  
as at 31 December 2016**

Country	UGSF	Basis of storage	Aggregate active capacity, bcm	Daily capacity, mmcm
Netherlands	UGFS Bergermeer	Storage agreement with TAQA Onshore B.V.	1.9	26.1

**Gazprom's Gas injection into and withdrawal from UGSFs abroad, mmcm**

	Injection season, Q1–Q4				
	2012	2013	2014	2015	2016
<b>Gas injection into UGSFs abroad, mmcm</b>					
<b>FSU countries</b>					
Armenia	127.4	29.2	68.9	40.6	–
Belarus	940.8	928.8	962.3	916.7	857.1
Latvia	1,599.5	1,536.7	1,907.10	1,550.0	1,250.0
<b>Total injection (FSU countries)</b>	<b>2,667.7</b>	<b>2,494.7</b>	<b>2,938.3</b>	<b>2,507.3</b>	<b>2,107.1</b>
<b>Far abroad countries*</b>					
Austria	1,407.1	1,472.0	1,303.5	709.8	683.9
United Kingdom	224.3	226.5	224.0	224.4	–
Hungary	–	–	699.9	–	–
Germany	2,149.5	1,464.2	886.1	797.2	654.1
The Netherlands	1,276.7	617.3	1,313.1	1,176.9	1,195.0
Serbia	336.2	93.5	118.4	–	–
Czech Republic	–	–	–	–	105.3
<b>Total injection (far abroad countries)</b>	<b>5,393.8</b>	<b>3,873.5</b>	<b>4,545.0</b>	<b>2,908.3</b>	<b>2,638.3</b>
<b>Total for the season</b>	<b>8,061.5</b>	<b>6,368.2</b>	<b>7,483.3</b>	<b>5,415.6</b>	<b>4,745.4</b>

\* Gas injection of Gazprom Group for contracts of OOO Gazprom Export

	Withdrawal season, Q3–Q4 and Q1–Q2 of the next year				
	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017
<b>Gas withdrawal* from UGSFs abroad, mmcm</b>					
<b>FSU countries</b>					
Armenia	18.2	66.7	23.0	10.8	30.6
Belarus	840.9	813.1	850.0	815.2	872.0
Latvia	1,410.8	1,318.4	1,541.7	1,257.1	1,081.8
<b>Total withdrawal (FSU countries)</b>	<b>2,269.9</b>	<b>2,198.2</b>	<b>2,414.7</b>	<b>2,083.1</b>	<b>1,984.4</b>
<b>Far abroad countries**</b>					
Austria	1,534.1	1,171.6	835.8	820.0	1,408.3
United Kingdom	224.3	226.5	224.0	224.4	–
Hungary	–	–	699.9	–	–
Germany	2,342.2	1,123.7	753.4	978.1	932.6
The Netherlands	–	–	405.4	1,129.8	1,981.3
Serbia	145.7	67.5	0.5	12.0	0.5
Czech Republic	–	–	–	–	104.5
<b>Total withdrawal (far abroad countries)</b>	<b>4,246.3</b>	<b>2,589.3</b>	<b>2,919.0</b>	<b>3,164.3</b>	<b>4,427.2</b>
<b>Total for the season</b>	<b>6,516.2</b>	<b>4,787.5</b>	<b>5,333.7</b>	<b>5,247.4</b>	<b>6,411.6</b>

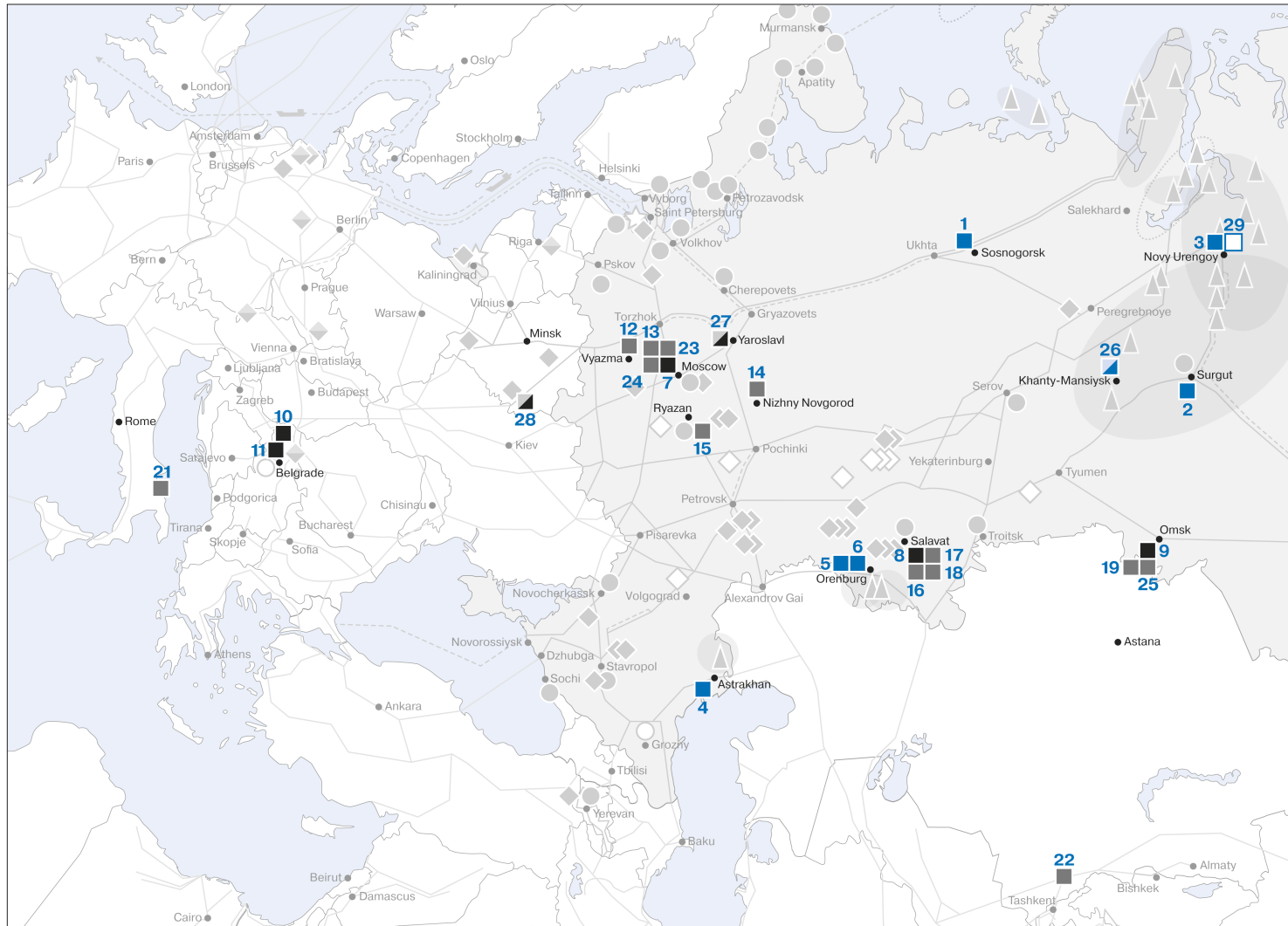
\* Excluding volumes sold in UGSFs.

\*\* Gas withdrawal of Gazprom group for contracts of OOO Gazprom Export

**Prospective UGSFs with Gazprom Group's participation abroad**

Country	UGSF	Type of construction	Type of UGSF	Project start	Basis of participation	Project parameters		Commissioning	Attainment of projected capacity	Project status (as at 31 December 2016)
						Aggregate active capacity, dcm	Daily capacity, mmcm			
Germany	Jemgum	New construction	Deposits of salt rock	2009	Wingas GmbH (83.3%) is co-investor	0.9	23.2	2014	2020	Operational exploitation and construction of new facilities
	Katharina	New construction	Deposits of salt rock	2011	OOO Gazprom Export (50%) is co-investor	0.6	25.8	2011	2025	Operational exploitation and construction of new facilities
	Etzel	New constructions	Deposits of salt rock	2008	Gazprom Germania GmbH (33.3%) is co-investor	1.1	21.6	2013	2018	Operational exploitation and construction of second stage facilities
Czech Republic	Damborice	New construction	Depleted field	2014	OOO Gazprom Export (50%) is co-investor	0.5	7.6	2016	2018	Operational exploitation and expansion

## Assets and projects of Gazprom Group and joint ventures in processing and refining of hydrocarbons, gas and oil chemistry



Existing refining/processing and petrochemical assets	
<span style="color: blue;">■</span>	GPPs
<span style="background-color: black; color: black;">■</span>	Refineries
<span style="background-color: gray; color: black;">■</span>	Gas chemical and petrochemical plants
<span style="color: blue;">▣</span>	Gazprom Group's access to the GPP's capacity
<span style="color: gray;">▣</span>	Gazprom Group's access to the refinery's capacity
Refining/processing and petrochemical projects	
<span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px;"></span>	

GPPs	
1	Sosnogorsk GPP
2	Condensate stabilisation plant
3	Condensate pre-transportation preparation plant
4	Astrakhan GPP
5	Orenburg GPP
6	Orenburg Helium Plant
Refineries	
7	Moscow Refinery
8	Refinery in Salavat
9	Omsk Refinery
10	Refinery in Novi Sad (Serbia)
11	Refinery in Pancevo (Serbia)

Gas chemical and petrochemical plants	
12	OOO Nova-Brit
13	Moscow Lubricants Plant
14	ZAO SOVKHIMTEKH, OOO Poliefir, OOO BSV-CHEM
15	Ryazan Bituminous Materials Experimental Plant
16	Gas chemical plant
17	Monomer Plant and the acryl acid and butyl acrylate plant
18	Mineral fertiliser plant
19	Omsk Lubricants Plant
20	Methanol plant
21	Oil and lubricant blending plant in Bari (Italy)
22	Bitumen plant in Shymkent (Kazakhstan)

Note. Data as at 31 December 2016.



- 23 NPP Neftekhimiya\*
  - 24 Total — PMB\*
  - 25 Poliom\*
- \*Assets operated by joint ventures.

**Gazprom Group’s access to the GPP’s capacity**

- 26 Yuzhno-Priobskiy GPP (Gazprom Group’s access to 50% of capacity)

**Gazprom Group’s access to the refinery’s capacity**

- 27 Slavneft-YANOS (Gazprom Group’s access to 50% of capacity)
- 28 Mozyr Refinery\*\*

\*\* The volume of oil refining at Mozyr Refinery is determined by Gazprom Group’s oil supply schedule, approved by the Russian Ministry of Energy, and the scheme to share oil supplies between Gazprom Neft Group’s own refineries and sales to Mozyr Refinery as set out in the Intergovernmental Agreement between Russia and Belarus.

**Refining/processing and petrochemical projects**

- 29 Novourengosky Gas Chemical Complex
- 30 Amur GPP



### Volumes of Gazprom Group's hydrocarbon processing (excluding give-and-take raw materials)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Natural and associated petroleum gas, bcm</b>					
PJSC Gazprom and its major 100% subsidiaries*	32.23	31.11	30.00	30.64	30.06
Gazprom neftekhim Salavat	0.22	0.41	0.45	0.44	0.49
Gazprom Neft	–	–	–	0.10	0.44
<b>Total</b>	<b>32.45</b>	<b>31.52</b>	<b>30.45</b>	<b>31.18</b>	<b>30.99</b>
<b>Crude oil and gas condensate, mm tonnes</b>					
PJSC Gazprom and its major 100% subsidiaries*	13.97	16.09	16.38	17.26	17.55
Gazprom Neft including:	43.34	42.63	43.48	43.07	41.89
abroad	4.08	3.80	3.78	3.54	3.23
Gazprom neftekhim Salavat*	4.23	7.42	8.13	6.44	6.47
<b>Total</b>	<b>61.54</b>	<b>66.14</b>	<b>67.99</b>	<b>66.77</b>	<b>65.91</b>

\* For the list of companies, see Glossary.

\*\* The results are shown since June 1, 2012.

### Major types of refined products produced by Gazprom Group (excluding give-and-take raw materials)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Stable condensate and oil, thousand tonnes	4,675.3	6,035.3	6,410.8	7,448.1	8,216.4
Dry gas, bcm	25.0	24.2	23.3	24.2	24.0
Liquefied hydrocarbon gases, thousand tonnes	3,097.3	3,276.4	3,371.1	3,463.3	3,525.4
Including abroad	127.2	118.0	130.4	137.9	115.0
Motor gasoline, thousand tonnes	11,706.9	12,125.2	12,067.9	12,395.2	12,270.0
Including abroad	827.8	669.9	762.7	646.8	516.0
Diesel fuel, thousand tonnes	14,459.5	16,215.2	16,281.4	14,837.0	14,971.4
Including abroad	1,251.9	1,423.5	1,493.8	1,470.1	1,363.0
Jet fuel, thousand tonnes	2,813.7	2,852.0	3,161.9	3,171.0	3,213.2
Including abroad	73.3	73.2	108.5	107.9	122.0
Heating oil, thousand tonnes	10,123.8	9,132.0	9,318.0	8,371.4	7,787.2
Including abroad	1,081.7	739.4	717.8	450.6	334.0
Oils, thousand tonnes	380.3	396.2	374.3	404.1	421.0
Sulfur, thousand tonnes	5,327.6	4,936.9	4,747.8	4,793.8	4,905.6
Including abroad	2.9	12.0	15.6	17.8	22.0
Helium, mcm	4,923.9	3,570.7	3,997.5	4,969.7	5,054.1
Wide fraction of light hydrocarbons, thousand tonnes	998.4	1,587.6	1,534.7	1,728.6	1,807.0
Ethane fraction, thousand tonnes	397.1	389.0	373.8	377.4	377.9
Monomers, thousand tonnes	97.8	242.6	262.2	243.4	294.0
Polymers, thousand tonnes	61.3	133.2	161.8	157.9	179.1
Products of organic synthesis, thousand tonnes	87.4	86.8	83.5	90.4	89.6
Mineral fertilizers and raw materials for their production, thousand tonnes	326.1	752.1	778.2	775.9	953.0

### Areas at utilization of some types of refined oil and gas products produced by Gazprom Group

Product type	Area of utilization
Acrylic acid, acrylates	Production of absorbent products, water-emulsion paints and other adhesive coatings
Oil bitumens	Road construction, waterproofing materials
Bitumen-derived materials	Construction and repair of highways, airfields, artificial structures, hydro and corrosion protection, industrial and civil engineering
Helium	Road construction, waterproofing materials
Mineral fertilizers (carbamide, liquid ammonia, carbon dioxide, ammonium nitrate)	Power engineering, metallurgy, ferospace industry, shipbuilding, mechanical engineering, medicine
Monomers (ethylene, propylene, styrene)	Agriculture
Products of organic synthesis (butyl, plasticizer DOF)	Raw materials for the petrochemical industry
Polymer-bitumen binder	Raw materials for the petrochemical industry
Polymers (polyethylene, polystyrene)	Road construction
Ethane fraction	Manufacture of medical and household products, tapes, packaging and insulation materials
Coke	Raw materials for oil and gas industry
Wide fraction of light hydrocarbons	Raw materials for oil and gas industry Manufacture of electrodes, anodes, nonferrous and ferrous metallurgy
Helium	Raw materials for oil and gas industry

### Refined products produced by major Gazprom Group's subsidiaries (excluding give-and-take raw materials)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>PJSC Gazprom and its major 100% subsidiaries*</b>					
Stable gas condensate and oil, thousand tonnes	4,675.3	6,035.3	6,410.8	7,448.1	8,216.4
Dry gas, bcm	25.0	24.2	23.3	24.1	23.6
Liquefied hydrocarbon gases, thousand tonnes	2,286.4	2,287.4	2,441.7	2,487.4	2,578.4
Motor gasoline, thousand tonnes	2,243.8	2,428.8	2,519.7	2,532.7	2,497.9
Diesel fuel, thousand tonnes	1,554.5	1,569.0	1,585.7	1,362.1	1,435.6
Jet fuel, thousand tonnes	146.0	158.8	172.1	167.7	174.2
Heating oil, thousand tonnes	347.3	351.4	329.6	332.2	346.1
Sulfur, thousand tonnes	5,203.4	4,790.4	4,589.4	4,623.9	4,696.5
Helium, mcm	4,923.9	3,570.7	3,997.5	4,969.7	5,054.1
Wide fraction of light hydrocarbons, thousand tonnes	998.4	1,587.6	1,534.7	1,661.9	1,666.7
Ethane fraction, thousand tonnes	397.1	389.0	373.8	377.4	377.9
<b>Gazprom Neft</b>					
Dry gas, bcm	–	–	–	0.1	0.4
Liquefied hydrocarbon gases, thousand tonnes	810.9	989.0	929.4	975.9	947.0
Motor gasoline, thousand tonnes	8,961.6	8,923.0	8,844.8	9,081.2	9,176.0
Diesel fuel, thousand tonnes	11,508.1	12,087.8	12,147.7	11,874.5	12,023.0
Jet fuel, thousand tonnes	2,667.7	2,693.2	2,989.8	3,003.3	3,039.0
Heating oil, thousand tonnes	8,775.2	7,476.9	7,391.7	7,198.6	6,720.0
Oils, thousand tonnes	380.3	396.2	374.3	404.1	421.0
Sulfur, thousand tonnes	107.7	117.0	124.0	136.8	180.0
Wide fraction of light hydrocarbons, thousand tonnes	–	–	–	28.0	131.5

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Gazprom neftekhim Salavat**</b>					
Motor gasoline, thousand tonnes	501.5	773.3	703.4	781.3	596.1
Diesel fuel, thousand tonnes	1,396.9	2,558.4	2,548.1	1,600.5	1,512.9
Heating oil, thousand tonnes	970.2	1,303.8	1,596.7	840.6	721.1
Sulfur, thousand tonnes	16.6	29.5	34.4	33.1	29.1
Monomers, thousand tonnes	97.8	242.6	262.2	243.4	294.0
Polymers and products, thousand tonnes	61.3	133.2	161.8	157.9	179.1
Products of organic synthesis, thousand tonnes	87.4	86.8	83.5	90.4	89.6
Mineral fertilizers and its raw materials, thousand tonnes	326.1	752.1	778.2	775.9	953.0
Wide fraction of light hydrocarbons, thousand tonnes	–	–	–	38,7	8,8

\* For the list of companies, see Glossary.

\*\* The results are shown since June 1, 2012.

## Hydrocarbon processing, gas chemical and petrochemical plants

Name	Company	Location	Year of commissioning/ establishment	Annual throughput / production capacity as at 31 December 2016	Product range	Key local investment projects underway as at 31 December 2016
<b>Major subsidiaries of PJSC Gazprom</b>						
Astrakhan GPP	OOO Gazprom dobycha Astrakhan	Astrakhan	1986	12.0 bcm of natural gas; 7.3 mm tonnes of gas condensate	Dry marketable gas, stable gas condensate, liquefied gas, wide fraction of light hydrocarbons, automobile gasoline, light gas condensate distillate, diesel fuel, fuel oil, heavy gas condensate distillate, gas condensate middle distillate, sulphur	Refurbishment of phases 1 and 2 of the gas processing plant to increase conversion rates, and improve the quality and environmental performance of marketable products (diesel fuel and gasoline). The project is expected to offer a guaranteed condensate and NGL processing capacity equivalent to 12 bcm of feedstock gas per year.
Orenburg GPP	OOO Gazprom dobycha Orenburg	Orenburg	1974	37.5 bcm of natural gas; 6.26 mm tonnes of gas condensate and oil	Dry marketable gas, stable gas condensate, liquefied gas, NGLs, gas sulphur, odorant	–
Orenburg Helium Plant	OOO Gazprom dobycha Orenburg	Orenburg	1978	15.0 bcm of natural gas;	Helium gaseous and liquefied, dry marketable gas, ethane fraction, liquefied gases, wide fraction of light hydrocarbons, pentane-hexane fraction, hydrocarbon fraction	–
Sosnogorsk GPP	OOO Gazprom pererabotka	Sosnogorsk, Republic of Komi	1946	3.0 bcm of natural gas; 1.25 mm tonnes of unstable condensate (stabilisation)*	Dry marketable gas, liquefied gas, stable gas condensate, carbon black	–
Urengoy Condensate Pre-transportation Preparation Plant	OOO Gazprom pererabotka	Novy Urengoy	1985	13.67 mm tonnes of unstable (non-degassed) condensate (de-ethanisation and stabilisation) or 12.2 mm tonnes of degassed condensate	De-ethanised gas condensate, stable gas condensate, liquefied gas, NGLs, diesel fuel, light distillate of gas condensate (GCLD), jet fuel TS-1, de-ethanised gas	–
Surgut Condensate Stabilisation Plant	OOO Gazprom pererabotka	Surgut	1985	12.05 mm tonnes of oil and gas condensation mixture (stabilisation)	Stable gas condensate (oil), motor gasoline, diesel fuel, TS-1 jet fuel, liquefied gas, NGLs, PHF, GCLD	–
Methanol plant	OOO Sibmetakhim	Tomsk	1983	Processing of 0.930 bcm of natural gas per year Production of 2.500 tonnes of methanol per day	Methanol, formalin, amino-formaldehyde resins	–

Name	Company	Location	Year of commissioning/ establishment	Annual throughput / production capacity as at 31 December 2016	Product range	Key local investment projects underway as at 31 December 2016
<b>Gazprom Neft</b>						
Omsk Refinery	AO Gazprom neft— Omsk Refinery	Omsk	1955	22.036 mm tonnes of oil and gas condensate	Motor gasoline, stable natural gasoline, diesel fuel, jet fuel, fuel oil, aromatic hydrocarbons, liquefied hydrocarbon gases, coke, oil bitumens, sulphur	<ul style="list-style-type: none"> <li>— Construction of an advanced oil refining facility comprising a hydro-cracking and hydrodesulphurisation unit with an annual capacity of 2 mm tonnes of vacuum gasoil to increase the output of high-octane gasolines, jet fuel, and diesel fuel.</li> <li>— Construction of a combined primary refining unit (desalter and atmospheric / vacuum distillation unit) with an annual throughput of 8.4 mm tonnes of hydrocarbons to replace three primary refining units commissioned back in the 1960s.</li> <li>— Construction of a delayed coking unit with an annual capacity of 2.0 mm tonnes of residual asphalt to phase out the production of fuel oil and increase the output of light products and coke.</li> <li>— Construction of a diesel fuel hydro-treating and dewaxing plant with an annual capacity of 2.5 mm tonnes to replace two hydrotreating units and increase the output of winter diesel fuel.</li> <li>— Construction of a hydrogen unit with an annual capacity of 12 thousand tonnes of hydrogen to supply new and refurbished hydrotreating units with hydrogen and secure an independent hydrogen source to exclude the exposure to catalytic reforming capacities.</li> <li>— Construction of treatment facilities with an hourly throughput of 3,450 cubic metres of wastewater to reduce pollutant concentrations in industrial wastewater, reduce open-air nonpoint sources of pollution, and decrease fresh water consumption by recycling wastewater.</li> <li>— Construction of a catalyst facility with an annual capacity of 21.0 thousand tonnes to increase the output of</li> </ul>

Name	Company	Location	Year of commissioning/ establishment	Annual throughput / production capacity as at 31 December 2016	Product range	Key local investment projects underway as at 31 December 2016
Moscow Refinery	AO Gazprom neft – Moscow Refinery	Moscow	1938	12.15 mm tonnes of oil	Motor gasoline, diesel fuel, jet fuel, fuel oil, oil bitumens, liquefied hydrocarbon gases, sulphur	<p>catalysts for catalytic cracking, set up the production of catalysts for hydrotreating of medium distillates and vacuum gasoil hydrocracking.</p> <p>— Construction of a combined refining unit with an annual throughput of 6.0 mm tonnes of oil to increase throughput and production capacity for high-octane gasolines, jet fuel, and diesel fuel.</p> <p>— Construction of an advanced oil refining facility comprising a hydrocracking and delayed coking unit with an annual capacity of 2.0 mm tonnes of vacuum gasoil and 2.4 mm tonnes of residual asphalt per year, contributing to a lower output of fuel oil and higher yields of light products.</p> <p>— Upgrade of the G-43-107 catalytic cracking unit with an annual capacity of 2.6 mm tonnes of vacuum gasoil to increase the annual output of vacuum gasoil by 350 thousand tonnes and ramp up the yield of naphtha.</p> <p>— Construction of biological waste-water treatment facilities with an hourly throughput of 1.400 cubic metres to meet wastewater treatment requirements of AO Mosvodokanal and build an efficient high-tech system of water supply to the refinery.</p>
Oil refinery (Pancevo)	NIS	Pancevo (Serbia)	1968	7.313 mm tonnes of oil	Motor gasoline, stable natural gasoline, diesel fuel, jet fuel, fuel oil, benzene, toluene, liquefied hydrocarbon gases, oil bitumen, polymer-modified bitumen, sulphur, and propylene	—
Oil refinery (Novi Sad)	NIS	Novi Sad (Serbia)	1968		Motor gasoline, diesel fuel, fuel oil, and bitumens	—
Oil and lubricant blending plant (Bari)	Gazpromneft Lubricants Italia S.p.A.	Bari (Italia)	1976	30 thousand tonnes of oils and 6 thousand tonnes of plastic lubricants	Industrial oils, motor oils, lubricants	—

Name	Company	Location	Year of commissioning/ establishment	Annual throughput / production capacity as at 31 December 2016	Product range	Key local investment projects underway as at 31 December 2016
Moscow Lubricants Plant (MZSM)	ZAO Gazpromneft MZSM	Fryazino	2007	62 thousand tonnes of oils	Motor, transmission and industrial oils	—
Omsk Lubricants Plant (OZSM)	OOO Gazprom neft-Lubricants	Omsk	2009	260 thousand tonnes of oils	Motor and industrial oils	—
Ryazan Bituminous Materials Experimental Plant (RZBM)	ZAO Gazpromneft – Ryazan bituminous materials	Ryazan	2011 (PMB binder unit)	60 thousand tonnes of PMB binder	PMB binder	—
TOO Gazpromneft-bitumen Kazakhstan	TOO Gazpromneft-bitumen Kazakhstan	South Kazakhstan Region Republic of Kazakhstan)	2011	280 thousand tonnes	Road and construction bitumen	—
OOO Nova-Brit	OOO Nova-Brit	Vyazma, Smolensk Region	2005	56 thousand tonnes	Bituminous products used in road and airfield construction: bitumen sealers and mastics, PMB joint tapes, bitumen emulsions and PMB binders, and PMB emulsion mastics	—
ZAO SOVKHIMTEKH, OOO Poliefir, OOO BCY-HIM	Rospolikhim Group of Companies	Nizhny Novgorod	2001	5 thousand of oil	Aviation, hydraulic, tempering, compressor, vacuum, transmission, refrigerator, industrial, and rolling mill oils, cooling lubricants, plasticisers, preservative lubricants, deicing fluid, vinylin, additives, lubricant bases	—
<b>Gazprom neftekhim Salavat</b>						
Refinery	OOO Gazprom neftekhim Salavat	Salavat	1955	10.0 mm tonnes of oil and condensate	Motor gasoline, pentane-isopentane fraction, benzene, toluene, oil solvent, kerosene absorbent, diesel fuel, fuel oil, feedstock for viscous road oil bitumens, technical sulphur, oil bitumens	— Construction of a hydrogen unit with a pressure swing adsorption (PSA) facility with an hourly capacity of 25,000 normal cubic metres of hydrogen to increase the yield of Euro 5 compliant fuels. — Construction of a PHF-isomerisation unit with an annual throughput of 434 thousand tonnes to produce the isomerisation product: a high-octane component, which will increase the output of Euro 4 and Euro 5 compliant gasolines. — Construction of a catalytic cracking facility with an annual capacity of

Name	Company	Location	Year of commissioning/ establishment	Annual throughput / production capacity as at 31 December 2016	Product range	Key local investment projects underway as at 31 December 2016
Monomer plant	OOO Gazprom neftekhim Salavat	Salavat	1991	165.7 thousand tonnes of polyethylene; 45.9 thousand tonnes of polystyrene; 200 thousand tonnes of styrene; 230.0 thousand tonnes of ethylbenzene; 347.0 thousand tonnes of ethylene; 144 thousand tonnes of propylene; 151.8 thousand tonnes of benzene; 183.8 thousand tonnes of alcohols; 21.9 thousand tonnes of hydrogen; 38.4 thousand tonnes of dioctyl phthalate (DOP) plasticiser; 16.3 thousand tonnes of phthalic anhydride;	Ethylene, propylene, benzene, pentane-isoprenecyclopenta- diene fraction, butylene- butadiene fraction, heavy pyrolysis residue, styrene, polystyrenes, low-density polyethylene, high-density polyethylene, normal industrial butyl alcohol, industrial isobutyl alcohol, 2-ethylhexanol, DOP plasticiser	1.095 mm tonnes of vacuum gasoil to process vacuum gasoil from ELOU-AVT-6 (desalter and atmos- pheric / vacuum distillation) and AVT-4 (atmospheric / vacuum distillation) units to produce the high-octane component for marketable gasolines. — Construction of a sulphide and alkaline waste neutralisation unit with an hourly throughput of 50 tonnes for advanced neutralisation and treatment of process wastewater to reduce the load on treatment facilities and ensure 100% water recycling. — Construction of a propane-propylene processing unit with an annual capacity of 85 tonnes. — Construction of an elemental sulphur production unit with an annual capacity of 60 thousand tonnes.
Gas chemical plant	OOO Gazprom neftekhim Salavat	Salavat	1964	604.8 thousand tonnes of ammonia; 701.7 thousand tonnes of urea	Ammonia, urea, ammonia water	—
Mineral fertiliser plant (MMF)	OAO Meleuz Mineral Fertilisers	Meleuz	1977	450.0 thousand tonnes of ammonium nitrate	Ammonium nitrate	—
Acryl acid and butyl acrylate plant	OOO Akrit Salavat	Salavat	2016	80 thousand tonnes of butyl acrylate; 35 thousand tonnes of glacial acrylic acid (polymer-grade)	Butyl acrylate, glacial acrylic acid	—

\* Not including gas condensate stabilisation unit CSU-2 with an annual feedstock capacity of 1.25 mm tonnes. in reserve as at 31 December 2016.



Additionally, Gazprom Group has access to the following capacities:

<b>Name</b>	<b>Company</b>	<b>Location</b>	<b>Year of commissioning/ establishment</b>	<b>Annual throughput / production capacity as at 31 December 2016</b>	<b>Product range</b>
Slavneft-YANOS	OAO Slavneft-YANOS	Yaroslavl	1958–1961	15.0 mm tonnes of oil	Motor gasoline, stable natural gasoline, diesel fuel, jet fuel, fuel oil, oils, aromatic hydrocarbons, sulphur, sulphuric acid, paraffin and wax products
Mozyr Refinery	OAO Mozyr Oil Refinery	Mozyr (Republic of Belarus)	1975	12.0 mm tonnes of oil	Motor gasolines, lamp oil, diesel fuel, home heating oil, fuel oil, oil bitumens, LHGs, vacuum gasoil, benzene
NPP Neftekhimiya	OOO NPP Neftekhimiya (joint venture with PAO SIBUR Holding)	Moscow	2003	120.0 thousand tonnes	Polypropylene
Poliom	OOO Poliom (joint venture with PAO SIBUR Holding and Titan Group)	Omsk	2013	210.0 thousand tonnes	Polypropylene
Total – PMB	OOO Gazpromneft-Total PMB (joint venture with Total)	Moscow	2014	67.0 thousand tonnes	PMB binder, bitumen emulsion
Yuzhno-Priobskiy GPP	OOO Yuzhno-Priobskiy GPP (joint venture with PAO SIBUR Holding)	Khanty-Mansiysk	2015	900.0 mmcm of APG	Dry stripped gas, natural gas liquids

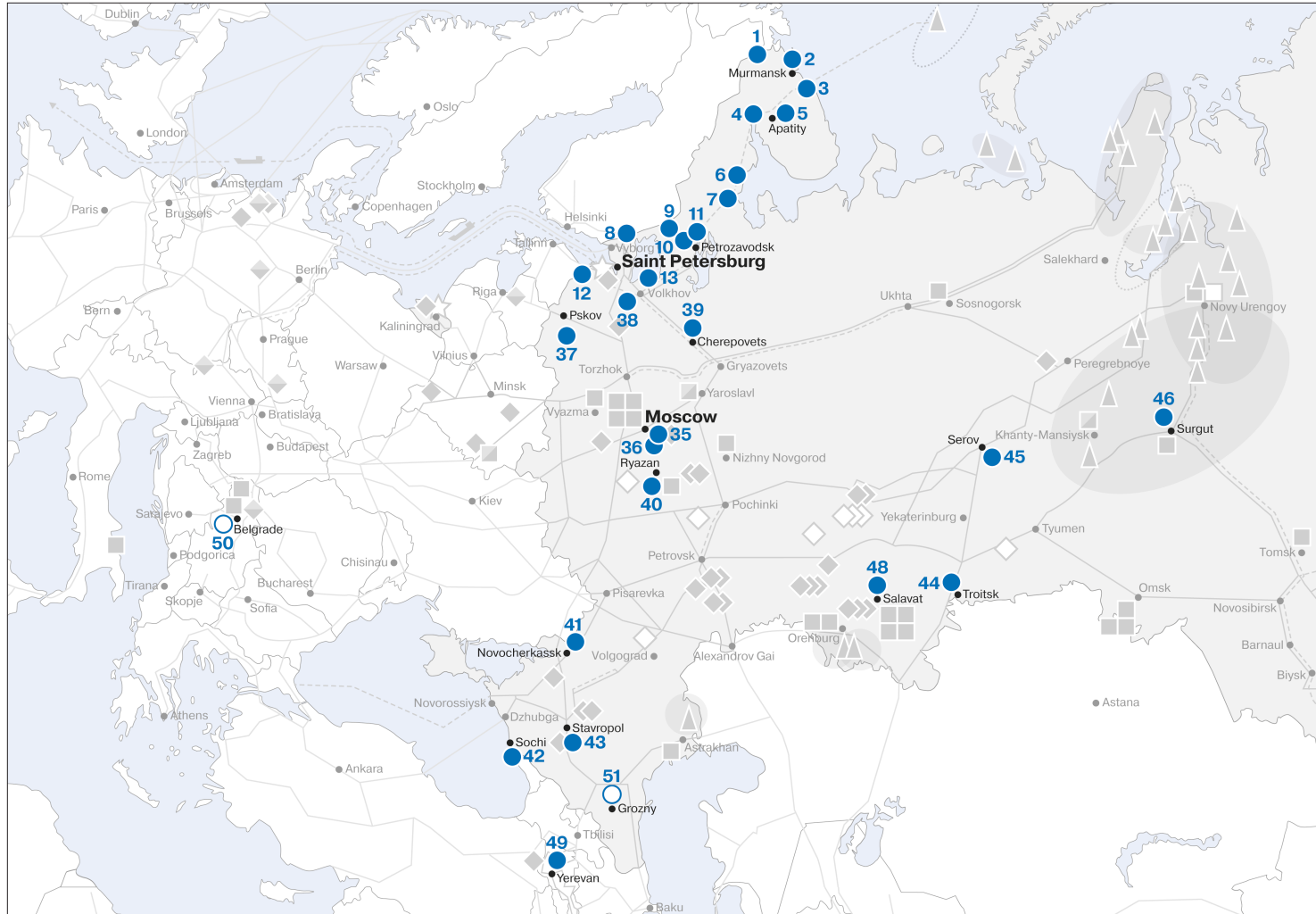
### Major new hydrocarbon processing, gas chemical and petrochemical projects of Gazprom Group

Project name and goal	Company	Location	Annual design throughput / production capacity	Commissioning year	Project status (as at 31 December 2016)
Novourengovskiy GCC. Goal: process de-ethanised condensate gases from the Nadym-Pur-Taz region; potential target markets for marketable products include Russia, Europe, and Asia.	OOO Novourengovskiy GCC	Novy Urengoy	1,456 thousand tonnes of ethane-containing gas; 400 thousand tonnes of low-density polyethylene	2021	Installation of equipment and pipelines at ethylene and polyethylene production units, installation of key process equipment and other construction and installation operations at offsite facilities are underway. The construction and installation operations are accompanied by the upgrade and retrofit of existing equipment and completion of design activities intended to increase the capacity of key operational assets and to bring the project in line with regulatory changes.
Amur GPP. Goal: support comprehensive processing of natural gas from the Yakutsk and Irkutsk gas production centres.	RJSC Gazprom	Svobodnenskiy District of the Amur Region	Processing of 42.0 bcm of natural gas per year (with a potential ramp-up to 49.0 bcm per year). Production of 38.0 bcm of marketable gas; 2.2 mm tonnes of ethane; 1.8 mm tonnes of LHGs; 60.0 mmcm of helium.	The project is scheduled for commissioning in line with the obligations under the agreement for Russian gas supplies to China via the eastern route.	Development of project documentation has been completed, positive conclusions of the state expertise of project documentation for the main stages of construction have been received, and working documentation has been developed. Completed work on the registration of land. Construction works on auxiliary objects and objects of transport infrastructure (access roads, railway communications, temporary berth on the Zeya river) underway. Orders for the manufacture of equipment for a long production cycle placed.
A stabilisation unit for Achimov deposit condensate from the Nadym-Pur-Taz region. Goal: set-up a mechanism in the north of the Tyumen Region to process and transport heavy paraffinic products (Achimov deposit oil and condensate).	OOO Gazprom pererabotka	Purovskiy District, Yamal-Nenets Autonomous Area	Unstable condensate: 4 mm tonnes per year; De-ethanised condensate: 2.4 mm tonnes per year; Stable condensate: 1.2 mm tonnes per year; De-ethanised gases: 0.4 bcm per year.	2019	Construction and installation operations are underway.

### Gazprom Group's projects for transportation of liquid hydrocarbons

Project name and goal	Company	Location	Annual design throughput / production capacity	Commissioning year	Project status (as at 31 December 2016)
Urengoy oil pumping station. Goal: ensure transportation of liquid hydrocarbons from the Nadym-Pur-Taz region.	OOO Gazprom pererabotka	Purovskiy District, Yamal-Nenets Autonomous Area	Transportation of 5.0 mm tonnes of hydrocarbons	2019	Construction and installation operations are underway.
Urengoy – Purpe oil and condensate pipeline. Goal: ensure transportation of liquid hydrocarbons from the Nadym-Pur-Taz region.	OOO Gazprom pererabotka	Purovskiy District, Yamal-Nenets Autonomous Area	Transportation of 5.0 mm tonnes of hydrocarbons	2019	Construction and installation operations are underway.

Power and heat assets and projects of Gazprom Group



- Power and heat facilities in operation

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- Power and heat facilities under construction and projected facilities

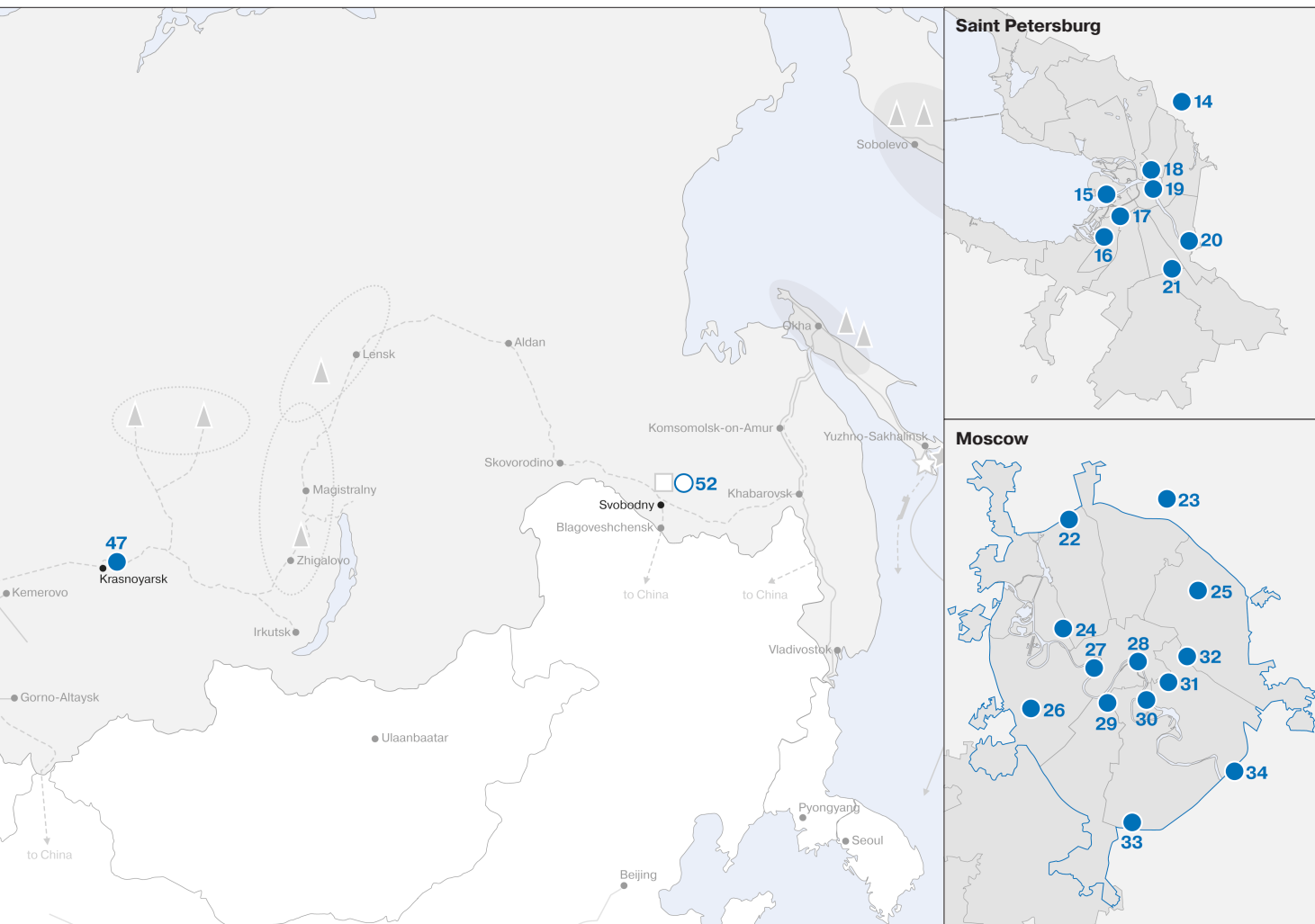
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- PAO MIPC heat supply zone

- PAO TGC-1 in Murmansk Region, Republic of Karelia and Leningrad Region**
- 
- 1 Pazskiye HEPPs
  - 2 Murmanskaya CHPP
  - 3 Serebryanskiye HEPPs and Tulomskiye HEPPs
  - 4 Nivskiye HEPPs
  - 5 Apatitskaya CHPP
  - 6 Kemskiye HEPPs
  - 7 Vygskiye HEPPs
  - 8 Vuoksinskiye HEPPs
  - 9 Group of small HEPPs
  - 10 Petrozavodskaya CHPP
  - 11 Sunskiye HEPPs
  - 12 Narvskaya HEPP
  - 13 Ladozhskiye HEPPs
- 

- PAO TGC-1 in Saint Petersburg**
- 
- 14 Severnaya CHPP
  - 15 Vasileostrovskaya CHPP
  - 16 Pervomayskaya CHPP
  - 17 Avtovskaya CHPP
  - 18 Vyborgskaya CHPP
  - 19 Tsentralnaya CHPP
  - 20 Pravoberezhnaya CHPP
  - 21 Yuzhnaya CHPP
- 

Note. Data as at 31 December 2016.



**PAO Mosenergo**

- 22 CHPP-21
- 23 CHPP-27
- 24 CHPP-16
- 25 CHPP-23
- 26 CHPP-25
- 27 CHPP-12
- 28 GES-1 after P.G. Smidovich
- 29 CHPP-20
- 30 CHPP-9
- 31 CHPP-8
- 32 CHPP-11 after M.Ya. Ufaev
- 33 CHPP-26
- 34 CHPP-22
- 35 GRES-3 after R.E. Klasson
- 36 CHPP-17

**PAO OGGK-2**

- 37 Pskovskaya GRES
- 38 Kirishskaya GRES
- 39 Cherepovetskaya GRES
- 40 Ryazanskaya GRES
- 41 Novocherkasskaya GRES
- 42 Adlerskaya TPP
- 43 Stavropolskaya GRES
- 44 Troitskaya GRES
- 45 Serovskaya GRES
- 46 Surgutskaya GRES-1
- 47 Krasnoyarskaya GRES-2

**48 Novo-Salavatskaya CHPP**

- 49 Razdanskaya TPP (Armenia)
- 50 TPP project in Pancevo (Serbia)
- 51 Groznenskaya TPP project
- 52 Amurskaya TPP project

## Electric power and heat generating capacity of Gazprom Group

Generating company	As at 31 December				
	2012	2013	2014	2015	2016
<b>Electric power generating capacity, MW</b>					
<b>In Russia</b>					
<b>Gazprom energoholding</b>					
PAO Mosenergo	12,299	12,262	12,737	12,915	12,963
PAO MIPC*	x	193	166	129	–
PAO OGK-2*	18,448	17,995	18,422	18,024	18,955
PAO TGC-1	6,870	7,238	7,164	7,057	6,951
<b>Total</b>	<b>37,617</b>	<b>37,688</b>	<b>38,489</b>	<b>38,125</b>	<b>38,869</b>
<b>Other capacity</b>					
Gazprom neftekhim Salavat**	x	541	541	541	893
Other	–	–	–	–	1
<b>Total</b>	<b>–</b>	<b>541</b>	<b>541</b>	<b>541</b>	<b>894</b>
<b>Total in Russia</b>	<b>37,617</b>	<b>38,229</b>	<b>39,030</b>	<b>38,666</b>	<b>39,763</b>
<b>Abroad</b>					
ZAO Kaunasskaya teplofikatsionnaya elektrostantsya (Lithuania)	170	x	x	x	x
ZAO Gazprom Armenia	467	467	467	467	467
Other	–	–	–	–	19
<b>Total abroad</b>	<b>637</b>	<b>467</b>	<b>467</b>	<b>467</b>	<b>486</b>
<b>Total</b>	<b>38,254</b>	<b>38,696</b>	<b>39,497</b>	<b>39,133</b>	<b>40,249</b>
<b>Heat generating capacity, Gcalh</b>					
<b>In Russia</b>					
<b>Gazprom energoholding</b>					
PAO Mosenergo	35,011	34,809	40,371	43,315	42,894
PAO MIPC*	x	17,529	10,546	6,006	4,261
PAO OGK-2*	4,473	4,474	4,336	4,336	4,169
PAO TGC-1	14,497	14,234	14,152	14,142	14,532
<b>Total</b>	<b>53,981</b>	<b>71,046</b>	<b>69,405</b>	<b>67,799</b>	<b>65,856</b>
<b>Other capacity</b>					
Gazprom neftekhim Salavat**	x	1,619	1,619	1,619	1,412
Other	–	–	–	–	758
<b>Total</b>	<b>–</b>	<b>1,619</b>	<b>1,619</b>	<b>1,619</b>	<b>2,170</b>
<b>Total in Russia</b>	<b>53,981</b>	<b>72,665</b>	<b>71,024</b>	<b>69,418</b>	<b>68,026</b>
<b>Abroad</b>					
ZAO Kaunasskaya teplofikatsionnaya elektrostantsya (Lithuania)	894	x	x	x	x
Other	–	–	–	–	2
<b>Total abroad</b>	<b>894</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>2</b>
<b>Total</b>	<b>54,875</b>	<b>72,665</b>	<b>71,024</b>	<b>69,418</b>	<b>68,028</b>

\* Results are shown effective from taking control.

\*\* The results are shown since 2013.

## Electric power and heat generated by Gazprom Group

Generating company	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Electric power generating capacity, billion kWh</b>					
<b>In Russia</b>					
<b>Gazprom energoholding</b>					
PAO Mosenergo	61.3	58.6	56.7	54.7	59.0
PAO MIPC*	x	0.4	0.4	0.1	–
PAO OGK-2*	75.2	70.7	68.7	64.4	67.1
PAO TGC-1	30.4	29.3	26.4	25.8	27.7
<b>Total</b>	<b>166.9</b>	<b>159.0</b>	<b>152.2</b>	<b>145.0</b>	<b>153.8</b>
<b>Other capacity</b>					
Gazprom neftekhim Salavat**	x	2.4	2.4	2.4	2.9
Other	–	–	–	–	0.0
<b>Total</b>	<b>–</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>2.9</b>
<b>Total in Russia</b>	<b>166.9</b>	<b>161.4</b>	<b>154.6</b>	<b>147.4</b>	<b>156.7</b>
<b>Abroad</b>					
ZAO Kaunasskaya teplofikatsionnaya elektrostantsya (Lithuania)	0.3	x	x	x	x
ZAO Gazprom Armenia	0.9	1.1	0.8	0.6	0.7
Other	–	–	–	–	0.2
<b>Total abroad</b>	<b>1.2</b>	<b>1.1</b>	<b>0.8</b>	<b>0.6</b>	<b>0.9</b>
<b>Total</b>	<b>168.1</b>	<b>162.5</b>	<b>155.4</b>	<b>148.0</b>	<b>157.6</b>
<b>Heat generating capacity, mm Gcalh</b>					
<b>In Russia</b>					
<b>Gazprom energoholding</b>					
PAO Mosenergo	68.4	67.6	70.3	71.7	81.8
PAO MIPC*	x	7.7	18.4	10.7	6.1
PAO OGK-2*	6.0	6.8	7.1	6.5	6.9
PAO TGC-1	26.7	25.3	24.3	23.0	24.5
<b>Total</b>	<b>101.1</b>	<b>107.4</b>	<b>120.2</b>	<b>112.0</b>	<b>119.3</b>
<b>Other capacity</b>					
Gazprom neftekhim Salavat**	x	5.1	5.0	5.1	5.4
Other	–	–	–	–	0.9
<b>Total</b>	<b>–</b>	<b>5.1</b>	<b>5.0</b>	<b>5.1</b>	<b>6.3</b>
<b>Total in Russia</b>	<b>101.1</b>	<b>112.5</b>	<b>125.2</b>	<b>117.1</b>	<b>125.6</b>
<b>Abroad</b>					
ZAO Kaunasskaya teplofikatsionnaya elektrostantsya (Lithuania)	1.4	x	x	x	x
Other	–	–	–	–	0.0
<b>Total abroad</b>	<b>1.4</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>0.0</b>
<b>Total</b>	<b>102.5</b>	<b>112.5</b>	<b>125.2</b>	<b>117.1</b>	<b>125.6</b>

\* Figures provided since control was taken over.

\*\* Figures provided since 1 January 2013.

## Gazprom Group's major projects in electric power generation

Name	Company	Purpose	Project characteristics			
			Blocks quantity and type	Installed electric capacity	Installed heat capacity	Commissioning date
Grozny TPP construction	PAO OGK-2	Increasing the reliability of power supply in the Chechen Republic	2 CCP	360 MW	–	2018
Power plant construction in Pancevo (Serbia)	PAO Centre-energoholding, NIS (Serbia)	Provision of electric and heat energy to the refinery in Pancevo and the petrochemical complex of HIP Petrohemija	Configuration to be updated	Up to 208 MW	To be updated	2019
Amur TPP construction	OOO "GEH Enginiiring"	Energy supply of Amur refinery plant	2 CCP	160 MW	To be updated	Will be synchronized with Amur refinery plant project realization

## Gas sales

## Natural gas sales volumes

(net of VAT, excise tax, and customs duties)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>RUB mm</b>					
Russia	760,885	794,349	820,567	805,615	819,924
Far abroad	1,469,455	1,682,761	1,752,147	2,165,500	2,140,027
FSU countries	529,516	420,320	411,722	429,660	309,644
Retroactive gas price adjustments	-102,749	74,393	949	26,482	33,175
<b>Total</b>	<b>2,657,107</b>	<b>2,971,823</b>	<b>2,985,385</b>	<b>3,427,257</b>	<b>3,302,770</b>
<b>USD mm*</b>					
Russia	24,481	24,901	21,258	13,138	12,269
Far abroad	47,280	52,751	45,392	35,315	32,022
FSU countries	17,037	13,176	10,666	7,007	4,633
Retroactive gas price adjustments	-3,306	2,332	25	432	496
<b>Total</b>	<b>85,492</b>	<b>93,160</b>	<b>77,341</b>	<b>55,892</b>	<b>49,420</b>
<b>EUR mm*</b>					
Russia	19,060	18,739	16,093	11,849	11,082
Far abroad	36,810	39,697	34,363	31,850	28,923
FSU countries	13,264	9,916	8,075	6,319	4,185
Retroactive gas price adjustments	-2,574	1,755	19	389	448
<b>Total</b>	<b>66,560</b>	<b>70,107</b>	<b>58,550</b>	<b>50,407</b>	<b>44,638</b>

\* Data is not derived from IFRS consolidated financial statements. Calculation based on the the average currency exchange rate for the respective period.

## Average natural gas price

(net of VAT, excise tax, and customs duties)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Russia</b>					
RUB per mcm	2,867.9	3,264.6	3,506.5	3,641.3	3,815.5
USD* per mcm	92.3	102.3	90.8	59.4	57.1
EUR* per mcm	71.8	77.0	68.8	53.6	51.6
<b>Far abroad</b>					
RUB per mcm	11,969.8	12,137.9	13,487.2	15,057.3	11,763.3
USD* per mcm	385.1	380.5	349.4	245.6	176.0
EUR* per mcm	299.8	286.3	264.5	221.5	159.0
<b>FSU countries</b>					
RUB per mcm	9,489.5	8,499.9	10,115.9	11,911.0	10,263.1
USD* per mcm	305.3	266.5	262.1	194.2	153.6
EUR* per mcm	237.7	200.5	198.4	175.2	138.7

\* Data is not derived from IFRS consolidated financial statements. Calculation based on the the average currency exchange rate for the respective period.



## Gazprom Group's natural gas sales volumes, bcm

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Russia	265.3	243.3	234.0	221.2	214.9
Far abroad	151.0	174.3	159.4	184.4	228.3
FSU countries	66.1	59.4	48.1	40.3	33.2
<b>Total</b>	<b>482.4</b>	<b>477.0</b>	<b>441.5</b>	<b>445.9</b>	<b>476.4</b>

## Gazprom Groups's natural gas sales volumes to foreign countries, bcm

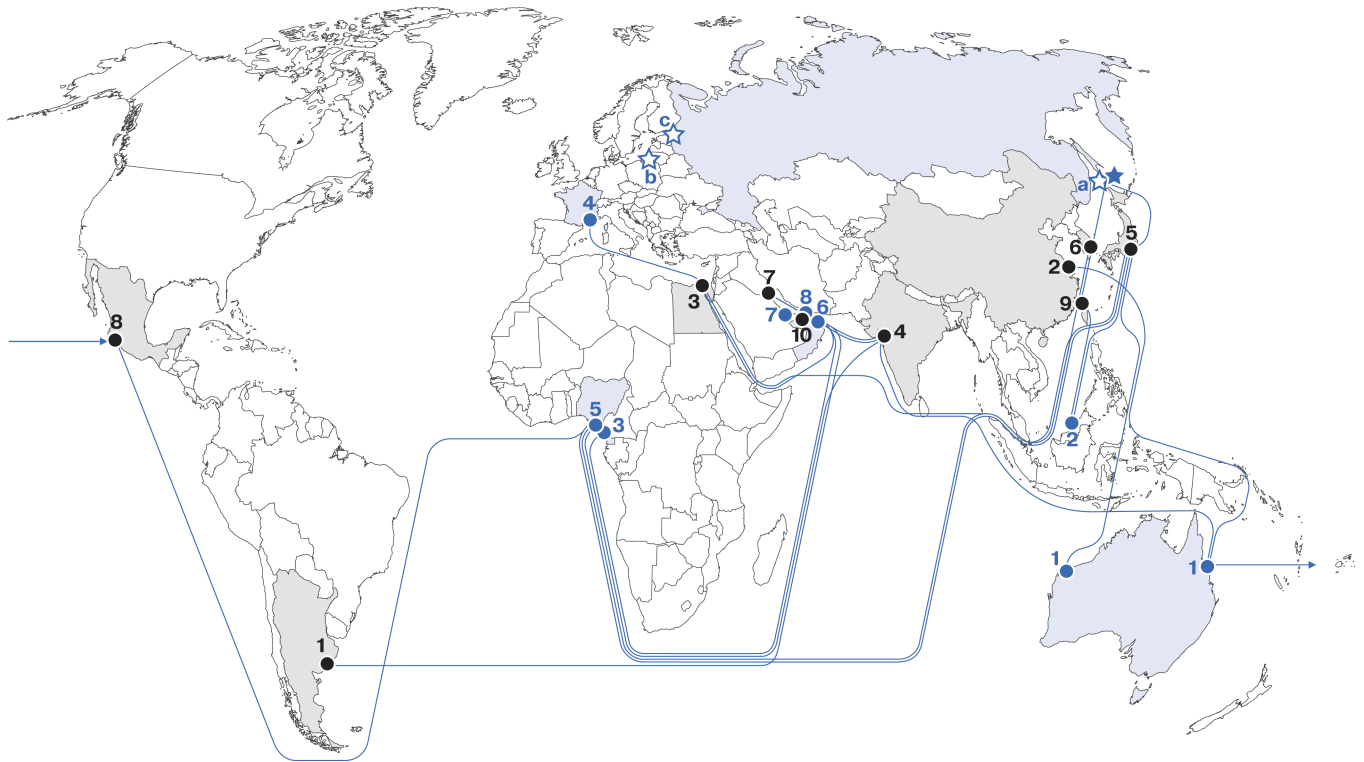
	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Far abroad</b>					
Austria	5.4	5.2	4.2	5.0	7.5
Belgium	–	–	–	1.5	2.5
Bulgaria	2.5	2.9	2.8	3.1	3.2
Bosnia and Herzegovina	0.3	0.2	0.2	0.2	0.2
United Kingdom	11.7	16.6	15.5	22.5	25.7
Hungary	5.3	6.0	5.4	6.0	5.7
Germany	34.0	41.0	40.3	47.4	57.9
Greece	2.5	2.6	1.7	2.0	2.7
Denmark	0.3	0.3	0.4	0.7	1.7
Ireland	0.3	0.5	0.2	0.2	0.1
Italy	15.1	25.3	21.7	24.4	24.7
Macedonia	0.1	0.0	0.1	0.1	0.2
The Netherlands	2.9	2.9	4.7	8.4	27.5
Poland	13.1	12.9	9.1	8.9	11.1
Romania	2.5	1.4	0.5	0.3	1.7
Serbia	1.9	2.0	1.5	1.9	1.9
Slovakia	4.3	5.5	4.4	3.8	3.7
Slovenia	0.5	0.5	0.4	0.5	0.5
Turkey	27.0	26.7	27.3	27.0	24.8
Finland	3.7	3.5	3.1	2.8	2.5
France	8.2	8.6	7.6	10.5	12.5
Croatia	0.0	0.2	0.6	0.6	0.8
Czech Republic	8.3	7.9	0.8	0.9	3.1
Switzerland	0.3	0.4	0.3	0.3	0.3
Other countries	0.8	1.2	6.6	5.4	5.8
<b>Total</b>	<b>151.0</b>	<b>174.3</b>	<b>159.4</b>	<b>184.4</b>	<b>228.3</b>

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>FSU countries</b>					
Azerbaijan	–	–	–	0.1	–
Armenia	1.7	1.7	1.8	1.8	1.8
Belarus	19.7	19.8	19.6	18.4	18.3
Georgia	0.2	0.2	0.3	0.3	0.1
Kazakhstan	3.7	4.7	5.1	4.7	4.7
Kyrgyzstan	–	–	0.1	0.3	0.3
Latvia	1.1	1.1	1.0	1.3	1.3
Lithuania	3.1	2.7	2.5	2.2	0.9
Moldova	3.1	2.4	2.8	2.9	3.0
Ukraine	32.9	25.8	14.5	7.8	2.4
Uzbekistan	–	0.3	–	–	–
Estonia	0.6	0.7	0.4	0.5	0.4
South Ossetia	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>66.1</b>	<b>59.4</b>	<b>48.1</b>	<b>40.3</b>	<b>33.2</b>

### Gazprom Group's LNG sales volumes

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>mm BTU</b>					
Argentina	–	11,857,948	41,106,666	16,178,574	19,703,171
Egypt	–	–	–	3,417,600	3,415,673
India	14,952,061	6,061,840	–	18,670,569	22,742,199
China	19,674,917	–	6,633,380	6,604,157	3,374,830
Kuwait	–	–	2,953,290	3,302,940	3,290,560
Malaysia	–	–	6,513,303	–	–
Mexico	–	–	–	–	6,519,570
UAE	–	–	–	–	6,532,551
Republic of Korea	9,383,613	25,230,593	36,193,511	26,480,466	3,324,750
Taiwan (China)	6,258,140	–	–	9,882,660	26,006,510
Japan	18,386,878	28,957,880	49,164,207	78,072,387	78,549,220
FOB deliveries	–	–	17,082,562	6,998,912	3,015,033
<b>Total</b>	<b>68,655,609</b>	<b>72,108,261</b>	<b>159,646,919</b>	<b>169,608,265</b>	<b>176,474,067</b>
<b>Including LNG sales from Sakhalin-2 project</b>	<b>29,575,454</b>	<b>29,726,254</b>	<b>53,075,050</b>	<b>86,049,604</b>	<b>59,443,050</b>
<b>Total, mm tonnes</b>	<b>1.44</b>	<b>1.51</b>	<b>3.35</b>	<b>3.56</b>	<b>3.71</b>
<b>Total, bcm</b>	<b>1.92</b>	<b>2.02</b>	<b>4.47</b>	<b>4.75</b>	<b>4.94</b>

**Gazprom Group LNG production and supply in 2016**



LNG production and regasification in Russia	Markets for Gazprom Group's LNG in 2016	Foreign countries to provide LNG to Gazprom Group portfolio in 2016
★ LNG plant, Sakhalin	1 Argentina	1 Australia
★a Phase 3 of LNG plant, Sakhalin	2 China	2 Brunei
★b Kaliningrad regasification terminal project	3 Egypt	3 Equatorial Guinea
★c Baltic LNG — LNG plant project in Leningrad region	4 India	4 France (reexport)
— LNG supply routes	5 Japan	5 Nigeria
	6 South Korea	6 Oman
	7 Kuwait	7 Qatar
	8 Mexico	8 UAE
	9 Taiwan (China)	
	10 UAE	

### Gazprom Group's projects to build LNG regasification facilities

Name	Target market	Project capacity	Implementation period	Project progress (as at 31 December 2016)
Regasification terminal in Kaliningrad	To provide for energy security of Kaliningrad Region	2.7 bcm annually	December 2017	The design and work documentation is developed in full. Construction and installation works are under way on the land and marine parts of the project.

### Promising LNG projects with Gazprom Group's participation

Name	Target market	Project capacity	Implementation period	Project progress (as at 31 December 2016)
Baltic LNG	Countries of the Atlantic region, Middle East, Asia. Apart from that part of LNG of the project may be delivered to European bunker fuel market and to supply consumers not connected to gas networks.	10 mm tonnes with potential to increase to 15 mm tonnes per year	The implementation period will be determined after the results of the design documentation development.	Project Justification for Investments Construction of an LNG plant in the Leningrad Region (Baltic-LNG) is developed, and a decision to move the project to an investment stage is made. Location of the LNG plant (port of Ust-Luga) is defined. In June 2016 PJSC Gazprom and Shell signed Memorandum on the project. Currently, in accordance with the Memorandum, the parties are studying the possibility and prospects for implementing the Baltic LNG project.
Vladivostok-LNG	Asia-Pacific countries	10 mm tonnes with potential to increase to 15 mm tonnes per year	Will be updated subject to LNG market conditions	Engineering surveys are carried out, project documentation is developed in full. Construction in the near future is not planned.
Third technological line of LNG plant within the framework of Sakhalin-2 project	Asia-Pacific countries	Up to 5.4 mm tonnes per year	2023–2024	Sakhalin Energy Investment Company Ltd. fulfilled a significant part of the FEED documentation, the development of project documentation in accordance with the requirements of normative and technical documents of the Russian Federation is under way.

### Gazprom Group subsidiaries' gas sales volumes to end-consumers in far abroad countries, mmcm

Country	For the year ended 31 December				
	2012	2013	2014	2015	2016
Austria	–	–	–	303.5	872.2
Belgium	–	–	–	620.7	1,530.7
United Kingdom	2,437.0	2,682.7	2,734.7	3,028.0	3,825.6
Hungary	–	–	–	104.8	197.4
Germany	–	–	–	3,665.7	13,163.4
Ireland	551.4	350.2	158.0	187.4	59.8
Macedonia	–	–	88.5	93.0	139.5
The Netherlands	18.8	31.5	29.4	1,335.5	3,220.8
Romania	–	–	–	22.8	169.7
France	457.7	384.3	510.1	780.9	947.9
Czech Republic	526.0	390.7	–	233.9	809.1
Slovakia	40.0	72.6	–	–	6.5
<b>Total</b>	<b>4,030.9</b>	<b>3,912.0</b>	<b>3,520.7</b>	<b>10,376.2</b>	<b>24,942.6</b>

### Gazprom's share in domestic gas demand in Russia

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Internal gas consumption in Russia, bcm	466.1	461.3	458.4	444.3	456.7
Domestic gas supply through Gazprom's gas transportation system (excluding technological needs of gas transportation system), bcm	360.0	351.7	353.7	339.4	348.7
including Gazprom Group production	274.7	254.5	237.0	211.2	210.2

### Regulated weighted average wholesale prices for natural gas in Russia, RUB per bcm1 000

	For the year ended 31 December				
	2012	2013	2014	2015	2016
All categories of consumers	2,963.0	3,393.2	3,656.5	3,759.4	3,938.2
Industrial consumers	3,105.0	3,564.4	3,848.9	3,958.1	4,158.1
Households	2,428.9	2,801.1	3,082.9	3,253.0	3,422.8

#### Notes

1. Exclusive of gas volumes supplied pursuant to Resolution of the Government of the Russian Federation No. 333 dated 28 May 2007 On Improvement of State Gas Price Regulation.
2. Starting from 2016, weighted average wholesale regulated prices are stated inclusive of PJSC Gazprom's gas volumes sold to consumers in Russia's Far East. For data comparability, the figures for 2014–2015 have been rebased and so may differ from those in the Factbook 2015.

## Gas distribution and gasification in Russia

	As at and for the year ended December 31				
	2012	2013	2014	2015	2016
Lenth of external gas pipelines, operated by Gazprom Group's subsidiaries and associated gas distribution companies (GDCs), thousand km	689.5	716.1	734.0	746.3	760.1
Natural gas transportation through gas distribution systems, operated by Gazprom Group's subsidiaries and associated GDCs, bcm	253.4	248.7	246.7	231.3	208.0
Consumers of Gazprom Group's subsidiaries and associated GDCs':					
Apartments and private households, mm units	26.0	26.7	27.0	26.8	27.0
Industrial sites, thousand units	21.8	22.6	31.5	32.8	32.9
Agricultural facilities, thousand units	4.7	5.2	6.5	6.9	7.2
Boiler-houses*, thousand units	44.3	44.5	x	x	x
Utilities, thousand units	241.9	255.1	286.9	303.6	312.3
Volume of Gazprom's gasification programs financing, RUB bn	33.8	33.9	28.8	27.6	25.0
Level of natural gas gasification**, including:					
towns and urban-type settlements	70.1%	70.9%	70.3%	70.4%	70.9%
country side	53.1%	54.0%	54.6%	56.1%	57.1%

\* Due to amendment of methodology, since 2014 boiler-houses are included in Industrial facilities or Utilities facilities, depending on nature of business of company to service boiler-house.

\*\* Calculation performed based on residential properties as at 2005.

## Sales of crude oil, gas condensate and refined products

### Oil and gas condensate sales revenue (net of VAT and custom duties)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>RUB mm</b>					
Russia	40,726	32,094	51,603	77,519	81,302
Far abroad	204,648	128,007	141,618	155,509	307,128
FSU countries	30,186	50,115	16,013	27,580	23,528
<b>Total</b>	<b>275,560</b>	<b>210,216</b>	<b>209,234</b>	<b>260,608</b>	<b>411,958</b>
<b>USD mm*</b>					
Russia	1,310	1,006	1,337	1,264	1,217
Far abroad	6,585	4,013	3,669	2,536	4,596
FSU countries	971	1,571	415	450	352
<b>Total</b>	<b>8,866</b>	<b>6,590</b>	<b>5,421</b>	<b>4,250</b>	<b>6,165</b>
<b>EUR mm*</b>					
Russia	1,020	757	1,012	1,140	1,099
Far abroad	5,126	3,020	2,777	2,287	4,151
FSU countries	756	1,182	314	406	318
<b>Total</b>	<b>6,902</b>	<b>4,959</b>	<b>4,103</b>	<b>3,833</b>	<b>5,568</b>

\* Data is not derived from IFRS consolidated financial statements. Calculated, based on the average exchange rate for respective period.

### Gazprom Group's oil and gas condensate sales volumes, mm tonnes

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Russia	3.5	2.6	4.7	5.3	5.9
Far abroad	14.8	9.2	9.8	9.8	17.1
FSU countries	2.5	4.2	1.2	1.9	1.7
<b>Total</b>	<b>20.8</b>	<b>16.0</b>	<b>15.7</b>	<b>17.0</b>	<b>24.7</b>

Note. Excluding intra-group sales.

**Refined products sales revenue**

(net of VAT, excise tax, and customs duties)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>RUB mm</b>					
Russia	742,473	821,487	953,136	981,792	980,352
Far abroad	393,475	449,669	586,204	468,464	428,327
FSU countries	73,267	80,557	79,874	105,335	88,883
<b>Total</b>	<b>1,209,215</b>	<b>1,351,713</b>	<b>1,619,214</b>	<b>1,555,591</b>	<b>1,497,562</b>
<b>USD mm*</b>					
Russia	23,889	25,752	24,693	16,011	14,669
Far abroad	12,660	14,096	15,187	7,640	6,409
FSU countries	2,357	2,525	2,069	1,718	1,330
<b>Total</b>	<b>38,906</b>	<b>42,373</b>	<b>41,949</b>	<b>25,369</b>	<b>22,408</b>
<b>EUR mm*</b>					
Russia	18,599	19,379	18,693	14,440	13,250
Far abroad	9,857	10,608	11,496	6,890	5,789
FSU countries	1,835	1,900	1,566	1,549	1,201
<b>Total</b>	<b>30,291</b>	<b>31,887</b>	<b>31,755</b>	<b>22,879</b>	<b>20,240</b>

\* Data is not derived from IFRS consolidated financial statements. Calculation based on the the average currency exchange rate for the respective period.

**Gazprom Group's refined products sales volumes, mm tonnes**

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Russia	36.1	38.4	41.5	41.3	41.2
Far abroad	22.6	25.2	29.9	23.8	23.3
FSU countries	5.2	4.7	4.0	4.3	3.6
<b>Total</b>	<b>63.9</b>	<b>68.3</b>	<b>75.4</b>	<b>69.4</b>	<b>68.1</b>

Note. Excluding intra-group sales.



### Gazprom Group's sales volumes of refined products and petrochemical products, mm tonnes

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Motor gasoline	12.51	12.69	13.45	13.65	14.92
Diesel fuel	15.46	18.28	17.31	15.49	15.85
Jet fuel	3.30	3.76	3.96	3.76	3.51
Heating oil	10.53	10.27	11.17	8.58	7.62
Oils	0.38	0.48	0.39	0.43	0.44
Liquefied hydrocarbon gases	3.49	3.66	5.44	4.85	4.49
Sulfur	5.71	5.00	5.54	5.19	5.46
Mineral fertilizers	0.43	0.46	0.70	0.69	0.95
Polymers	0.14	0.13	0.17	0.16	0.14
Other refined and petrochemical products	11.90	13.54	17.27	16.62	14.70
<b>Total</b>	<b>63.85</b>	<b>68.27</b>	<b>75.40</b>	<b>69.42</b>	<b>68.08</b>

Note. Excluding intra-group sales.

### Gazprom Group's helium sales volumes

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Helium gaseous, mmcm	2.74	3.01	2.74	3.04	3.18
Helium liquefied, tonnes	391.60	94.00	139.96	314.15	299.32

Note. Excluding intra-group sales.

## Sales of electricity, heat energy and gas transportation services

### Electricity and heat energy sales revenue

(net of VAT)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>RUB mm</b>					
Russia	326,737	362,415	409,087	403,084	461,908
Far abroad	11,186	10,983	15,383	19,057	17,350
FSU countries	5,586	2,191	2,481	2,524	2,458
<b>Total</b>	<b>343,509</b>	<b>375,589</b>	<b>426,951</b>	<b>424,665</b>	<b>481,716</b>
<b>USD mm*</b>					
Russia	10,513	11,361	10,598	6,573	6,912
Far abroad	360	344	399	311	260
FSU countries	180	69	64	41	37
<b>Total</b>	<b>11,053</b>	<b>11,774</b>	<b>11,061</b>	<b>6,925</b>	<b>7,209</b>
<b>EUR mm*</b>					
Russia	8,185	8,550	8,023	5,929	6,243
Far abroad	280	259	302	280	234
FSU countries	140	52	49	37	33
<b>Total</b>	<b>8,605</b>	<b>8,861</b>	<b>8,374</b>	<b>6,246</b>	<b>6,510</b>

\* Data is not derived from IFRS consolidated financial statements. Calculation based on the the average currency exchange rate for the respective period.

### Gas transportation sales revenue

(net of VAT)

	For the year ended 31 December				
	2012	2013	2014	2015	2016
RUB mm	125,386	163,265	172,842	193,965	198,971
USD mm*	4,034	5,118	4,478	3,163	2,977
EUR mm*	3,141	3,851	3,390	2,853	2,689

\* Data is not derived from IFRS consolidated financial statements. Calculation based on the the average currency exchange rate for the respective period.

### Sales volumes of gas transportation services to companies other than Gazprom Group's companies, bcm

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Total	95.8	111.4	121.1	121.5	129.0
Including Russian gas	86.9	104.3	113.7	113.9	121.3

## Key indicators of Gazprom Group's environmental impact in Russia

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Hazardous atmospheric emission, thousands tonnes</b>	<b>3,410.9</b>	<b>3,076.4</b>	<b>2,797.6</b>	<b>2,830.6</b>	<b>2,868.5</b>
including: carbon oxide	1,031.9	653.4	547.0	533.6	550.5
nitrogen oxide	378.3	352.9	313.1	286.3	288.5
sulfur dioxide	310.0	296.9	289.3	328.4	346.1
hydrocarbons (including methane)	1,606.6	1,534.0	1,398.5	1,430.8	1,462.3
<b>Discharge of waste water into surface water objects, mmcm</b>	<b>4,893.0</b>	<b>4,389.9</b>	<b>4,179.1</b>	<b>3,853.8</b>	<b>3,855.5</b>
of them normative clean and normative cleaned at wastewater treatment facilities	4,691.6	4,227.9	3,991.6	3,660.6	3,691.2
<b>Waste production, thousands tonnes</b>	<b>5,226.6</b>	<b>4,693.7</b>	<b>4,831.4</b>	<b>4,954.0</b>	<b>4,289.8</b>
<b>Recultivated lands, thousands ha</b>	<b>9.7</b>	<b>14.0</b>	<b>12.6</b>	<b>18.2</b>	<b>42.5</b>

## Gazprom Group's environmental costs in Russia, RUB mm

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Current expenditures	18,354.7	20,328.1	18,047.9	16,399.9	17,189.7
Expenditure on payment for services to environmental protection	3,849.5	8,021.9	9,403.5	12,806.3	14,725.6
Expenditures on refurbishment of fixed assets related to environmental protection	2,444.6	3,106.5	4,204.9	2,962.9	2,187.9
Payment for environmental pollution	1,563.1	2,952.5	1,746.9	1,790.4	824.8
Capital expenditures related to environmental protection and rational use of natural resources	12,885.8	24,947.9	15,578.3	15,754.3	22,541.9
<b>Total</b>	<b>39,097.7</b>	<b>59,356.9</b>	<b>48,981.5</b>	<b>49,713.8</b>	<b>57,469.9</b>

## Energy saving of PJSC Gazprom and its major subsidiaries

	For the year ended 31 December				
	2012	2013	2014	2015	2016
<b>Natural gas</b>					
mmcm	1,807.0	1,922.3	2,070.7	2,255.3	2,285.0
thousand t c.e.	2,060.0	2,191.4	2,360.6	2,571.0	2,641.1
<b>Electric power</b>					
million kWh	255.4	293.4	254.6	260.6	256.0
thousand t c.e.	83.0	95.4	82.8	84.7	84.5
<b>Heat power</b>					
thousand Gcal	241.8	217.9	237.2	205.0	254.2
thousand t c.e.	34.5	31.1	33.9	29.3	36.4
<b>Total, thousand t c.e.</b>	<b>2,177.5</b>	<b>2,317.9</b>	<b>2,477.3</b>	<b>2,685.0</b>	<b>2,762.0</b>

**Note.** FER consumption rates have been converted to t c.e. using the following ratios: 1 mcm of gas = 1.155 t c.e. (2015 and earlier: 1 mcm of gas = 1.14 t c.e.); 1 thousand kWh = 0.325 t c.e.; 1 thousand Gcal = 0.143 t c.e.

## Research and development works contracted by Gazprom Group (Net of VAT), RUB bn

	For the year ended 31 December				
	2012	2013	2014	2015	2016
Research and development	7.7	6.8	10.8	9.9	6.3

## Gazprom Group's personnel structure

	As at 31 December				
	2012	2013	2014	2015	2016
<b>Number of employees of the Group, in thousands:</b>					
PJSC Gazprom	23.3	24.1	24.3	24.8	25.6
Gas production, transportation, processing and storage subsidiaries*	222.5	228.6	233.3	235.4	237.4
Gazprom Neft	58.6	62.8	66.4	65.0	71.4
Gazprom energoholding	26.5	50.8	45.5	45.0	44.9
Gazprom neftekhim Salavat	15.6	16.2	15.7	15.5	15.4
Other subsidiaries	84.7	77.0	74.4	76.7	72.7
<b>Total</b>	<b>431.2</b>	<b>459.5</b>	<b>459.6</b>	<b>462.4</b>	<b>467.4</b>
by categories:					
management	13.0%	13.4%	13.7%	13.7%	13.9%
specialists and other employees	30.1%	30.8%	30.9%	31.5%	31.6%
workers	56.9%	55.8%	55.4%	54.8%	54.5%
by age:					
under 30 years	19.2%	19.0%	18.5%	17.9%	16.9%
30–40 years	27.8%	28.3%	29.0%	29.7%	30.5%
40–50 years	27.8%	27.0%	27.0%	27.2%	27.8%
50 years and over	25.2%	25.7%	25.5%	25.2%	24.8%

\* For the list of companies, see Glossary

Gazprom Group structure (as at 31 December 2016)

Subsidiaries	Core business activities																	
	Hydrocarbons prospecting and exploration	Gas and gas condensate production	Oil production	Gas transportation	Gas underground storage	Gas distribution	Gas processing	Oil refining	Oil and gas chemical production	Production of electricity and heat	Trunk pipeline gas sales	Gas sales to final customers	LNG sales	Refined hydrocarbon products sales	Oil and gas condensate sales	Electricity and heat sales	Product sales through the gasoline, CNG filling, gas filling and multi-fuel filling stations	
PJSC Gazprom	-	-	-	-	-	-	-	-	-	-	■	■	-	■	■	-	-	
<b>Gazprom Group's major subsidiaries engaged in core business activities</b>																		
ZAO Gazprom Armenia	-	-	-	■	■	■	-	-	-	-	■	■	-	-	-	-	■	■
OOO Gazprom geologorazvedka	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom georesurs	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom dobycha Astrakhan	■	■	-	-	-	-	■	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom dobycha Krasnodar	■	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom dobycha Kuznetsk	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom dobycha Nadym	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom dobycha Noyabrsk	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom dobycha Orenburg	■	■	■	-	-	-	■	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom dobycha Urengoy	■	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom dobycha shelf Yuzhno-Sakhalinsk	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom dobycha Yamburg	■	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OsOO Gazprom Kyrgyzstan	-	-	-	■	-	■	-	-	-	-	■	■	-	-	-	-	■	
OOO Gazprom pererabotka	-	-	-	-	-	-	■	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom PHG	-	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom transgaz Belarus	-	-	-	■	■	-	-	-	-	-	■	-	-	-	-	-	■	
OOO Gazprom transgaz Volgograd	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Yekaterinburg	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Kazan	-	-	-	■	-	■	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Krasnodar	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom transgaz Makhachkala	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom transgaz Moscow	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom transgaz Nizhny Novgorod	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Samara	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Saint Petersburg	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom transgaz Saratov	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Stavropol	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Surgut	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Tomsk	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Ufa	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	-	
OOO Gazprom transgaz Ukhta	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Tchaikovsky	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom transgaz Yugorsk	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	■	
OOO Gazprom Export	-	-	-	-	-	-	-	-	-	-	■	-	■	■	■	-	-	

Subsidiaries	Core business activities																
	Hydrocarbons prospecting and exploration	Gas and gas condensate production	Oil production	Gas transportation	Gas underground storage	Gas distribution	Gas processing	Oil refining	Oil and gas chemical production	Production of electricity and heat	Trunk pipeline gas sales	Gas sales to final customers	LNG sales	Refined hydrocarbon products sales	Oil and gas condensate sales	Electricity and heat sales	Product sales through the gasoline, CNG filling, gas filling and multi-fuel filling stations
OOO Gazprom flot	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OAo Daltransgaz	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	-
OAo Kamchatgazprom	-	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PAo Krasnoyarskgazprom	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZAO Purgaz	-	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OAo Severneftegazprom	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gazprom EP International B.V.	■	■	-	-	-	-	-	-	-	-	■	-	-	-	-	■	-
OAo Vostokgazprom and its subsidiaries	■	■	■	-	-	-	■	-	■	-	-	-	-	-	■	-	-
OOO Sibmetakhim	-	-	-	-	-	-	-	-	■	-	-	-	-	-	■	-	-
OAo Tomskgazprom	■	■	■	-	-	-	■	-	-	-	-	-	-	-	-	-	-
Gazprom Germania GmbH and its subsidiaries	-	-	-	-	■	■	-	-	-	■	■	■	■	■	■	■	■
Gazprom Marketing and Trading Ltd.	-	-	-	-	-	-	-	-	-	-	■	■	■	■	■	■	-
Gazprom NGV Europe GmbH	-	-	-	-	-	-	-	-	-	-	-	-	■	-	-	-	■
Gazprom Global LNG Ltd.	-	-	-	-	-	-	-	-	-	-	-	-	■	-	-	-	-
WINGAS GmbH	-	-	-	-	■	■	-	-	-	■	■	■	-	-	-	-	■
WIEH GmbH	-	-	-	-	-	■	-	-	-	■	■	-	-	-	-	-	-
OOO Gazprom mezhregiongaz and its subsidiaries	-	-	-	-	-	■	-	-	-	■	■	■	-	-	■	■	■
OOO Gazprom neftekhim Salavat and its subsidiaries	-	-	-	-	-	-	■	■	■	■	-	-	-	-	■	-	■
PAo Gazprom Neft and its subsidiaries	■	■	■	-	-	-	-	■	■	■	■	-	-	-	■	■	■
OOO Gazprom energoholding and its subsidiaries	-	-	-	-	-	-	-	-	-	■	-	-	-	-	-	-	■
PAo Mosenergo	-	-	-	-	-	-	-	-	-	■	-	-	-	-	-	-	■
PAo TGC-1	-	-	-	-	-	-	-	-	-	■	-	-	-	-	-	-	■
PAo OGK-2	-	-	-	-	-	-	-	-	-	■	-	-	-	-	-	-	■
PAo MIPC	-	-	-	-	-	-	-	-	-	■	-	-	-	-	-	-	■
<b>Gazprom Group's subsidiaries engaged in other business activities</b>	Air transportation, investment activities, information and technical support, scientific research activities, power transmission, pipe production and sales, design activities, maintenance and repair, trading activities, procurement of materials and equipment, transportation and forwarding services, construction and installation services, and civil engineering																
<b>Companies where Gazprom has investments classified as joint operations</b>																	
OAo Tomskneft VNK	■	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OOO Juzhno-Priobsky GPP	-	-	-	-	-	-	■	-	-	-	-	-	-	-	-	-	-
Blue Stream Pipeline Company B.V.	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-	-
Erdgasspeicher Peissen GmbH	-	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-
Moravia Gas Storage a.s.	-	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-
Podzemno skladiste gasa Banatski Dvor d.o.o.	-	-	-	-	■	-	-	-	-	-	-	-	-	-	-	-	-
Salym Petroleum Development N.V.	-	■	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## Conversion table and conventions

### Conversion Table

Measure	Correspondence
1 mcm of natural gas	6.49 boe
1 tonne of oil	7.33 boe
1 tonne of gas condensate	8.18 boe
1 kilometer	0.62 miles
1 million BTUs	0.028 mcm of LNG 0.021 tonnes of LNG

### Conventions

Sign	Meaning
x	Data cannot be given
–	Phenomenon is absent
0.0	Less than 0.05

## Calculation of financial ratios

### Calculation of financial ratios

<b>Statement of cash flows figures</b>	
Self-financing ratio	Ratio between Net cash from operating activities and Capital expenditures (figures from Statement of cash flows)
<b>Return ratios</b>	
Return on operating profit	Ratio between Operating profit and Sales
Return on adjusted EBITDA	Ratio between Adjusted EBITDA and Sales
Return on profit for the year	Ratio between Profit for the year and Sales
Return on assets (ROA)	Ratio between Profit for the year and the average value of Total assets as at the beginning and of the end of the respective period
Return on equity (ROE)	Ratio between Profit for the year and the average value of Equity (including non-controlling interest) as at the beginning and of the end of the respective period
<b>Liquidity ratios</b>	
Current liquidity ratio	Ratio between Current assets and Current liabilities
Quick liquidity ratio	Ratio between Current assets less Inventories and Current liabilities
<b>Other ratios</b>	
EV / EBITDA	Ratio between Enterprise value (calculated as the sum of Market capitalization and Net debt) as at the end of the period and Adjusted EBITDA for the period
P / E	Ratio between Share price as at the end of the period and Earnings per share for profit attributable to the owners of the company for the respective period
P / S	Ratio between Market capitalization as at the end of the period and Sales of the respective period



## Glossary of terms and abbreviations

Terms and abbreviations	Description
ADR of PJSC Gazprom	American depository receipt representing Gazprom's shares. One ADR is equal to two ordinary shares of PJSC Gazprom. Before April 2011 onwards 1 ADR provided a right for four ordinary shares of PJSC Gazprom. Since April 2011 onwards 1 ADR provides a right for two ordinary shares of PJSC Gazprom.
APG	Associated petroleum gas
bcm	Billion cubic meters
boe	Barrel of oil equivalent
BTU	British thermal unit
CS	Compressor station
EBITDA	Earnings before interest, taxes, depreciation and amortization
EV	Enterprise value
EUR	Euro
Far abroad	Foreign countries, excluding FSU Countries, which together refer in IFRS financial statements as "Europe and other countries" geographical segment.
FD	Federal district
FEED	Front end engineering design
FSU Countries	Republics of the former USSR, except for the Russian Federation, which together refer in IFRS financial statements as "Former Soviet Union countries (excluding the Russian Federation)" geographical segment.
Gasification	Construction of low-pressure gas pipelines to ensure gas supply to the ultimate consumers
Gazprom Group, Group, Gazprom, PJSC Gazprom	PJSC Gazprom (head company) and its subsidiaries taken as a whole.
Gcal/h	Gigacalorie per hour
GCLD	Light distillate of gas condensate
GCC	Gas Chemical Complex
GDC	Gas distribution company
GPP	Gas processing plant
GPU	Gas pumping unit
GTS	Gas transportation system
Hydrocarbon reserves (categories A+B <sub>1</sub> +C <sub>1</sub> )	Russian classification of reserves. Reserves are reclassified into the following categories: A (producing, developed), B <sub>1</sub> (producing, undeveloped, explored), B <sub>2</sub> (undeveloped, estimated)
IFRS	International Financial Reporting Standards
kWh	Kilowatt-hour
LNG	Liquefied natural gas
LSE	London Stock Exchange
mcm	Thousand cubic meters
mmcm	Million cubic meters
MW	Megawatt
NGL	Natural gas liquids
PJSC Gazprom and its major 100% subsidiaries	PJSC Gazprom and its gas production, transportation and storage subsidiaries OOO Gazprom dobycha Yamburg, OOO Gazprom dobycha Urengoy, OOO Gazprom dobycha Nadym, OOO Gazprom dobycha Noyabrsk, OOO Gazprom dobycha Orenburg, OOO Gazprom dobycha Astrakhan, OOO Gazprom pererabotka, OOO Gazprom dobycha Krasnodar, OOO Gazprom dobycha Kuznetsk, OOO Gazprom transgaz Uhta, OOO Gazprom transgaz Surgut, OOO Gazprom transgaz Yugorsk, OOO Gazprom transgaz Sankt-Peterburg, OOO Gazprom transgaz Moskva, OOO Gazprom transgaz Tomsk, OOO Gazprom transgaz Chajkovskij, OOO Gazprom transgaz Yekaterinburg, OOO Gazprom transgaz Stavropol, OOO Gazprom transgaz Makhachkala, OOO Gazprom transgaz Nizhny Novgorod, OOO Gazprom transgaz Saratov, OOO Gazprom transgaz Volgograd, OOO Gazprom transgaz Samara, OOO Gazprom transgaz Ufa, OOO Gazprom transgaz Kazan, OOO Gazprom transgaz Krasnodar, OAO Gazprom transgaz Belarus, OOO Gazprom PHG, OAO Vostokgazprom and its subsidiaries, OOO Gazprom dobycha shelf Yuzhno-Sakhalinsk, OOO Gazprom neft shelf (until its consolidation in Gazprom Neft Group in May 2014), OAO Kamchatgazprom

<b>Terms and abbreviations</b>	<b>Description</b>
PHF	Pentane-hexane fraction
PRMS Standards	International classification and assessment of hydrocarbon reserves under PRMS (Petroleum Resources Management System).
Roubles, RUB	Russian roubles
ton	Metric ton
UGSF	Underground gas storage facility
UGSS	Unified Gas Supply System of Russia
USD	U.S. dollars
VAT	Value added tax







