Gazprom in Figures 2014–2018
Factbook

A Strategic Resource

Gazprom in Figures 2014–2018 Factbook contains information and statistics prepared for the annual General Shareholders Meeting of PJSC Gazprom in 2019. 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). Under the Gazprom Group, Group, or Gazprom should be understood a set companies, consisting of PJSC "Gazprom" and its subsidiaries. For the purposes of this Handbook lists of subsidiaries, organizations are used, investments in which are classified as joint operations, associated organizations and joint-enterprises of Gazprom Group, composed on the basis of the principles of PJSC Gazprom's consolidated financial reporting statements information disclosure, prepared in accordance with the international financial reporting standards (IFRS).

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 OOO 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, 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.

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

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.

Gazprom in Figures 2014–2018 Factbook

Gazprom in Russian and Global Energy Industry

	As at and for the year ended 31 December				
	2014	2015	2016	2017	2018
Share in the world natural gas industry					
Gas reserves*	16.8%	16.9%	17.1%	16.7%	16.2%
Gas production*	12.1%	11.2%	11.2%	12.0%	12.1%
Share in the Russian fuel and energy complex					
Russian natural gas reserves	72.3%	71.6%	71.7%	71.7%	71.1%
Gas production**	69.3%	66.0%	65.6%	68.3%	68.7%
Crude oil and gas condensate production**	11.0%	11.1%	11.5%	11.8%	11.6%
Primary processing of oil and stable gas condensate**	18.9%	18.5%	18.4%	17.7%	18.2%
Electric power energy production**	14.6%	14.3%	14.6%	14.8%	14.1%
Total length of trunk pipelines and pipeline branches (including technological jumpers) on the territory of Russia, thousand km	**170.7**	**171.2**	**171.8**	**172.1**	**172.6**

* 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.

Financial Results

Major financial results and ratios of Gazprom Group

	As at and for the year ended 31 December				
	2014	**2015**	**2016**	**2017**	**2018**
Statement of comprehensive income figures					
Sales, RUB mm	5,589,811	6,073,318	6,111,051	6,546,143	8,224,177
Operating expenses, RUB mm	4,128,330	4,762,444	5,280,876	5,697,056	6,181,191
Operating profit, RUB mm	1,309,509	1,237,422	726,639	871,405	1,930,030
Adjusted EBITDA, RUB mm	1,961,643	1,883,847	1,323,258	1,467,692	2,599,284
Profit for the year, RUB mm	157,192	805,199	997,104	766,879	1,528,996
Profit for the year attributable to owners of PJSC Gazprom, RUB mm	159,004	787,056	951,637	714,302	1,456,270
Basic and diluted earnings per share for profit attributable to the owners of PJSC Gazprom, RUB	6,93	34,29	42,19	32,32	65,89
Balance sheet figures					
Total assets, RUB mm	15,177,470	17,052,040	16,918,938	18,238,770	20,810,440
Current assets, RUB mm	3,461,155	3,993,722	3,234,346	3,469,266	4,212,230
Inventories, RUB mm	671,916	804,364	711,199	772,314	909,677
Current liabilities, RUB mm	1,855,947	2,124,701	1,921,808	2,589,516	2,473,695
Total debt, RUB mm	2,688,824	3,442,215	2,829,623	3,266,518	3,863,822
Net debt, RUB mm	1,650,633	2,083,120	1,932,895	2,397,511	3,014,403
Equity, excluding non-controlling interest, RUB mm	9,816,558	10,589,586	11,094,531	11,629,086	13,300,009
Equity, including non-controlling interest, RUB mm	10,120,021	10,914,622	11,441,839	12,015,481	13,776,153
Capital expenditures*, RUB mm	1,221,328	1,349,635	1,357,336	1,504,600	1,795,884
Statement of cash flows figures					
Cash flows from operating activities, RUB mm	1,915,769	2,030,927	1,571,323	1,187,022	1,617,384
Capital expenditures, RUB mm	(1,262,140)	(1,641,024)	(1,369,052)	(1,405,780)	(1,639,474)
Cash flows from investing activities, RUB mm	(1,441,305)	(1,664,156)	(1,445,965)	(1,368,131)	(1,617,718)
Cash flows from financing activities, RUB mm	(262,587)	(138,305)	(460,479)	149,944	(96,070)
Cash and cash equivalents as at the end of the reporting year, RUR mm	1,038,191	1,359,095	896,728	869,007	849,419
Self-financing ratio	152%	124%	115%	84%	99%
Return ratios**					
Return on operating profit	23%	20%	12%	13%	23%
Return on adjusted EBITDA	35%	31%	22%	22%	32%
Return on profit for the year	3%	13%	16%	12%	19%
Return on assets (ROA)	1%	5%	6%	4%	8%
Return on equity (ROE)	2%	8%	9%	7%	12%

	As at and for the year ended 31 December				
	2014	2015	2016	2017	2018
Ratios of total and net debt**					
Total debt / equity and non-controlling interest	27%	32%	25%	27%	28%
Total debt / total debt, equity and non-controlling interest	21%	24%	20%	21%	22%
Total debt / total assets	18%	20%	17%	18%	19%
Total debt / adjusted EBITDA	1.37	1.83	2.14	2.23	1.49
Net debt / adjusted EBITDA	0.84	1.11	1.46	1.63	1.16
Liquidity ratios**					
Current liquidity ratio	1.86	1.88	1.68	1.34	1.70
Quick liquidity ratio	1.50	1.50	1.31	1.04	1.34
Other ratios**					
EV / EBITDA	2.4	2.8	4.2	3.7	2.6
P / E	18.8	4.0	3.6	4.0	2.3
P / S	0.6	0.5	0.6	0.5	0.4

* 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.

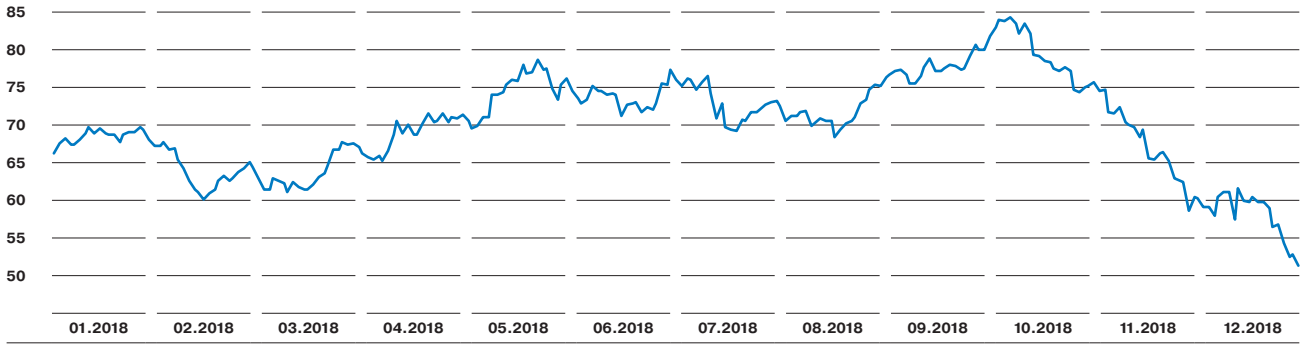
Macroeconomic Data

Indicator*	Measure	As at and for the year ended 31 December				
		2014	2015	2016	2017	2018
Consumer price index	%	11.4%	12.9%	5.4%	2.5%	4.3%
Producer price index	%	5.9%	10.7%	7.4%	8.4%	11.7%
Average RUB/USD currency exchange rate for the period	RUB/USD	38.60	61.32	66.83	58.31	62.90
RUB/USD currency exchange rate at the end of the period	RUB/USD	56.26	72.88	60.66	57.60	69.47
Average RUB/EUR currency exchange rate for the period	RUB/EUR	50.99	67.99	73.99	66.02	74.11
RUB/EUR currency exchange rate at the end of the period	RUB/EUR	68.34	79.70	63.81	68.87	79.46
Brent oil price (Dated)**	USD/barrel	55.98	35.74	54.94	66.54	50.21
Urals oil price (average CIF MED/RDAM)**	USD/barrel	53.40	33.11	53.27	66.19	51.18
Brent average annual oil price (Dated)**	USD/barrel	98.95	52.39	43.73	54.19	71.31
Urals (average CIF MED/RDAM) average annual oil price**	USD/barrel	96.94	51.42	42.10	53.06	70.05

* 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 2018, USD/barrel



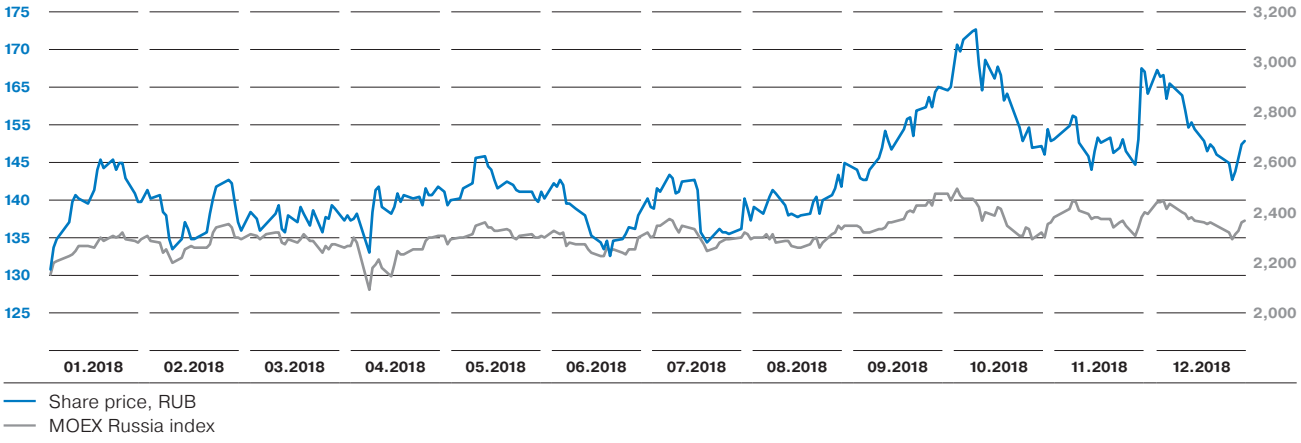
Source: Platts. Average quotes Urals Mediterranean and Urals Rotterdam.

Market Data

Indicator	Measure	As at and for the year ended 31 December 2014	2015	2016	2017	2018
Price per share on Moscow Exchange						
as at the end of the year	RUB	130.31	136.09	154.55	130.50	153.50
minimum	RUB	117.87	130.90	124.60	115.35	132.20
maximum	RUB	153.25	163.00	168.47	157.97	172.11
Price per ADR on LSE						
as at the end of the year	USD	4.65	3.69	5.05	4.41	4.43
minimum	USD	3.73	3.62	3.02	3.85	4.14
maximum	USD	9.06	6.24	5.27	5.27	5.31
Number of PJSC Gazprom's ordinary shares issued, as at the end of the year	mm shares	23,674	23,674	23,674	23,674	23,674
Number of PJSC Gazprom's ordinary shares issued, held by the subsidiaries of PJSC Gazprom, as at the end of the year	mm shares	723	723	1,573	1,573	1,573
Number of PJSC Gazprom's ordinary shares issued less shares held by the subsidiaries of PJSC Gazprom, as at the end of the year*	mm shares	22,951	22,951	22,101	22,101	22,101
Market capitalization**	USD bn	54.8	44.2	60.3	53.6	52.3
change (y-o-y)	%	–45.1%	–19.3%	36.4%	–11.1%	–2.4%
MOEX Russia index	points	1,397	1,761	2,233	2,110	2,369
change (y-o-y)	%	–7.1%	26.1%	26.8%	–5.5%	12.3%
RTS index	points	791	757	1,152	1,154	1,069
change (y-o-y)	%	–45.2%	–4.3%	52.2%	0.2%	–7.4%
Daily average trading volume, Moscow Exchange	mm shares	52.5	32.5	29.9	28.9	26.4
Daily average trading volume, LSE	mm ADRs*	27.6	16.4	15.9	12.0	9.2
Dividend per share***	RUB	7.20	7.89	8.0397	8.04	16.61
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%
AO ROSNEFTEGAZ	%	10.97%	10.97%	10.97%	10.97%	10.97%
AO Rosgazifikatsiya	%	0.89%	0.89%	0.89%	0.89%	0.89%
ADR holders*****	%	28.05%	27.83%	26.86%	25.20%	24.13%
Other registered holders	%	21.72%	21.94%	22.91%	24.57%	25.64%
Total	%	100%	100%	100%	100%	100%

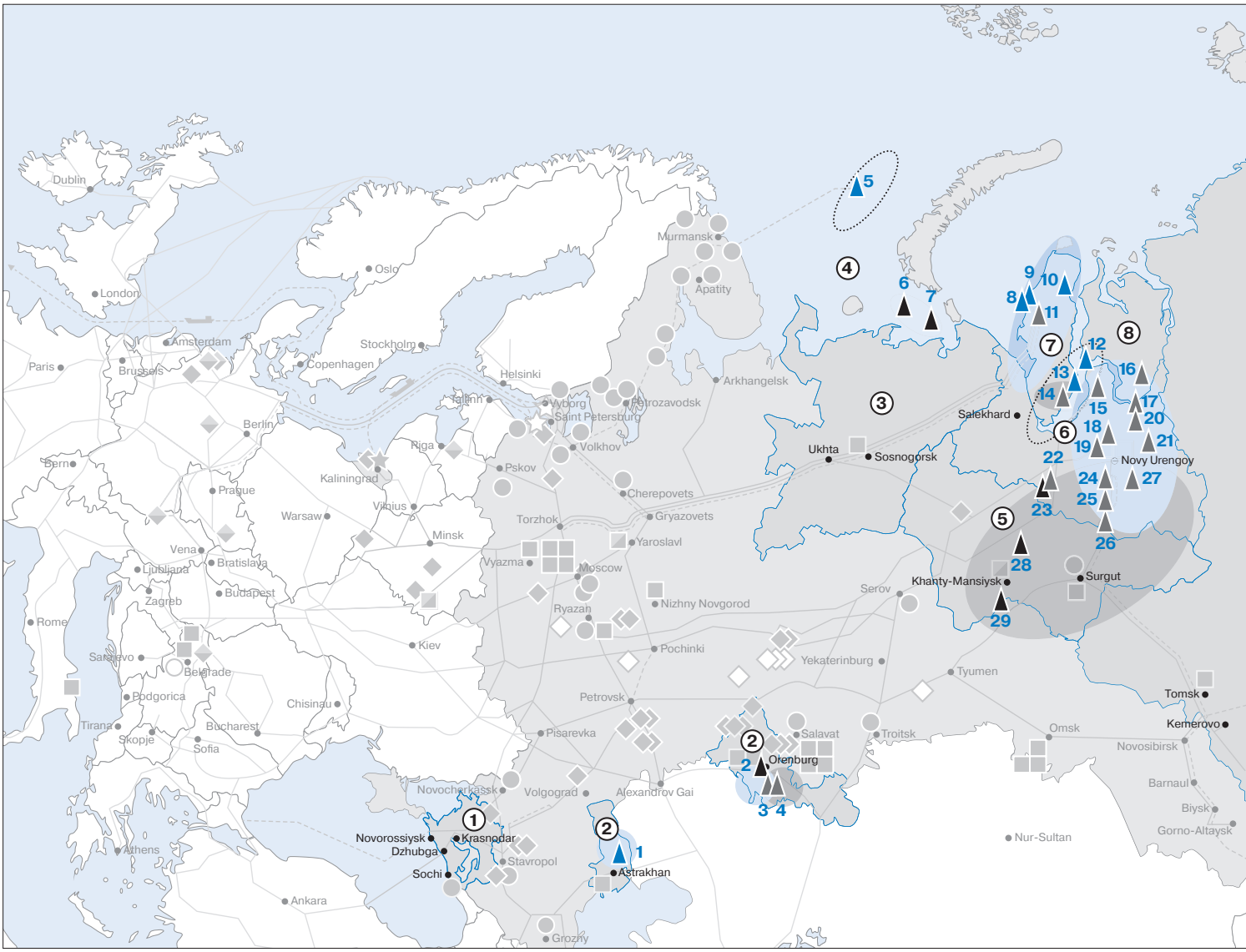
* As at 31 December of the respective year, there were no ordinary shares of PJSC Gazprom which belong to the Company.
** Market capitalization based on Moscow Exchange share price converted into USD.
*** For 2018 — recommended dividends.
**** As at 31 December 2017 and 31 December 2018, the cumulative share in PJSC Gazprom directly or indirectly controlled by the Russian Federation and calculated by direct addition totals 50.23% and is owned through the full ownership of AO ROSNEFTEGAZ which also holds a 74.55% stake in AO Rosgazifikatsiya.
***** The Bank of New York Mellon issued ADRs on PJSC Gazprom's shares.

Dynamics of PJSC Gazprom's ordinary shares on Moscow Exchange and MOEX Russia Index in 2018



Exploration and Production in Russia

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

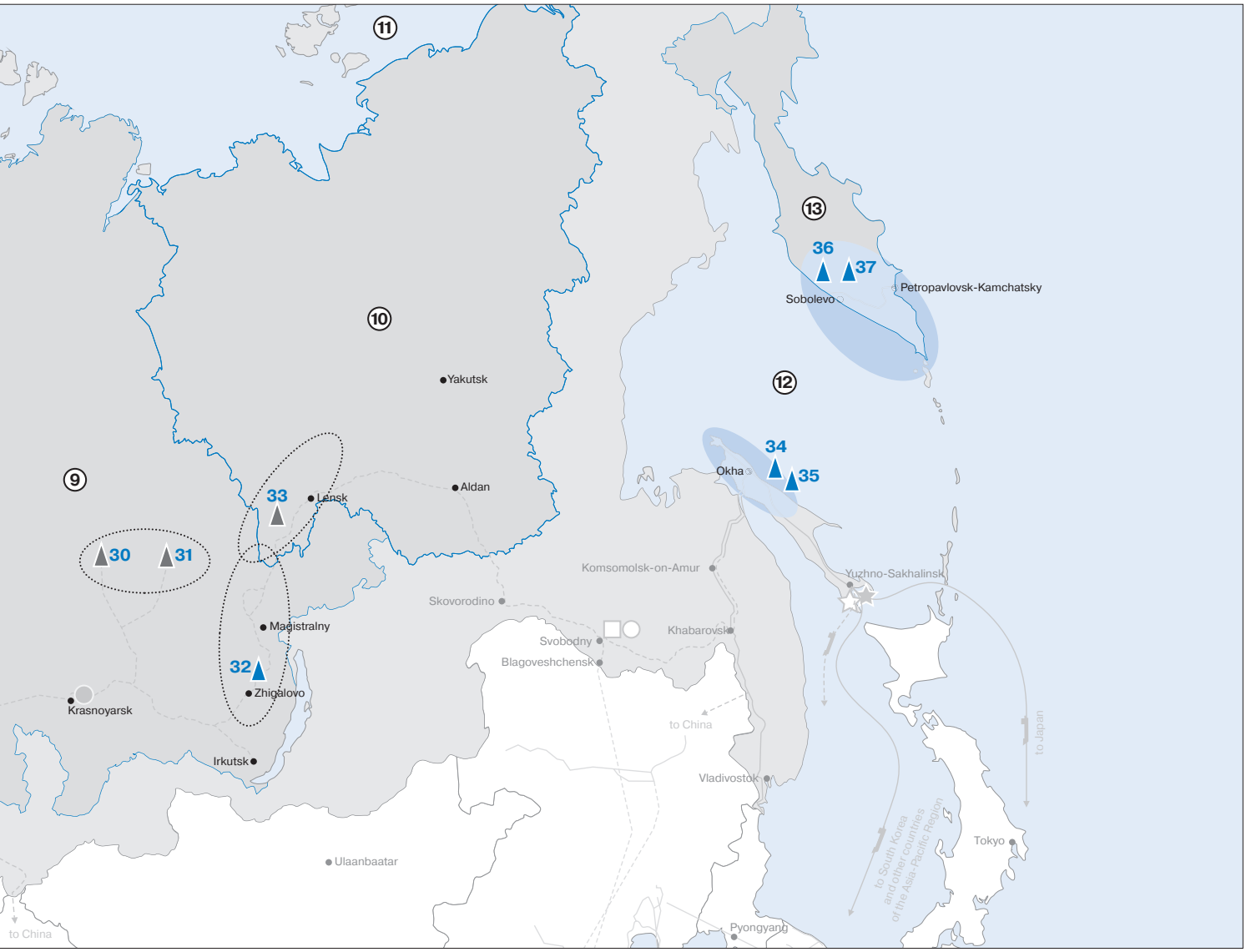


	Gas production centers
	Projected gas production centers
	Oil production centers
	Gas and gas condensate fields
	Oil fields
	Oil and gas and oil, gas and gas condensate fields

Areas of geological exploration works

①	Krasnodar Territory
②	Astrakhan Region and Orenburg Region
③	Republic of Komi and Nenets Autonomous Area
④	Continental shelf of the Russian Federation in Kara Sea, Barents Sea and Pechora Sea
⑤	Khanty-Mansi Autonomous Area — Yugra
⑥	North of Taz Peninsula, Ob and Taz bays, Nadym-Pur-Taz Region
⑦	Yamal Peninsula
⑧	Gydan Peninsula
⑨	Krasnoyarsk Territory, Irkutsk, Tomsk and Kemerovo Regions
⑩	Republic of Sakha (Yakutia)
⑪	Continental shelf of the Russian Federation in Vostochno-Sibirskoye Sea and Chukotskoye Sea
⑫	Continental shelf of the Russian Federation in the Okhotsk Sea
⑬	Kamchatka Peninsula

Note. As at 31 December 2018.



Fields

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

* 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 in 2007 has replaced SPE definitions published in 1997.

Russian classification of reserves

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_1 (producing, undeveloped, explored), B_2 (undeveloped, estimated), C_1 (explored) and C_2 (estimated). Resources are categorised into D_0, D_I (localised), D_1 and D_2.

Corporate reporting statements will indicate an aggregate of categories A+B_1+C_1, or explored reserves of high geological certainty and corresponding to previously used categories A+B+C_1. 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). As at 31 December 2018, Gazprom completed the gas recovery factors estimation for the fields containing 19% of the Group's total A+B_1+C_1 reserves. Comparison of the new Classification with the international one will be carried out following a transition period during which the new Classification will be tested 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
(including share in the reserves of entities, investments in which are classified as joint operations)

Metric units

	As at 31 December				
	2014	2015	2016	2017	2018
Natural gas, bcm					
Reserves, Russian classification	36,101.4	36,147.3	36,443.9	35,355.4	35,195.3
share audited under PRMS standards	94%	94%	95%	94%	93%
Proved	18,894.7	18,791.2	18,596.5	18,253.4	17,890.4
Probable	4,616.0	4,913.8	5,258.6	5,893.2	6,364.7
Proved + probable	**23,510.7**	**23,705.0**	**23,855.1**	**24,146.6**	**24,255.1**
Gas condensate, mm tonnes					
Reserves, Russian classification	1,447.0	1,499.5	1,534.9	1,595.6	1,604.4
share audited under PRMS standards	92%	92%	94%	93%	94%
Proved	642.3	699.5	759.2	797.7	759.7
Probable	206.3	233.8	259.7	308.0	330.5
Proved + probable	**848.6**	**933.3**	**1,018.9**	**1,105.7**	**1,090.2**
Crude oil, mm tonnes					
Reserves, Russian classification	2,053.1	2,082.0	2,078.5	2,045.3	2,015.7
share audited under PRMS standards	91%	92%	93%	94%	94%
Proved	830.5	792.7	789.5	736.8	712.3
Probable	543.9	562.7	589.2	623.2	623.1
Proved + probable	**1,374.4**	**1,355.4**	**1,378.7**	**1,360.0**	**1,335.4**

Oil equivalent

	As at 31 December				
	2014	2015	2016	2017	2018
Natural gas, mm boe					
Reserves, Russian classification	234,298.1	234,596.0	236,520.9	229,456.5	228,417.5
Proved	122,626.6	121,954.9	120,691.3	118,464.5	116,108.7
Probable	29,957.8	31,890.6	34,128.3	38,246.9	41,306.9
Proved + probable	**152,584.4**	**153,845.5**	**154,819.6**	**156,711.4**	**157,415.6**
Gas condensate, mm boe					
Reserves, Russian classification	11,836.5	12,265.9	12,555.5	13,052.0,	13,124.0
Proved	5,254.0	5,721.9	6,210.3	6,525.2	6,214.3
Probable	1,687.5	1,912.5	2,124.3	2,519.4	2,703.5
Proved + probable	**6,941.5**	**7,634.4**	**8,334.6**	**9,044.6**	**8,917.8**
Crude oil, mm boe					
Reserves, Russian classification	15,049.2	15,261.1	15,235.4	14,992.1	14,775.1
Proved	6,087.6	5,810.5	5,787.0	5,400.7	5,221.2
Probable	3,986.8	4,124.6	4,318.8	4,568.1	4,567.3
Proved + probable	**10,074.4**	**9,935.1**	**10,105.9**	**9,968.8**	**9,788.5**

	As at 31 December				
	2014	2015	2016	2017	2018
Total, mm boe					
Reserves, Russian classification	261,183.8	262,123.0	264,311.8	257,500.6	256,316.6
Proved	133,968.2	133,487.3	132,688.6	130,390.4	127,544.2
Probable	35,632.1	37,927.7	40,571.5	45,334.4	48,577.7
Proved + probable	**169,600.3**	**171,415.0**	**173,260.1**	**175,724.8**	**176,121.9**

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.

Change in Gazprom Group's hydrocarbon reserves (Russian classification of reserves) in Russia

(including share in the reserves of entities, investments in which are classified as joint operations)

	Natural gas, bcm	Gas condensate*, mm tonnes	Crude oil, mm tonnes
Reserves as at 31 December 2013	**35,696.6**	**1,384.4**	**2,019.0**
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
Reserves as at 31 December 2014	**36,101.4**	**1,447.0**	**2,053.1**
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

	Natural gas, bcm	Gas condensate*, mm tonnes	Crude oil, mm tonnes
Reserves as at 31 December 2015	**36,147.3**	**1,499.5**	**2,082.0**
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
Reserves as at 31 December 2016	**36,443.9**	**1,534.9**	**2,078.5**
Additions to reserves as a result of exploration	852.9	95.6	3.3
Transfer of reserves discovered in 2016 to the Undistributed Subsoil Fund of Russia** and to other companies, acquisition from other companies	–46.4	–	1.2
Receipt of licenses, including	12.8	1.9	–
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	–	–	–9.4
Revaluation	–1,437.8	–24.8	19.8
Production (including losses)	–469.9****	–12.0	–48.1
Reserves as at 31 December 2017	**35,355.4**	**1,595.6**	**2,045.3**
Additions to reserves as a result of exploration	796.6	21.8	19.4
Transfer of reserves discovered in 2016 to the Undistributed Subsoil Fund of Russia** and to other companies, acquisition from other companies	–409.3	–0.6	–5.7
Receipt of licenses, including	–	–	0.8
due to new fields discovery***	–	–	0.8
due to resolution of the Russian government, without tendering process	–	–	–
Return of licenses	–	–	–
Acquisition of assets	–	–	0.1
Disposal of assets	–	–	–
Revaluation	–49.6	0.1	3.1
Production (including losses)	–497.8****	–12.5	–47.3
Reserves as at 31 December 2018	**35,195.3**	**1,604.4**	**2,015.7**

* Any changes in gas condensate reserves due to production are recognized as converted into stable gas condensate (C_{5+}). 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.

Hydrocarbon fields and deposits discovered by Gazprom Group in the Russian Federation

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Gazprom Group					
Fields	1	2	2	4	3
Deposits in previously discovered fields	37	22	15	47	12
Entities in which Gazprom has investments classified as joint operations (share in the reserves)					
Fields	–	–	–	1	1
Deposits in previously discovered fields	2	6	3	5	3

Hydrocarbon fields discovered by Gazprom Group in the Russian Federation

(excluding fields discovered by entities in which Gazprom has investments classified as joint operations)

Discovery year	Discovered field name	Discovered field type*	Region of the Russian Federation
2014	Vostochno-Imbinskoye	G	Krasnoyarsk Territory
2015	Padinskoye	GC	Yamal-Nenets Autonomous Area
	Naryksko-Ostashkinskoye	Coalbed methane	Kemerovo Region
2016	Zapadno-Chatylkinskoye	O	Yamal-Nenets Autonomous Area
	Novosamarskoye	O	Orenburg Region
2017	Yuzhno-Lunskoye	GC	The Sea of Okhotsk continental shelf of Russia
	Salairskoye	GC	Krasnoyarsk Territory
	Alexander Zhagrin	O	Khanty-Mansi Autonomous Area — Yugra
	Novozarinskoye	O	Orenburg Region
2018	Neptune	O	The Sea of Okhotsk continental shelf of Russia
	Triton	O	The Sea of Okhotsk continental shelf of Russia
	Blizhneportovskoye	G	Yamal-Nenets Autonomous Area

* As per the current Russian state classification: OGC — oil and gas condensate field; OG — oil and gas field; GC — gas and condensate field; G — gas field; O — oil field.

Replacement ratio of Gazprom Group's hydrocarbon reserves, Russian classification of reserves

(including share in the reserves of entities, investments in which are classified as joint operations)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural gas	1.86	1.27	1.10	1.82	1.60
Gas condensate	10.88	6.12	3.25	7.97	1.74
Crude oil	0.57	0.47	0.41	0.07	0.41
Total	**1.95**	**1.32**	**1.08**	**1.81**	**1.49**

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

(including share in the reserves of entities, investments in which are classified as joint operations)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural gas	82	87	87	75	71
Crude oil	47	47	44	43	43

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

(including share in the reserves of entities, investments in which are classified as joint operations)

	As at 31 December				
	2014	2015	2016	2017	2018
PJSC Gazprom and its major subsidiaries					
Proved	18,023.7	17,942.5	17,780.9	17,429.6	17,075.8
Probable	4,303.7	4,587.6	4,930.2	5,536.8	6,007.5
Proved + probable	**22,327.4**	**22,530.1**	**22,711.1**	**22,966.4**	**23,083.3**
PAO Gazprom Neft and its subsidiaries					
Proved	223.5	239.5	243.0	288.2	322.3
Probable	168.3	182.1	183.0	210.5	212.2
Proved + probable	**391.8**	**421.6**	**426.0**	**498.7**	**534.5**
ZAO Purgaz					
Proved	145.0	132.3	120.6	109.7	92.0
Probable	12.9	12.9	12.9	12.9	12.7
Proved + probable	**157.9**	**145.2**	**133.5**	**122.6**	**104.7**
OAO Severneftegazprom					
Proved	484.9	459.8	434.6	409.9	384.8
Probable	125.7	125.7	125.7	125.5	125.4
Proved + probable	**610.6**	**585.5**	**560.3**	**535.4**	**510.2**
Total (excluding share in the reserves of entities, investments in which are classified as joint operations)					
Proved	18,877.1	18,774.1	18,579.1	18,237.4	17,874.9
Probable	4,610.6	4,908.3	5,251.8	5,885.7	6,357.8
Proved + probable	**23,487.7**	**23,682.4**	**23,830.9**	**24,123.1**	**24,232.7**
Entities, investments in which are classified as joint operations (attributable to the share of Gazprom Group)					
Proved	17.6	17.1	17.4	16.0	15.5
Probable	5.4	5.5	6.8	7.5	6.9
Proved + probable	**23.0**	**22.6**	**24.2**	**23.5**	**22.4**
Total (including share in the reserves of entities, investments in which are classified as joint operations)					
Proved	18,894.7	18,791.2	18,596.5	18,253.4	17,890.4
Probable	4,616.0	4,913.8	5,258.6	5,893.2	6,364.7
Proved + probable	**23,510.7**	**23,705.0**	**23,855.1**	**24,146.6**	**24,255.1**

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

(including share in the reserves of entities, investments in which are classified as joint operations)

	As at 31 December				
	2014	2015	2016	2017	2018
PJSC Gazprom and its major subsidiaries					
Proved	637.3	691.9	751.7	788.9	748.5
Probable	202.8	230.2	257.0	303.5	327.2
Proved + probable	**840.1**	**922.1**	**1,008.7**	**1,092.4**	**1,075.7**
PAO Gazprom Neft and its subsidiaries					
Proved	5.0	7.6	7.5	8.8	11.2
Probable	3.5	3.6	2.7	4.5	3.3
Proved + probable	**8.5**	**11.2**	**10.2**	**13.3**	**14.5**
Total					
Proved	642.3	699.5	759.2	797.7	759.7
Probable	206.3	233.8	259.7	308.0	330.5
Proved + probable	**848.6**	**933.3**	**1,018.9**	**1,105.7**	**1,090.2**

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

(including share in reserves of entities, investments in which are classified as joint operations)

	As at 31 December				
	2014	2015	2016	2017	2018
PJSC Gazprom and its major subsidiaries					
Proved	55.6	44.7	44.6	16.5	17.2
Probable	45.9	35.0	35.0	46.5	46.7
Proved + probable	**101.5**	**79.7**	**79.6**	**63.0**	**63.9**
PAO Gazprom Neft and its subsidiaries					
Proved	675.9	655.6	652.8	630.8	611.1
Probable	432.8	458.7	486.1	507.4	507.7
Proved + probable	**1,108.7**	**1,114.3**	**1138.9**	**1,138.2**	**1,118.8**
Total (excluding share in the reserves of entities, investments in which are classified as joint operations)					
Proved	731.5	700.3	697.4	647.3	628.3
Probable	478.7	493.7	521.1	553.9	554.4
Proved + probable	**1,210.2**	**1,194.0**	**1,218.5**	**1,201.2**	**1,182.7**
Entities, investments in which are classified as joint operations (attributable to the share of Gazprom Group)					
Proved	99.1	92.4	92.1	89.5	84.0
Probable	65.1	69.0	68.1	69.3	68.7
Proved + probable	**164.2**	**161.4**	**160.2**	**158.8**	**152.7**
Total (including share in the reserves of entities, investments in which are classified as joint operations)					
Proved	830.5	792.7	789.5	736.8	712.3
Probable	543.9	562.7	589.2	623.2	623.1
Proved + probable	**1,374.4**	**1,355.4**	**1,378.7**	**1,360.0**	**1,335.4**

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

(including share in the reserves of entities, investments in which are classified as joint operations)

	As at 31 December				
	2014	2015	2016	2017	2018
Natural gas, bcm					
Ural Federal District	22,032.2	21,613.5	21,309.0	20,302.6	19,735.7
Northwest Federal District	85.8	85.1	307.3	319.3	318.6
South Federal District and North Caucasian Federal District	2,997.4	2,985.3	2,973.1	2,961.1	2,948.2
Volga Federal District	684.1	663.5	648.9	640.7	626.9
Siberian Federal District	1,936.7	1,971.6	2,103.3	2,102.1	2,094.2
Far Eastern Federal District	1,197.2	1,402.1	1,488.3	1,420.1	1,415.8
Continental shelf of the Russian Federation	7,168.0	7,426.2	7,614.0	7,609.5	8,055.9
Total	**36,101.4**	**36,147.3**	**36,443.9**	**35,355.4**	**35,195.3**
Gas condensate, mm tonnes					
Ural Federal District	675.7	695.2	690.6	750.0	744.1
Northwest Federal District	20.5	20.5	31.3	33.1	33.0
South Federal District and North Caucasian Federal District	447.5	444.7	441.9	439.0	436.0
Volga Federal District	56.5	56.0	55.7	55.6	55.3
Siberian Federal District	92.6	92.3	97.0	96.9	96.0
Far Eastern Federal District	27.3	29.6	30.5	29.4	29.3
Continental shelf of the Russian Federation	126.9	161.2	187.9	191.6	210.7
Total	**1,447.0**	**1,499.5**	**1,534.9**	**1,595.6**	**1,604.4**
Crude oil, mm tonnes					
Ural Federal District	1,560.1	1,541.6	1,531.3	1,494.3	1,471.2
Northwest Federal District	4.8	5.6	19.8	20.3	20.3
South Federal District and North Caucasian Federal District	7.9	8.0	7.9	7.8	7.7
Volga Federal District	159.9	200.2	202.5	228.1	227.7
Siberian Federal District	198.9	205.0	201.3	199.6	187.4
Far Eastern Federal District	57.6	58.4	54.6	36.8	36.8
Continental shelf of the Russian Federation	63.9	63.2	61.1	58.4	64.6
Total	**2,053.1**	**2,082.0**	**2,078.5**	**2,045.3**	**2,015.7**

Note. Until 2016 hydrocarbon reserves are given under $A+B+C_1$ classification, since 31 December 2016 — under $A+B_1+C_1$ 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 $A+B_1+C_1$ are explored reserves of high geological certainty and correspond to previously used $A+B+C_1$.

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				
	2014	2015	2016	2017	2018
Natural gas, bcm	971.7	1,035.5	999.1	1,003.8	1,146.7
Gas condensate, mm tonnes	97.0	112.1	104.5	100.8	110.1
Crude oil, mm tonnes	575.4	566.9	571.5	578.3	592.0

Oil equivalent

	As at 31 December				
	2014	2015	2016	2017	2018
Natural gas, mm boe	6,306.3	6,720.4	6,484.2	6,514.7	7,442.1
Gas condensate, mm boe	793.5	917.0	854.8	824.5	900.6
Crude oil, mm boe	4,217.7	4,155.4	4,189.1	4,238.9	4,339.4
Total, mm boe	**11,317.5**	**11,792.8**	**11,528.1**	**11,578.1**	**12,682.1**

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.

Licences

License areas set out by federal districts of the Russian Federation, as at 31 December 2018, 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
Gazprom Group							
Licenses for prospecting, exploration and production of hydrocarbons (SEPL)	25.9	–	2.8	4.5	51.4	–	319.3
Licenses for exploration and production of hydrocarbons (EPL)	67.5	1.5	5.4	3.0	20.9	12.6	11.8
Licenses for geological survey (SL)	21.9	–	0.3	2.5	7.1	0.9	–
Total	**115.3**	**1.5**	**8.5**	**10.0**	**79.4**	**13.5**	**331.1**
Entities investments in which are classified as joint operations							
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	–	–	–	–	–	–
Total	**4.2**	**–**	**–**	**–**	**18.9**	**–**	**–**

* License types in accordance with Russian legislation.

Licenses for the main hydrocarbon fields as at 31 December 2018

Field name	Year of production start	Subsidiary — license holder	Gazprom Group share*, %	Field type**	License category***	License expiration year****
Gazprom Group						
Western Siberia (Ural FD)						
Urengoyskoye	1978	OOO Gazprom Dobycha Urengoy	100%	OGC	EPL	2038
Severo-Urengoyskoye	1987			OGC	EPL	2030
Yen-Yakhinskoye	1985			OGC	EPL	2038
Pestsovoye	2004			OGC	EPL	2041
Yamburgskoye	1991	OOO Gazprom Dobycha Yamburg	100%	OGC	EPL	2054
Zapolyarnoye	2001			OGC	EPL	2114
Medvezhye	1972	OOO Gazprom Dobycha Nadym	100%	OGC	EPL	2086
Yamsoveiskoye	1997			OGC	EPL	2039
Ubileynoye	1992			OGC	EPL	2063
Kharasaveiskoye	–			GC	EPL	2033
Bovanenkovskoye	2012			OGC	EPL	2042

Field name	Year of production start	Subsidiary — license holder	Gazprom Group share*, %	Field type**	License category***	License expiration year****
Novoportovskoye	2016	OOO Gazpromneft-Yamal	100%	OGC	EPL	2150
Komsomolskoye	1993	OOO Gazprom Dobycha Noyabrsk	100%	OGC	EPL	2049
Yety-Purovskoye	2004			OGC	EPL	2038
Zapadno-Tarkosalynskoye	1996			OGC	SEPL	2116
Gubkinskoye	1999	ZAO Purgaz	51%	OGC	EPL	2040
Yuzhno-Russkoye	2007	OAO Severneftegazprom	50,001% (of ordinary shares)	OGC	EPL	2043
Zapadno-Tambeyskoye	–	PJSC Gazprom		OGC	EPL	2028
Kruzenshternskoye	–			GC	EPL	2028
Malyginskoye	–			GC	EPL	2028
Severo-Tambeyskoye	–			GC	EPL	2028
Tasiyskoye	–			GC	EPL	2028
Antypajutinskoye	–			G	EPL	2028
Tota-Yakhinskoe	–			G	EPL	2028
Tazovskoye	–	OOO Gazpromneft-Yamal	100%	OGC	SEPL	2025
Sugmutskoye	1995	AO Gazpromneft-Noyabrskneftegaz	100%	O	EPL	2089
Sutorminskoye	1982			OGC	EPL	2110
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	2090
Vyngapurovskoye (Yamal-Nenets Autonomous Area)	1982			OGC	EPL	2113
Southern Russia (South FD)						
Astrakhanskoye	1986	OOO Gazprom Dobycha Astrakhan	100%	GC	EPL	2019
Zapadno-Astrakhanskoye	–			GC	SEPL	2029
South Ural region (Volga FD)						
Orenburgskoye	1974	OOO Gazprom Dobycha Orenburg	100%	OGC	EPL	2038
Estern section of Orenburg OGC field	1994	OOO Gazpromneft-Orenburg	100%	OGC	EPL	2138
Eastern Siberia and the Far East (Siberian and Far Eastern FDs)						
Chayandinskoye	–	PJSC Gazprom		OGC	EPL	2028
Kovyktinskoye (including Khandinskaya area)	–			GC	EPL	2037
Tas-Yuryakhskoye	–			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****
Continental shelf of the Russian Federation						
Shtokmanovskoye (including western part)	–	PJSC Gazprom		GC	EPL	2043
Kirinskoye	2013			GC	EPL	2028
Yuzhno-Kirinskoye	–			GC	SEPL	2039
Yuzhno-Lunskoye	–			GC	SEPL	2039
Mynginskoe	–			GC	SEPL	2039
Ledovoye	–			GC	EPL	2033
Rusanovskoye	–			GC	SEPL	2043
Ludlovskoye	–			G	SEPL	2043
Leningradskoye	–			GC	SEPL	2043
Kamennomysskoye-more	–	OOO Gazprom Dobycha Yamburg	100%	G	EPL	2057
Severo-Kamennomysskoye	–			GC	EPL	2076
Prirazlomnoye	2013	OOO Gazprom Neft shelf	100%	O	EPL	2043
Dolginskoye	–			O	EPL	2035
Entities, investments in which are classified as joint operations						
Western Siberia (Ural FD)						
Zapadno-Salymskoye	2004	Salym Petroleum Development N.V.	50%	O	EPL	2130
Sovetskoye (Khanty-Mansi Autonomous Area)	1966	AO Tomskneft VNC	50%	O	EPL	2145
Eastern Siberia and the Far East (Siberian and Far Eastern FDs)						
Krapivinskoye	1984	AO Tomskneft VNC	50%	O	EPL	2159
Sovetskoye (the Tomsk Region)	1966			O	EPL	2145
Pervomayskoye (the Tomsk Region)	1981			O	EPL	2105
Luginetskoye	1982			OGC	EPL	2098
Associated and jointly controlled companies						
Western Siberia (Urals FD)						
Vostochno-Messoyakhskoe	2016	AO Messoyakhaneftegaz	50%	OGC	SEPL	2140
Zapadno-Messoyakhskoe	–			OG	SEPL	2027
Severo-Parusovoye	–	OOO RusGasAlliance******	50%	OGC	EPL	2027
Eastern Siberia and the Far East (Siberian and Far Eastern FDs)						
Kuyumbinskoye	2018	OOO Slavneft-Krasnoyarskneftegaz	50%	OGC	SEPL	2171
Piltun-Astokhskoe	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.
***** Reorganised on 28 December 2018 through merger with AO Gazpromneft-Noyabrskneftegaz.
****** The financial results of this entity are not included in the IFRS consolidated financial statements for 2018 due to insignificance.

Production

Hydrocarbon production of Gazprom Group in Russia
(including share in production of entities, investments in which are classified as joint operations)

Metric units

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural and associated gas, bcm	444.90	419.52	420.13	472.05	498.68
Gas condensate, mm tonnes	14.49	15.34	15.85	15.94	15.93
Crude oil, mm tonnes	43.53	44.04	47.15	48.63	48.28

Oil equivalent

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural and associated gas, mm boe	2,887.40	2,722.68	2,726.64	3,063.60	3,236.43
Gas condensate, mm boe	118.53	125.48	129.65	130.39	130.31
Crude oil, mm boe	319.07	322.81	345.61	356.46	353.89
Total, mm boe	**3,325.00**	**3,170.97**	**3,201.91**	**3,550.45**	**3,720.63**

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.

Daily average hydrocarbon production of Gazprom Group in Russia
(including share in production of entities, investments in which are classified as joint operations)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural and associated gas, mmcm / day	1,218.9	1,149.4	1,147.9	1,293.3	1,366.2
Gas condensate, thousand tonnes / day	39.7	42.0	43.3	43.7	43.7
Crude oil, thousand tonnes / day	119.3	120.7	128.8	133.2	132.3

Gazprom Group's hydrocarbon production in Russia

(including share in production of entities, investments in which are classified as joint operations)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural and associated gas, bcm					
PJSC Gazprom and its major subsidiaries*	393.73	368.20	368.60	419.72	444.99
PAO Gazprom Neft and its subsidiaries	11.86	12.53	13.64	15.40	17.84
ZAO Purgaz	13.25	12.70	11.74	10.82	9.64
OAO Severneftegazprom	25.04	25.05	25.12	25.04	25.13
Total (excluding share in production of companies, investments in which are classified as joint operations)	**443.88**	**418.48**	**419.10**	**470.98**	**497.60**
Entities, investments in which are classified as joint operations (attributable to the share of Gazprom Group)	1.02	1.04	1.03	1.07	1.08
Total (including share in production of companies, investments in which are classified as joint operations)	**444.90**	**419.52**	**420.13**	**472.05**	**498.68**
Gas condensate, mm tonnes					
PJSC Gazprom and its major subsidiaries*	14.47	15.31	15.83	15.92	15.90
PAO Gazprom Neft and its subsidiaries	0.02	0.03	0.02	0.02	0.03
Total	**14.49**	**15.34**	**15.85**	**15.94**	**15.93**
Crude oil, mm tonnes					
PJSC Gazprom and its major subsidiaries*	1.73	1.74	1.55	1.50	1.45
PAO Gazprom Neft and its subsidiaries	33.56	34.30	37.74	39.48	39.46
Total (excluding share in production of companies, investments in which are classified as joint operations)	**35.29**	**36.04**	**39.29**	**40.98**	**40.91**
Entities, investments in which are classified as joint operations (attributable to the share of Gazprom Group)	8.24	8.00	7.86	7.65	7.37
Total (including share in production of companies, investments in which are classified as joint operations)	**43.53**	**44.04**	**47.15**	**48.63**	**48.28**

* Taking into account the production volumes of OOO Gazprom dobycha shelf Yuzhno-Sakhalinsk, OAO Tomskgazprom. Also taking into account the production volumes of AO Gazprom Gazoraspredeleniye Elista, OOO Gazprom dobycha Irkutsk, and OOO Servisneftegaz; the financial results of these entities are not included in Gazprom Group's IFRS consolidated financial statements due to insignificance.

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

(including share in production of entities, investments in which are classified as joint operations)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural gas, bcm					
Ural Federal District	409.96	385.18	385.46	437.56	464.36
Northwest Federal District	2.25	2.14	2.06	2.02	1.89
South Federal District and North Caucasian Federal District	11.24	11.15	11.28	11.58	11.94
Volga Federal District	16.73	16.22	15.65	14.95	14.40
Siberian Federal District	4.23	3.82	4.55	4.88	4.91
Far Eastern Federal District	0.39	0.40	0.41	0.43	0.45
Continental shelf of the Russian Federation	0.10	0.61	0.72	0.63	0.73
Total	**444.90**	**419.52**	**420.13**	**472.05**	**498.68**
Gas condensate, mm tonnes					
Ural Federal District	10.30	11.14	11.59	11.51	11.38
Northwest Federal District	0.13	0.12	0.12	0.12	0.12
South Federal District and North Caucasian Federal District	3.56	3.51	3.56	3.68	3.81
Volga Federal District	0.16	0.15	0.14	0.12	0.12
Siberian Federal District	0.31	0.31	0.31	0.39	0.37
Far Eastern Federal District	0.01	0.01	0.01	0.01	0.02
Continental shelf of the Russian Federation	0.02	0.10	0.12	0.11	0.11
Total	**14.49**	**15.34**	**15.85**	**15.94**	**15.93**
Crude oil, mm tonnes					
Ural Federal District	32.83	32.39	34.45	35.71	36.82
Northwest Federal District	0.03	0.04	0.03	0.02	0.02
South Federal District and North Caucasian Federal District	0.11	0.09	0.09	0.09	0.08
Volga Federal District	2.46	2.76	2.85	2.85	2.79
Siberian Federal District	7.84	7.87	7.58	7.32	5.38
Far Eastern Federal District	–	0.00	–	0.00	0.00
Continental shelf of the Russian Federation	0.26	0.89	2.15	2.64	3.19
Total	**43.53**	**44.04**	**47.15**	**48.63**	**48.28**

Useful life of APG by Gazprom Group in Russia

	For the year ended 31 December				
	2014	2015	2016	2017	2018
APG usage, bcm					
PJSC Gazprom and its major subsidiaries*	1.42	1.87	1.79	1.64	1.57
PAO Gazprom Neft and its subsidiaries	6.13	6.51	7.63	8.71	11.29
Total excluding share in the production of entities where Gazprom has investments classifies as joint operations	**7.55**	**8.38**	**9.42**	**10.35**	**12.86**
Entities where Gazprom has investments classifies as joint operations, Gazprom's share	1.02	1.05	1.03	1.07	1.08
Total including share in the production of entities where Gazprom has investments classifies as joint operations	**8.58**	**9.43**	**10.45**	**11.42**	**13.94**
Level of useful life of APG, %					
PJSC Gazprom and its major subsidiaries*	93.5	95.6	97.8	98.4	98.1
PAO Gazprom Neft and its subsidiaries	80.5	79.6	79.2	76.2	78.4
Total excluding share in the production of entities where Gazprom has investments classifies as joint operations	**82.7**	**82.7**	**82.2**	**79.0**	**80.4**
Entities where Gazprom has investments classifies as joint operations, Gazprom's share	90.0	89.9	87.2	88.9	91.6
Total including share in the production of entities where Gazprom has investments classifies as joint operations	**83.5**	**83.5**	**82.7**	**79.8**	**81.8**

* Taking into account the production volumes of OAO Tomskgazprom. Also taking into account the production volumes of OOO Servisneftegaz; the financial results of this entity are not included in Gazprom Group's IFRS consolidated financial statements due to insignificance.

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				
	2014	2015	2016	2017	2018
Natural and associated gas, bcm	18.2	25.5	27.2	27.0	26.9
Gas condensate, mm tonnes	2.3	4.7	5.2	5.0	4.9
Crude oil, mm tonnes	10.0	9.6	9.9	10.9	11.2

Oil equivalent

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural and associated gas, mm boe	118.1	165.5	176.5	175.2	174.7
Gas condensate, mm boe	18.8	38.4	42.5	40.9	39.8
Crude oil, mm boe	73.3	70.4	72.6	79.9	82.3
Total, mm boe	**210.2**	**274.3**	**291.6**	**296.0**	**296.8**

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.

Geological exploration, production drilling and production capacity

Key figures of Gazprom Group's geological exploration activities
(excluding entities, investments in which are classified as joint operations)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Exploration drilling, thousand m	165.4	143.6	111.6	85.9	157.6
Completed exploration wells, units	41	43	40	36	25
including producing wells	31	38	34	31	20
Seismic exploration 2D, thousand linear km	6.6	0.3	1.1	–	5.7
Seismic exploration 3D, thousand square km	12.6	20.0	20.6	18.7	9.5
Reserves growth due to geological exploration, mm boe	6,435.6	4,153.0	3,404.0	6,337.1	5,440.6
Drilling efficiency, boe / m	38.9	28.9	30.5	73.8	34.5

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

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Exploration drilling, thousand m	13.1	3.2	7.4	12.8	28.7
Completed exploration wells, units	4	1	2	4	8
including producing wells	3	1	1	4	5
Seismic exploration 2D, thousand linear km	–	–	–	–	–
Seismic exploration 3D, thousand square km	494	459	130	200	474

Gazprom Group's production drilling
(excluding entities, investments in which are classified as joint operations)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Production wells, completed construction, units					
natural gas	38	73	64	116	114
crude oil	832	802	725	660	545
at UGSFs	22	27	13	4	9
Total	**892**	**902**	**802**	**780**	**668**
Production wells drilled, thousand m					
natural gas	125.6	153.2	227.2	240.8	304.4
crude oil	2,948.5	3,163.0	2,735.8	2,559.5	2,202.6
at UGSF	27.6	47.5	23.7	13.6	19.4
Total	**3,101.7**	**3,363.7**	**2,986.7**	**2,813.9**	**2,526.4**

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

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Oil production wells, completed construction, units	188	206	231	236	208
Oil production wells drilled, thousand m	694	789	785	784	749

Gazprom Group's production capacity

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

	As at 31 December				
	2014	2015	2016	2017	2018
Fields in operation, units	126	135	136	136	138
Gas production wells, units	7,816	7,881	7,916	7,945	7,976
including those in operation	7,293	7,358	7,441	7,438	7,418
Oil production wells, units	8,218	9,058	9,316	7,944	9,106
including those in operation	7,604	8,461	8,681	7,358	8,489
Comprehensive and preliminary gas treatment units, units	171	170	171	169	170
Comprehensive and preliminary gas treatment units aggregate installed capacity, bcm per year	1,119.7	1,119.7	1,119.7	1,127.9	1,166.2
Booster compressor stations, units	52	53	58	60	62
Booster compressor stations aggregate capacity, MW	5,265.4	5,080.3	5,669.8	5,865.9	6,135.3

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

	As at 31 December				
	2014	2015	2016	2017	2018
Fields in operation, units	39	41	42	41	38
Gas production wells, units	8	7	7	7	4
including those in operation	1	3	3	1	4
Oil production wells, units	3,635	3,768	3,733	3,810	3,866
including those in operation	3,086	3,163	3,379	3,472	3,534

Promising Fields

Producing fields operated by Gazprom Group

Field name	Description	Annual design capacity	Year of launch	Year of achieving design capacity	Project status (as at 31 December 2018)
Nadym-Pur-Taz area (Western Siberia)					
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	2021–2022	Gas extraction from Aptian–Albian deposits. PJSC Gazprom approved design documents for the field con struction project to develop Berriasian–Valanginian deposits in the Nydinsky block of the Medvezhye oil and gas condensate field.
Urengoyskoye (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	Development in progress; field operated by AO Achimgaz (a joint venture with Wintershall Dea GmbH*).
	Block 2	12.33 bcm of gas and 3.36 mm tonnes of unstable gas condensate	2009		Development design completed to achieve full capacity. Detailed design documents have been developed in full. Development is in progress. Construction and installation operations are underway.
	Blocks 4–5	15.5 bcm of gas	2020	2024–2027	Development design was completed for Block 4 (Phase 1) and Block 5. PJSC Gazprom approved the design documents. Detailed design documents were developed in full. Development started at Block 4 (Phase 2). Design documents were handed over to the operator, OOO Achim Development (a joint venture with Wintershall Dea GmbH). In October 2018, PJSC Gazprom and OMV AG signed the Basic Asset Sales Agreement for OMV AG to acquire a 24.98% stake in the project. The deal will decrease Gazprom Group's stake to 50.01%, while the stake of Wintershall Dea GmbH will remain unchanged at 25.01%. The parties plan to sign the final agreement on the deal in 2019.

* Until 2019 — Wintershall Holding GmbH.

Field name	Description	Annual design capacity	Year of launch	Year of achieving design capacity	Project status (as at 31 December 2018)
Yamal Peninsula and adjacent offshore areas					
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.				
Cenomanian-Aptian deposits		115 bcm of gas	2012	2021	Arrangements were made and the Bovanenkovskoye OGCF was tested at maximum daily gas production of 317 mmcm. The testing was enabled by the commissioning of a CGTU with an annual capacity of 30 bcm, a 125-MW booster compressor station (Phase 1) at the third gas production site of the Bovanenkovskoye OGCF, and the commissioning of 83 gas wells. Well connections and Phase 2 construction of an 80 MW booster compressor station of CGTU-3 are underway.
Neocomian-Jurassic deposits		25 bcm of gas	2025–2027	2030–2032	Follow-up exploration is in progress.
Novoportovskoye	Located in the south-eastern corner of the Yamal Peninsula, where no infrastructure is available.	8.6 mm tonnes of oil	2016	2020	Oil production and production drilling are in progress. In 2018, Andrey Vilkittskiy and Alexander Sannikov icebreaking support vessels joined PJSC Gazprom's Arctic fleet; Phase 2 facilities of a compressor station with a CGTU were commissioned. Engineering design for construction of facilities at the Novoportovskoye field (northern part) was approved, pilot testing was completed. Key technical parameters of the pipeline transporting gas from the field through the Ob Bay were approved, and the design stage started.
Volga Area					
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.
Volga-Urals Area					
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.	6.4 mm toe	1994	2021	Ongoing use of multi-stage hydraulic fracturing technology; oil production and production drilling in progress. In 2018, Phase 1 facilities of the TL-4 compressor station were commissioned.
Continental shelf in Russia's Arctic					
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	2013	2024	Oil production and production drilling in progress; the project design provides for a total of 32 wells to be drilled.

Field name	Description	Annual design capacity	Year of launch	Year of achieving design capacity	Project status (as at 31 December 2018)
Eastern Siberia and the Russian Far East					
Chayandinskoye	Located in the Lensk District of the Republic of Sakha (Yakutia).	25 bcm of gas 1.9 mm tonnes of oil	2019 2014 (launch of pilot production)	2024 To be adjusted based on the results of the pilot production phase	Full-scale construction at CGTU sites and oil treatment facilities is underway, including pipelines for supplying gas from gas treatment facilities to booster compressor stations, and power supply facilities; on-site equipment is being installed. A river wharf was completed in the Peleduy settlement; other newly built facilities include a municipal and industrial solid waste landfill, wastewater treatment facilities and sites for water intake facilities at CGTU-3, and 10 kV overhead power lines connecting the facilities. Drilling of 148 gas wells and 8 oil wells was completed. Several full-scale fatigue tests of membrane cartridges and membrane equipment to be used at the Chayandinskoye OGCF's membrane unit to recover helium were completed at the GTU-102 site of the Kovyktinskoye field.
Continental shelf of the Russian Federation in the Okhotsk Sea					
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	2021–2023	Gas production and production drilling in progress. Design documents for production capacity additions at the Kirinskoye gas and condensate field have been approved by resolution of PJSC Gazprom.

Note. 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	Design capacity	Year of launch	Year of achieving design capacity	Project status (as at 31 December 2018)
Yamal Peninsula and adjacent offshore areas					
Kharasaveyskoye	To be put in operation after the Bovanenkovskoye field achieves design capacity.				Addendum to the field development plan is expected to be approved. The documents have been submitted to the Federal Subsoil Resources Management Agency's Central Committee for Approval of Hydrocarbon Field Development Design Plans and Other Design Documents.
Cenomanian-Aptian deposits		32 bcm of gas	2023	2025	Design documents for the field construction to develop the Cenomanian-Aptian deposits at the Kharasaveyskoye field and the connecting pipeline to the Kharasaveyskoye field were approved by PJSC Gazprom. Preparation for the commencement of construction and installation is underway.
Neocomian-Jurassic deposits		18 bcm of gas	2027–2029	2029–2031	Follow-up exploration in progress.
Kruzenshternskoye	Part of the Bovanenkovskoye field.	33 bcm of gas	2025–2028	2029–2033	Follow-up exploration in progress. The field development project is being updated.
Continental shelf in Russia's Arctic					
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 pre-investment feasibility study for the comprehensive development of the Shtokman gas condensate field is being updated.
Ob and Taz Bays					
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	2027–2029	2032–2033	Basis of design and design specifications were approved. Development of the field construction design was started.
Kamennomysskoye-more		15.1 bcm of gas	2025	2027–2029	Development of the field construction design was completed. Design documents are at the review stage.
Eastern Siberia and the Russian Far East					
Kovyktinskoye	Located in the Zhigalovo and Kazachinskoye Districts of the Irkutsk Region.	25 bcm of gas	2022	2025	The field is at the final stage of pilot development. Development and mobilisation of drilling rigs for well construction has commenced. Exploration activities are underway, potential production capacities of the existing production wells are being analysed.

Field	Description	Design capacity	Year of launch	Year of achieving design capacity	Project status (as at 31 December 2018)
Continental shelf of the Russian Federation in the Okhotsk Sea					
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	2029-2032	Preparations are underway to commence development: offshore and onshore engineering surveys are completed, follow-up exploration is nearing completion, design documents are being prepared for Phase 1 development project (construction of initial wells), and drilling of production wells.

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

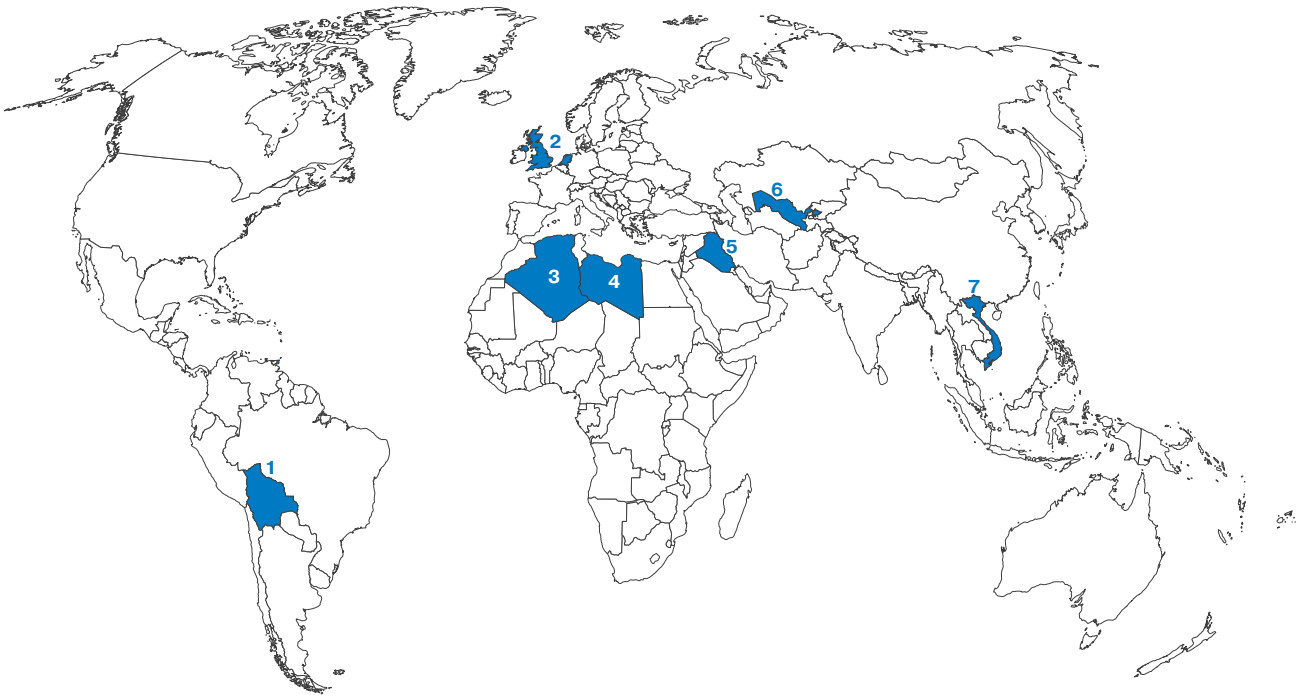
Fields of joint ventures of Gazprom Group

Field	Description	Partner	Annual design capacity	Year of launch	Year of operation at design capacity	Project status (as at 31 December 2018)
Gydan Peninsula						
Vostochno-Messoyakhskoye	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	5.9 mm tonnes of oil	2016	2021	Oil production and production drilling are in progress. Construction and installation operations were started to develop infrastructure for APG utilisation through re-injection into a reservoir.
Eastern Siberia and the Russian Far East						
Kuyumbinskoye	Located in the Baikitsky Municipality of the Evenk Municipal District in the Krasnoyarsk Territory. Makes part of the Yurubcheno-Tokhomskaya oil and gas pool. The area is hard to access and has no all-season roads.	Rosneft	10.7 mm tonnes of oil	2018	2032	Commercial production was started at the field, with the central oil gathering facility up and running. Design documents were reviewed and priority drilling areas identified.

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

Geological Exploration, Production Drilling and Production Capacity Abroad

Gazprom Group's hydrocarbon exploration and production activities outside Russia



1	Bolivia	**2**	UK and the Netherlands	**3**	Algeria	**4**	Libya
	Azero licence block		Winchelsea and Sillimanite fields		El-Assel licence block		Licence blocks 19 and 64
	Ipati and Aquiro licence blocks		Wingate field				
5	Iraq	**6**	Uzbekistan	**7**	Vietnam		
	Badra field, Garmian block (Kurdistan)		Djel field		Offshore Blocks 112 (incl. extension), and 129–132		
	Shakal block (Kurdistan)		Shakhpakhty field		Moc Tinh and Hai Thach fields in the South China Sea		

Hydrocarbon prospecting and exploration

Oil production

Gas production

Note. As at 31 December 2018.

Key figures of Gazprom's hydrocarbon geological exploration abroad

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Exploration drilling, thousand m	17.6	28.3	9.7	18.4	21.9
Exploration wells, completed construction, units	5	4	8	8	10
including productive wells, units	4	2	7	5	9
2D seismic survey, thousand linear km	–	–	1.5	–	–
3D seismic survey, thousand sq. km	1.7	1.4	0.8	1.2	1.1

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				
	2014	2015	2016	2017	2018
Production fields, units	47	53	47	48	47
Gas production wells, units	235	168	172	163	243
including those in operation	96	74	81	81	126
Oil production wells, units	904	963	931	946	887
including those in operation	623	661	681	737	734

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

Gazprom Group oil and gas exploration drilling abroad

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Production wells, completed construction, units					
natural gas	3	–	2	–	4
crude oil	46	35	38	51	46
Total	**49**	**35**	**40**	**51**	**50**
Production wells drilled, thousand m					
natural gas	7.9	–	1.6	2.1	5.0
crude oil	86.0	75.0	40.9	67.5	61.5
Total	**93.9**	**75.0**	**42.5**	**69.6**	**66.5**

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

Project	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural and associated gas, bcm					
Badra	–	7	14	208	777
Wingate	622	877	686	436	300
Moc Tinh and Hai Thach	1,786	1,884	2,142	2,099	2,234
Shakhpakthy	334	357	363	312	271
Incahuasi	–	–	740	2,519	2,555
Gas condensate, mm tonnes					
Wingate	4	5	3	3	2
Moc Tinh and Hai Thach	366	436	573	469	397
Incahuasi	–	–	75	270	280
Oil, mm tonnes					
Badra	309	1,383	2,575	3,787	3,980
Garmian block	–	219	193	370	935

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

International exploration and production projects of Gazprom Group at the prospecting and exploration stage

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 2018)
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%. 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 RSH and RSHN project is at the exploration stage pending the submission of a statement on the commercial value of the fields. Data obtained during seismic surveys is being re-processed and re-interpreted, development plans prepared for the RSH and RSHN fields are being updated. A notice on the ZER and ZERN fields being returned to the Algerian Government has been submitted to ALNAFT.

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 2018)
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. Partners: Bolivian state oil and gas company YPFB, 55%; Total E&P Bolivia S.A. (operator), 22.5%.	Geological survey was completed, with logging data re-processed and re-interpreted. Partial force-majeure was confirmed by YPFB. The consortium started the process of obtaining approval for land identification of the portion of land within the contract area (the Iñao National Park) expected to be returned. Preparations are underway to drill the Ñancahuazú-X1 well.

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 2018)
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. Partners: Wintershall Noordzee B.V.* (operator), 49.5%; XTO UK, 15.5%; and Gas Union, 15.0%.	Exploration wells 44/23g-14 (Winchelsea 1) and 44/23g-15 (Winchelsea 2) have been completed. Discovery of an eponymous field has been made. Possibility to tap into the western block of the field (under the P1902 licence) is being assessed, and the potential synergy of using infrastructure of other projects is being analysed.
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. 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. Licence participants signed a field unitisation agreement determining the Group's share at 19.9%. Besides, an intergovernmental agreement was signed on the development of the Sillimanite field and its taxation. Design documents for the field development and documents for drilling are being prepared; construction of the D12-B platform and a pipeline and modification of the receiving unit of the D15-A platform are underway.
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. 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 2018, Gazprom Group's share in the company was 50%.

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 2018)
Hydrocarbon prospecting and exploration at Block 112 (expanded) on the Vietnamese continental shelf	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. Partners: Petrovietnam, Petrovietnam Exploration & Production Corporation Operator: Vietgazprom joint operating company.	The minimum obligations under three exploration phases at Block 112 were fully met in previous years, and the Bao Wang (2007) and Bao Den (2009) gas and condensate fields were discovered. The Bao Wang field appraisal and development concept report was prepared. Addendum to the updated feasibility study for the integrated Power Plant — Bao Wang field project was prepared. Appraisal of other prospects identified within Block 112 (expanded) is underway.
Hydrocarbon prospecting and exploration at Blocks 129–132 on the Vietnamese continental shelf	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. Partners: Petrovietnam, Petrovietnam Exploration & Production Corporation Operator: Vietgazprom joint operating company.	Two deep-water prospecting wells completed at Blocks 130 and 131 in 2015–2016. The Than Bien field was discovered by exploration drilling in 2015. Geological and logging data was re-processed and re-interpreted.

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 2018)
Hydrocarbon exploration and development at the Shakal block in Kurdistan.	2012	■	Implemented on the PSA terms. Gazprom Group finances 100% of the project costs. At the development stage, the Group will finance 80% of the project costs.	Overhaul, acidising and testing of the Shakal-1 well completed; geological model of the block updated.

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 2018)
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.	2013	–	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. The project involves OOO TsentrCaspNeftegaz (established by PJSC LUKOIL and PJSC Gazprom on parity terms) from the Russian side, and JSC National Company KazMunayGas from the Kazakhstan side.	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. Data obtained from seismic surveys is being re-processed and re-interpreted.

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 2018)
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 Partner: Libyan National Oil Corporation. Gazprom Group finances 100% of the project costs at the exploration stage.	Force majeure continuing under relevant PSAs.

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 2018)
Development of the Djel field (the Shakhpakhty licence block).	2006	■	Implemented on the PSA terms. Partner: AO Uzbekneftegaz.	The Djel field at the Shakhpakhty licence block was discovered by exploration carried out as part of the Company's licence obligations. A PSA on the Djel gas condensate field was signed in October 2018.

International exploration and production projects of Gazprom Group at the development stage

Bolivia

Project name, purpose, and description	Project start	Exploration results	The Group's operator role	Partners' stakes in the project	Year of launch	Annual design capacity	Project status (as at 31 December 2018)
Hydrocarbon exploration and development at the Ipati and Aquio licence blocks under a Farmout Agreement According to the Bolivian laws, all hydrocarbons that will be produced belong to YPFB, and project participants will get due remuneration. Operator: Total EP Bolivie S.A.	2010	The Incahuasi field at the Ipati and Aquio blocks was discovered in 2011.	–	Gazprom Group, 20%; Total EP Bolivie S.A., 50%; TecPetrol, 20%; YPFB Chako, 10%	2016	6.8 bcm (Phase 1 of CGTU)	Construction of Phase 1 of the Incahuasi field was 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. The CGTU's throughout capacity was expanded to 7.7 mmcm of gas per day. Work is in progress to construct the ICS-5 well (4,366 m has been drilled), connect the previously drilled ICS-3 and increase the CGTU's throughout capacity to 9.0 mmcm of marketable gas per day. Work is also in progress to ensure the connection to the Santa Cruz–Yakuiba (GSCY) trunk pipeline and expand condensate storage capacity.

UK and the Netherlands

Project name, purpose, and description	Project start	Exploration results	The Group's operator role	Partners' stakes in the project	Year of launch	Annual design capacity	Project status (as at 31 December 2018)
Construction, production, and follow-up exploration at the UK's offshore Wingate gas field (licence blocks P1239 and P1733) under a Joint Operation Agreement Operator: Wintershall Noordzee B.V.*	2008	Gazprom Group joined the project after the field had been discovered and was being prepared for development.	–	Gazprom Group, 20%; Wintershall Noordzee B.V., 49.5%; XTO UK, 15.5%; Gas Union, 15.0%	2011	0.3 bcm	Six production wells drilled, development of the field in the first phase is carried out from three production wells.

* As at 31 December 2018, Gazprom Group's share in the company was 50%.

Vietnam

Project name, purpose, and description	Project start	Exploration results	The Group's operator role	Partners' stakes in the project	Year of launch	Annual design capacity	Project status (as at 31 December 2018)
Hydrocarbon production at the Moc Tinh and Hai Thach fields in the Vietmamese waters of the South China Sea on the PSA terms. Operator: Bien Dong operating company.	2012	Gazprom Group joined the project after the fields had been discovered and were being prepared for development.	–	Gazprom Group, 49%; Petrovietnam, 51%	2013	2.0 bcm of natural gas per year	Production at the fields was ramped up to design capacity in 2016. Commercial production of gas and gas condensate continues, production is kept at 2 bcm per year, in line with the development plans.

Iraq

Project name, purpose, and description	Project start	Exploration results	The Group's operator role	Partners' stakes in the project	Year of launch	Annual design capacity	Project status (as at 31 December 2018)
Development of the Badrah field under a Service Contract. Operator: Gazprom Neft Badra B.V. The project is expected to span 20 years, with potential extension for another five years.	2010	Gazprom Group joined the project after the field had been discovered and was being prepared for development.	■	Gazprom Group, 30%; KOGAS, 22.5%; PETRONAS, 15%; TPAO, 7.5%; Iraqi Government (represented by Oil Exploration Company), 25%.	2014	5.7 mm tonnes	The second train for gas treatment was commissioned. The production well drilling programme was completed.
Hydrocarbon production at the Garmian block on the PSA terms. Operator: Gazprom Neft Middle East B.V.	2012	The Sarkala field has been discovered within the boundaries of the block.	■	Gazprom Group, 40%; WesternZagros, 40%; Kurdistan Regional Government, 20%	2015	1.26 mm tonnes	The Sarkala-2 well was commissioned; expansion of the oil treatment facilities to 35,000 bpd was completed; drilling of the Sarkala-3 well was started.

Uzbekistan

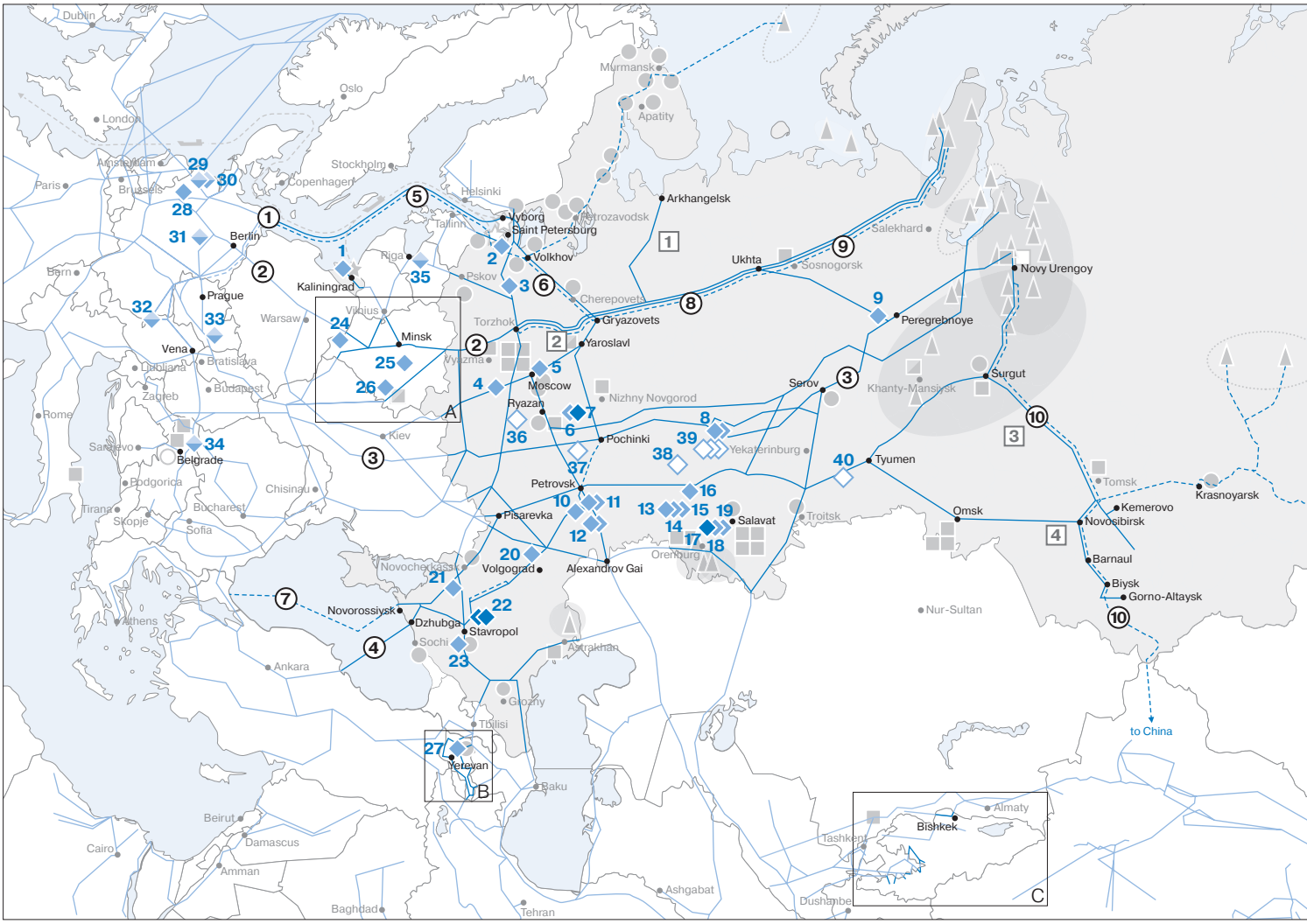
Project name, purpose, and description	Project start	Exploration results	The Group's operator role	Partners' stakes in the project	Year of launch	Annual design capacity	Project status (as at 31 December 2018)
Refurbishment of the infrastructure at the Shakhpakhty field in the Ustyurt region of the Republic of Uzbekistan, and follow-up development of remaining gas reserves on the PSA terms are underway. The costs are compensated by natural gas supplies. Gas remaining after costs are compensated is distributed pro rata between the parties to the PSA. Operator: OOO Zarubezhneftegaz — GPD Central Asia (established by Gas Project Development Central Asia AG and AO Gazprom Zarubezhneftegaz on a parity basis)	2004	x	■	A consortium representing Gazprom Group and consisting of its subsidiary AO Gazprom Zarubezhneftegaz (5%) and joint venture Gas Project Development Central Asia AG (95%), 50%; AO Uzbekneftegaz, 50%.	x	x	Gas production in progress; overhauls of wells aiming at their gradual transformation from being inactive to producing are underway. A supplementary agreement to the PSA was signed in 2018 to extend its validity till 2024.

International prospecting and exploration projects of affiliates 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 December 2007 as a result of the asset swap agreement with BASF AG (from 2008 — BASF SE).	The company operates six fields on oil concessions C96 and C97 in Libya. In 2018, oil production was carried out at the rate of 65 thousand barrels per day in accordance with an interim agreement between Wintershall AG and Libyan National Oil Corporation. In 2018, the company produced 2,148 thousand tonnes of oil (1,531 thousand tonnes in 2017).
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 SE.	The company owns varied level stakes in 49 licences in the British, Danish, and Dutch sectors of the North Sea. A number of oil and gas fields are discovered within these licence areas. The key producing assets include K18-Golf, Wingate, Q1-B, and Q1-D gas fields. In 2018, the Ravn oil field in the Danish North Sea, which had been put into commercial development in 2017, reached its design capacity. In 2018, the company produced a total of 712 mmcm of gas and 51.5 thousand tonnes of oil.

Transportation and Underground Storage

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

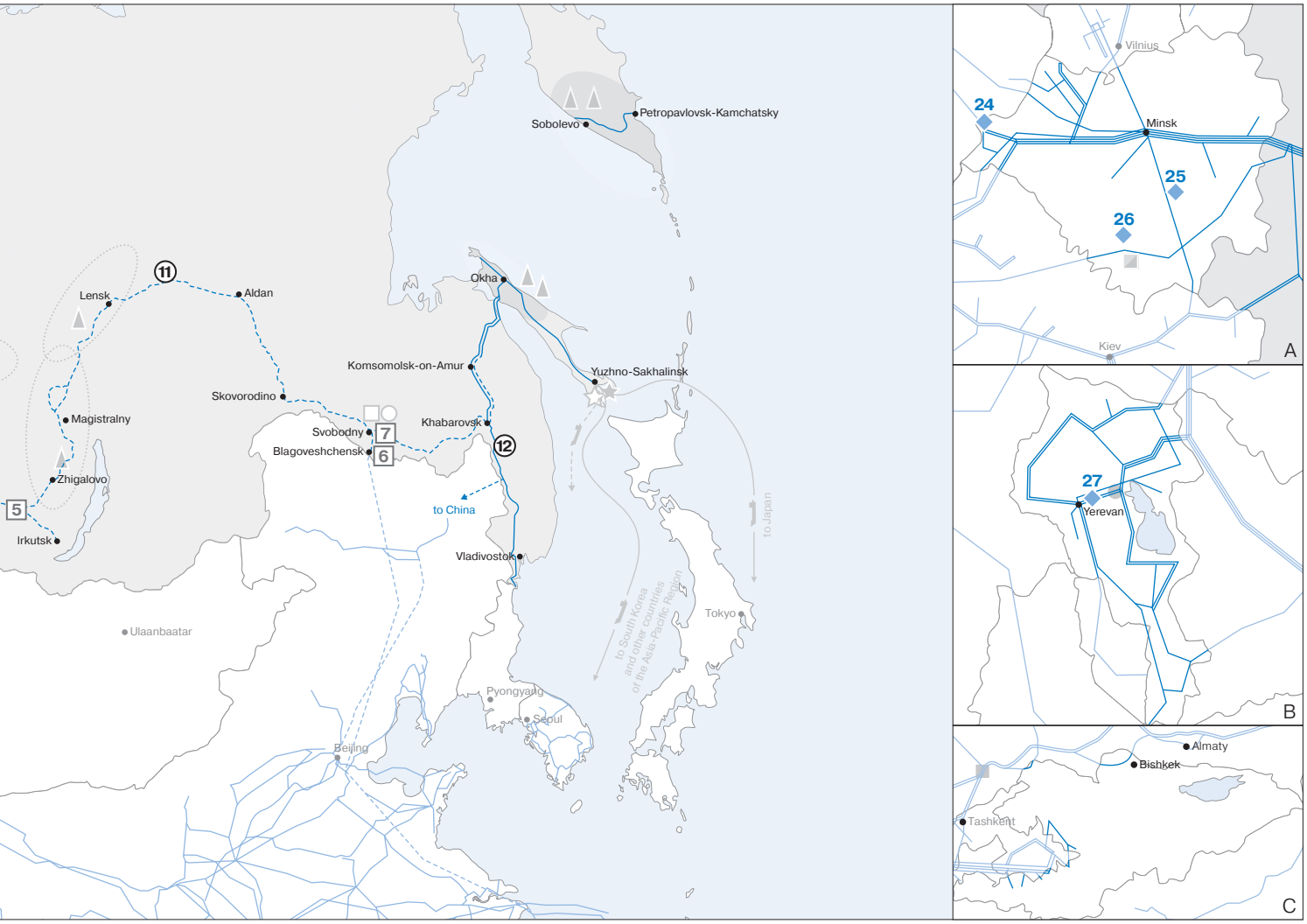
Gas transportation projects

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. TurkStream gas pipeline
8. Ukhta — Torzhok 2 and Ukhta — Torzhok 3 gas pipelines
9. Bovanenkovo — Ukhta 2 and Bovanenkovo — Ukhta 3 gas pipelines
10. Power of Siberia 2 gas pipeline
11. Power of Siberia gas pipeline
12. Sakhalin — Khabarovsk — Vladivostok gas pipeline

Exploration areas for UGSFs

1. Arkhangelskaya
2. Skalinskaya
3. Tiginskaya
4. Utyanskaya
5. Angarskaya
6. Blagoveshchenskaya
7. Belogorskaya

Note. As at 31 December 2018.



UGSFs of Gazprom Group in operation

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

Existing UGSFs co-invested by Gazprom Group

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

UGSFs under construction and projected UGSFs

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

Transportation

Upgrade and overhaul of gas transportation system in Russia

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Gas trunk pipelines and pipeline branches put into operation*, km	1,277	933	771	640	529
Reconstruction of trunk pipelines, km	200	169	211	100	362
Capital repairs, km	1,581	1,441	823	810	771
Number of technical faults per 1 thousand km	0.03	0.05	0.03	0.02	0.05

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

Diagnostics of the GTS in Russia, thousand km

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Inline inspections	23.5	19.9	23.9	22.1	25.1
Corrosion inspections	18.4	17.9	17.3	18.0	14.9

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

	As at 31 December				
	2014	2015	2016	2017	2018
Length of gas trunk pipelines and pipeline branches (in single-lane measuring), thousand km	170.7	171.2	171.8	172.1	172.6
Linear compressor stations, units	250	250	253	254	254
Gas pumping units (GPUs), units	3,825	3,829	3,852	3,844	3,812
GPUs installed capacity, thousand MW	46.1	46.2	46.7	46.7	47.1

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

	As at 31 December				
	2014	2015	2016	2017	2018
Up to 10 years	20.6	19.9	17.3	17.3	16.7
from 11 to 20 years	20.7	19.1	15.8	16.2	15.7
from 21 to 30 years	50.6	47.3	40.9	40.9	34.8
from 31 to 40 years	46.6	49.2	55.2	55.2	59.1
from 41 to 50 years	20.6	23.3	24.9	24.8	26.3
Over 50 years	11.6	12.4	17.7	17.7	20.0
Total	**170.7**	**171.2**	**171.8**	**172.1**	**172.6**

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

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Injections into GTS					
Gas inflow into GTS, including:	588.7	574.2	573.8	623.1	638.7
Central Asian gas	26.4	20.0	18.0	20.8	17.7
Azerbaijanian gas	0.2	–	–	–	
Gas withdrawn from UGSFs in Russia and Latvia	32.7	24.3	44.9	45.7	52.0
Decrease in the amount of gas within GTS	6.1	4.1	3.9	3.3	2.4
Total	**627.5**	**602.6**	**622.6**	**672.1**	**693.1**
Distribution from GTS					
Supply inside Russia, including:	356.5	342.3	351.7	354.0	364.7
Central Asian gas	0.0	0.0	0.0	0.0	0.0
Supply outside Russia, including:	196.2	196.8	209.4	232.4	234.8
Central Asian gas	26.4	20.0	18.0	20.7	17.7
Azerbaijanian gas	0.2	–	–	–	–
Gas pumped into UGSFs in Russia	35.1	27.1	24.7	44.2	49.4
Technical needs of the gas transportation system and UGSFs	33.2	32.3	32.3	37.8	40.6
Increase in the amount of gas within GTS	6.5	4.1	4.5	3.7	3.6
Total	**627.5**	**602.6**	**622.6**	**672.1**	**693.1**

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

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Nord Stream pipeline (through Portovaya CS)	35.6	39.1	43.8	51.0	58.7
Blue Stream pipeline (through Beregovaya CS)	14.4	15.7	13.1	15.9	13.3

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

	As at and for the year ended 31 December				
	2014	2015	2016	2017	2018
Belarus (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, bcm	65.2	64.2	60.3	61.2	62.6
including transit	45.1	45.4	41.7	42.2	42.3
Armenia (ZAO Gazprom Armenia)					
Length, thousand km	1.7	1.6	1.6	1.7	1.7
Compressor stations, units	–	–	–	–	–
Gas inflow to gas transportation system, bcm	2.5	2.3	2.2	2.4	2.5
including transit	–	–	–	–	–
Kyrgyzstan (OsOO Gazprom Kyrgyzstan)					
Length, thousand km	0.7	0.7	0.7	0.8	0.8
Compressor stations, units	1	1	1	1	1
Gas inflow to gas transportation system, bcm	4.3	4.6	4.5	6.6	6.3
including transit	4.0	4.4	4.2	6.4	6.0

Gazprom Group's major gas transportation projects

Project	Purpose	Project highlights			Project period	Project status (as at 31 December 2018)
		Length	Number / total capacity of compressor stations	Annual capacity		
Gryazovets — 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	2017–2019	Construction and installation operations are underway. In 2018, a 63.6 km section was commissioned.
Nord Stream 2	Gas supplies to consumers in Western and Central Europe	C. 1,227 km (to be adjusted after obtaining a permit for construction in Denmark)	–	55 bcm	Q4 2019	The Company obtained full sets of permits for the gas pipeline construction in Russia, Germany, Finland, and Sweden. The approval process in Denmark is underway. Detailed design of the offshore section has been completed. A total of 423 km of pipe was installed. The construction of the sites to launch treatment and diagnostic facilities is continued at the onshore sections in Russia and Germany. Pipe and anode supplies have been completed. Coating and coated pipe distribution across logistics hubs are underway. The construction of a microtunnel has been completed.
Turkish Stream	Supplies of Russian gas to Turkey across the Black Sea and further on to Turkey's borders with neighbouring countries	Two pipeline strings 937 km and 939 km long (offshore section)	–	31.5 bcm	December 2019	Installation of the deep-water offshore section of the pipeline was completed. Construction of landfall facilities in Russia was completed, pre-commissioning operations are underway. Landfall facilities and a receiving terminal are under construction in Turkey. In May 2018, PJSC Gazprom and the Turkish Government signed a Protocol on the onshore transit section of the transit string of the TurkStream gas pipeline, and PJSC Gazprom and Botas signed an Agreement detailing the terms and conditions of the section construction. In November 2018, TurkAkim Gaz Tasima A.S. joint project company was established to construct the onshore transit section.
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.	

Project	Purpose	Project highlights: Length	Project highlights: Number / total capacity of compressor stations	Project highlights: Annual capacity	Project period	Project status (as at 31 December 2018)
Bovanenkovo — Ukhta 2 gas pipeline	Gas pipeline system to carry gas from Yamal fields	1,108 km	9 compressor stations / 830 MW	57.5 bcm	2014–2021	The linear section of the second string and two compressor stations are in operation. Construction of compressor capacity continued. Four compressor plants with a combined capacity of 371 MW were commissioned in 2018.
Ukhta — Torzhok 2 gas pipeline	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	2014–2020	Construction of the linear section has been completed, the construction of a compressor station is underway.
Power of Siberia	Gas supplies from the Chayandinskoye oil and gas condensate field and the Kovyktinskoye gas condensate field to the gas infrastructure of the Far Eastern Federal District, and gas exports to China market	2,960 km, including 2,156 km of the Chayandinskoye field — China border	9 compressor stations (1,234 MW), including 8 compressor stations (1,186 MW) between Chayandinskoye field and China border	Up to 48 bcm	Phased commissioning starting from December 2019 in line with the obligations under the agreement for Russian gas supplies to China via the eastern route.	For the pipeline section between the Chayandinskoye oil and gas condensate field and the Chinese border, design documents (have successfully passed official reviews) and detailed design documents have been developed in full to build facilities required to start gas supplies to China (the linear section of the trunk gas pipeline and the Atamanskaya compressor station); contractors have been selected to supply core process equipment for the linear section of the trunk gas pipeline and the compressor station. A total 2,140 km of the trunk pipeline's linear section have been completed in full since the construction started. A rotation camp is being completed in Lensk, along with line pipe operation centres of the trunk gas pipeline, a gas metering station, and the Atamanskaya compressor station, while the underwater crossing of the Amur River has been completed.
Power of Siberia 2	Gas supplies from Western Siberia to China; diversification of gas exports	2,622 km (to be adjusted based on design stage results)	12 compressor stations (to be adjusted based on design stage results)	30 bcm	PJSC Gazprom and CNPC will 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 northwestern Russia and the Nord Stream 2 gas pipeline	870 km	8 compressor stations / 1,500 MW	84 bcm to achieve full capacity, including up to 55 bcm of gas supplies to the Nord Stream 2 gas pipeline	Staged commissioning starting from December 2019	Construction of the linear section of the trunk gas pipeline and two compressor stations (Pikalevskaya CS and Slavyanskaya CS) is underway.

Project	Purpose	Project highlights				Project status (as at 31 December 2018)
		Length	Number / total capacity of compressor stations	Annual capacity	Project period	
Sakhalin — Khabarovsk — Vladivostok	Additional gas supplies to consumers in the Primorye and Khabarovsk Territories, as well as export supplies	C. 353 km	7 compressor stations / 432 MW	C. 22 bcm to achieve full capacity (to be adjusted based on design stage results)	Phased commissioning starting from 2021	Design documents have been approved for Phase 1 (construction of the 505 km — 874 km linear section of the pipeline). Preparations are underway. Design and survey are in progress for other phases.
Bovanenkovo — Ukhta 3	Gas pipeline system intended to carry gas from the Yamal fields	C. 1,100 km (to be adjusted based on design stage results)	10 compressor stations / 1,386 MW (to be adjusted based on design stage results)	C. 60 bcm	Phased commissioning starting from 2023	Design and survey are in progress.
Ukhta — Torzhok 3	Additional gas supplies to northwestern Russia to expand the gas infrastructure to domestic consumers and support export supplies	C. 970 km (to be adjusted based on design stage results)	6 compressor plants / 652 MW (to be adjusted based on design stage results)	C. 45 bcm	Phased commissioning starting from 2023	Design and survey are in progress.

Underground Gas Storage

Gazprom's UGSFs in Russia

	As at 31 December				
	2014	2015	2016	2017	2018
Number of UGSFs, units	26	26	26	26	27
Total active capacity, bcm	71.10	73.56	73.62	74.93	75.01
Number of productive wells at UGSFs, units	2,685	2,686	2,681	2,694	2,705

Gas storage in Russia

	Injection season				
	2014	2015	2016	2017	2018
Gas injection into UGSFs, mmcm					
Q1	189.4	–	–	23.2	99.8
Q2	14,963.8	10,158.4	8,468.8	17,443.9	23,418.6
Q3	16,790.1	14,498.1	14,209.2	24,434.7	23,616.1
Q4	3,191.2	2,425.3	1,973.1	2,275.4	2,349.9
Total for the season	**35,134.5**	**27,081.8**	**24,651.1**	**44,177.2**	**49,484.4**
	Withdrawal season				
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Gas withdrawal from UGSFs, mmcm					
Q3	41.9	92.8	114.2	164.4	99.8
Q4	8,262.5	5,172.1	18,834.6	17,117.2	20,415.6
Q1 of the next year	16,353.2	24,653.1	26,175.1	31,036.3	23,702.9
Q2 of the next year	2,653.2	1,234.2	2,022.8	435.6	505.7
Total for the season	**27,310.8**	**31,152.2**	**47,146.7**	**48,753.5**	**44,724.0**
Maximum potential daily output during gas withdrawal season, mmcm per day	770.4	789.9	801.3	805.3	812.5

Main projects of development of underground storage of gas in Russia

			Project parameters	
Regions of the Russian Federation	UGSF	UGSF type	Aggregate active capacity, bcm	Maximum potential daily capacity, mmcm
Volgograd Region	Volgogradskoye	Deposits of salt rock	0.8	70.0
Kaliningrad Region	Kaliningradskoe	Deposits of salt rock	0.8	12.0
Ryazan Region	Kasimovskoe	Water bearing structures	11.0	170.0
Republic of Udmurtia	Udmurtsky reserve complex	Water bearing structures	2.8	45.0
Tyumen Region	Punginskoe	Depleted field	3.5	43.0

UGSFs with Gazprom Group participation abroad

Country	UGSF	Groups's participation	UGSF capacities as at 31 December 2018						
			Aggregate active capacity, bcm		Daily capacity employed by Gazprom Group, mmcm	CS	GPU	Installed capacity of GPUs, MW	Exploitation wells / caverns
			Total	Including employed by Gazprom Group					
Austria	Haidach	Co-investor (55.5%)	2.8	2.4 (of which OOO Gazprom Export — 1.9)	23.5 (of which OOO Gazprom Export — 18.9)	1	4	62	17
Serbia	Banatski Dvor	Co-investor (51%)	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	Co-investor (83.3%)	0.7	0.3 (capacity not employed by Gazprom Export)	10.2 (capacity not employed by Gazprom Export)	1	3	38	9
	Katharina	Co-investor (50%)	0.4	0.3 (of which OOO Gazprom Export — 0.3)	23.2 (of which OOO Gazprom Export — 23.2)	1	3	37	8
	Rehden	Ownership	4.7	4.7 (of which OOO Gazprom Export — 0.5)	50.5 (of which OOO Gazprom Export — 10.0)	1	7	90	16
	Etzel	Co-investor (33% share in caverns, 16% share in pipelines)	1.0	0.3 (capacity not employed by Gazprom Export)	7.0 (capacity not employed by Gazprom Export)	1	3	24	9
Czech Republic	Damborice	Co-investor (50%)	0.3	0.3 (of which OOO Gazprom Export — 0.3)	5.0 (of which OOO Gazprom Export — 4.5)	1	3	10.5	14
Belarus	Pribugskoye	Ownership	0.5	0.5	8.0	1	5	7.1	40
	Osipovichskoye	Ownership	0.4	0.4	6.0	1	6	4.4	42
	Mozyrskoye	Ownership	0.3	0.3	20.0	1	2	4.6	15
Latvia	Inchukalnskoye	Co-investor (34%)	2.3	–	–	1	6	33.1	93
Armenia	Abovyanskoye	Ownership	0.1	0.1	6.0	1	9	9.9	21

European UGSF capacity leased by OOO Gazprom export by the start of the 2017/2018 withdrawal season

Country	UGSF	Aggregate active capacity employed by Gazprom Group, bcm	Daily capacity employed by Gazprom Group, mmcm
Netherlands	UGS Bergermeer*	1.8	26.1
Europe	Not detailed in the contract	0.4	34.4
Slovakia	Not detailed in the contract	0.3	3.1
Hungary	Zana	0.3	3.0

* When constructing the UGSF, PJSC Gazprom provided the necessary volume of cushion gas to get access to its capacities.

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

	Injection season, Q1–Q4				
	2014	2015	2016	2017	2018
Gas injection into UGSFs abroad					
FSU countries					
Armenia	68.9	40.6	37.2	71.3	32.4
Belarus	962.3	916.7	857.1	948.8	1,059.4
Latvia	1,907.1	1,550.0	1,250.0	254.8	136.0
Total injection (FSU countries)	**2,938.3**	**2,507.3**	**2,144.3**	**1,274.9**	**1,227.8**
Far abroad countries*					
Austria	1,303.5	709.8	683.9	2,222.5	1,527.5
United Kingdom	224.0	224.4	–	–	–
Hungary	699.9	–	–	898.4	290.2
Germany	886.1	797.2	654.1	1,840.0	2,072.5
The Netherlands	1,313.1	1,176.9	1,195.0	1,782.0	1,558.1
Serbia	118.4	–	–	12.6	51.1
Slovakia	–	–	–	738.0	283.6
Czech Republic	–	–	105.3	190.8	393.8
Short-term contracts for storage in European UGSFs	–	–	–	909.9	412.9
Total injection (far abroad countries)	**4,545.0**	**2,908.3**	**2,638.3**	**8,594.2**	**6,589.7**
Total for the season	**7,483.3**	**5,415.6**	**4,782.6**	**9,869.1**	**7,817.5**

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

	Withdrawal season, Q3-Q4 and Q1-Q2 of the next year				
	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Gas withdrawal* from UGSFs abroad					
FSU countries					
Armenia	23.0	10.8	30.6	47.8	56.5
Belarus	850.0	815.2	879.2	1,100.1	916.2
Latvia	1,541.7	1,257.1	1,087.3	150.8	89.7
Total withdrawal (FSU countries)	**2,414.7**	**2,083.1**	**1,997.1**	**1,298.7**	**1,062.4**
Far abroad countries**					
Austria	835.8	820.0	1,480.5	2,054.0	474.0
United Kingdom	224.0	224.4	–	–	–
Hungary	699.9	–	–	898.4	267.7
Germany	753.4	978.1	936.9	2,117.5	1,008.0
The Netherlands	405.4	1,129.8	1,981.3	1,532.8	368.6
Serbia	0.5	12.0	0.5	44.5	13.7
Slovakia	–	–	–	673.0	201.7
Czech Republic	–	–	104.5	183.2	172.4
Short-term contracts for storage in European UGSFs	–	–	–	974.9	–
Total withdrawal (far abroad countries)	**2,919.0**	**3,164.3**	**4,503.7**	**8,478.3**	**2,506.1**
Total for the season	**5,333.7**	**5,247.4**	**6,500.8**	**9,777.0**	**3,568.5**

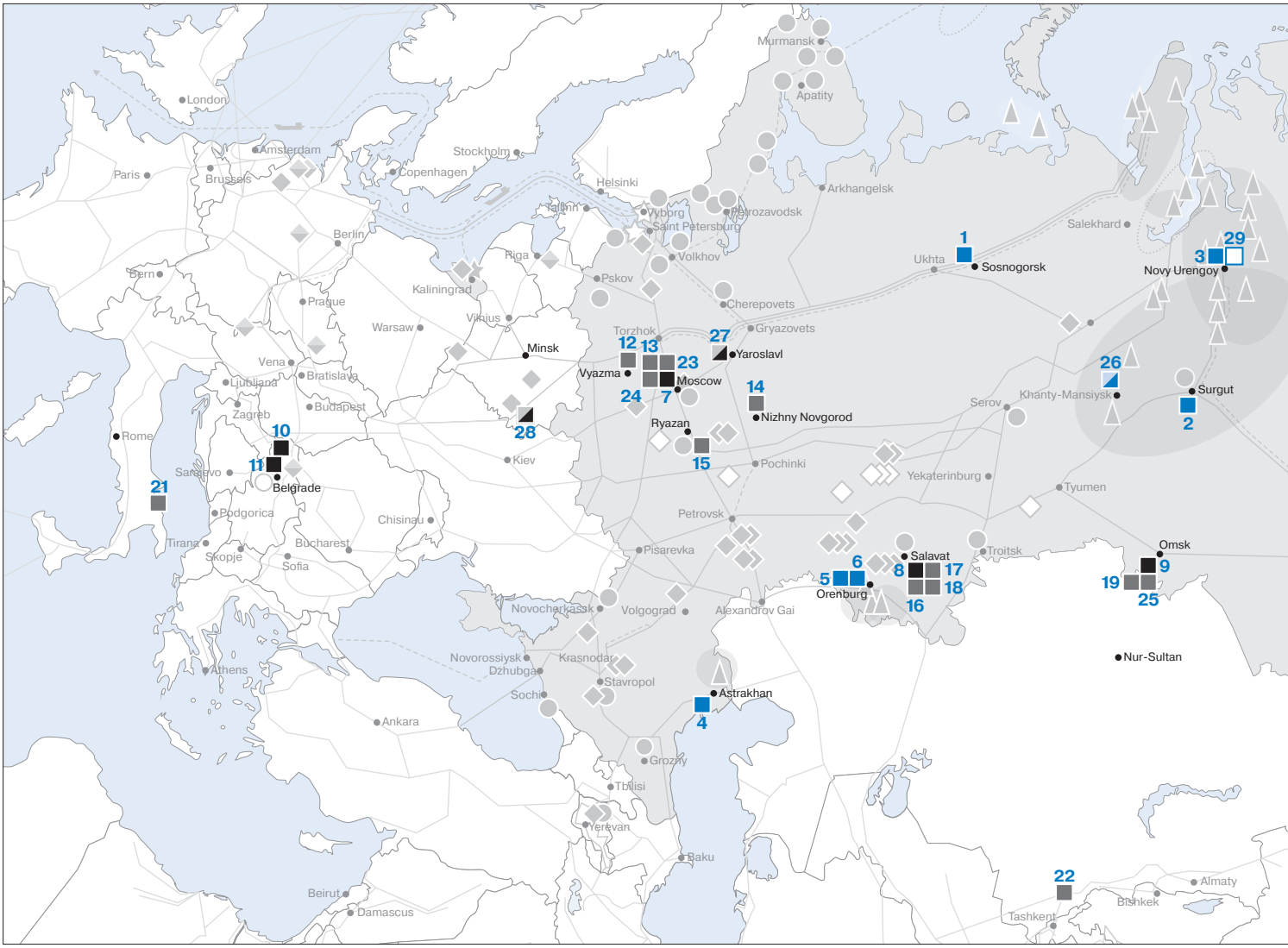
* Excluding volumes sold in UGSFs.
** Gas withdrawal of Gazprom group for contracts of OOO Gazprom Export.

Prospective UGSFs with Gazprom Group's participation abroad

Country	UGSF	Type of construction	Type of UGSF	Project start	Gazprom Group participation	Project parameters		Commis-sioning	Attainment of projected capacity	Project status (as at 31 December 2018)
						Aggregate active capacity, dcm	Daily capacity, mmcm			
Germany	Jemgum	New construction	Deposits of salt rock	2009	Co-investor (83.3%)	0.9	23.2	2014	2020	Operational exploitation and construction of new facilities
	Katharina	New construction	Deposits of salt rock	2011	Co-investor (50%)	0.6	25.8	2011	2025	Operational exploitation and construction of new facilities
Czech Republic	Damborice	New construction	Depleted field	2014	Co-investor (50%)	0.5	7.6	2016	2021	Operational exploitation and expansion

Hydrocarbon Processing and Production of Refined Products

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

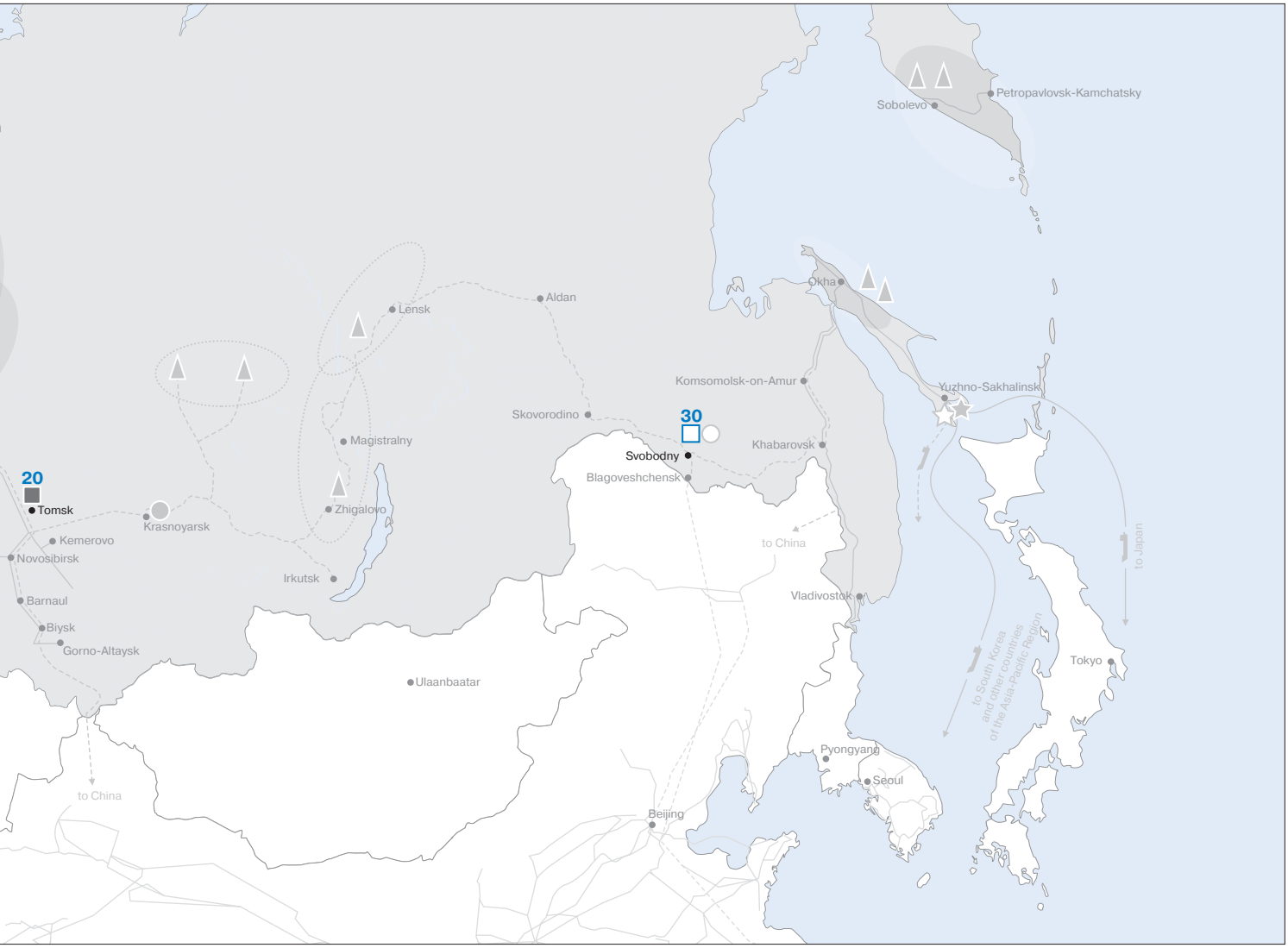


Existing refining/processing and petrochemical assets	
■	GPPs
■	Refineries
■	Gas chemical and petrochemical plants
◪	Gazprom Group's access to the GPP's capacity
◪	Gazprom Group's access to the refinery's capacity
□	**Refining/processing and petrochemical projects**

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
18	Acrylic acid and butyl acrylate plant
19	Omsk Lubricants Plant

Note. As at 31 December 2018.



20	Methanol plant
21	Oil and lubricant blending plant in Bari (Italy)
22	Bitumen plant in Shymkent (Kazakhstan)
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**

** Up to 50% volume of oil supplied to the refinery.

Refining/processing and petrochemical projects

29	Novourengoysky 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				
	2014	2015	2016	2017	2018
Natural and associated petroleum gas, bcm					
PJSC Gazprom and its major subsidiaries*	30.00	30.64	30.06	29.94	30.14
Gazprom neftekhim Salavat	0.45	0.44	0.49	0.43	0.47
Gazprom Neft	–	0.10	0.44	0.45	0.45
Total	**30.45**	**31.18**	**30.99**	**30.82**	**31.06**
Crude oil and gas condensate, mm tonnes					
PJSC Gazprom and its major subsidiaries* (unstable gas condensate, crude oil)	16.38	17.26	17.55	17.47	17.75
Gazprom Neft (crude oil, stable gas condensate)	43.48	43.07	41.89	40.11	42.91
including abroad	3.78	3.54	3.23	3.42	3.56
Gazprom neftekhim Salavat* (crude oil, stable gas condensate, fuel oil)	8.13	6.44	6.47	6.48	6.74
Total	**67.99**	**66.77**	**65.91**	**64.06**	**67.40**

* Taking into account the processing volumes of OOO Gazprom dobycha shelf Yuzhno-Sakhalinsk, OOO Sibmetakhim, OAO Tomskgazprom. Also taking into account the processing volumes of OOO Gazprom dobycha Irkutsk and OOO Servisneftegaz; the financial results of these entities are not included in Gazprom Group's IFRS consolidated financial statements due to insignificance.

Liquid hydrocarbon primary processing by key subsidiaries of PJSC Gazprom, mm tonnes
(excluding tolling arrangements)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Stable gas condensate (oil)	6.71	6.44	6.58	6.49	6.21

Processing of natural and associated gas supplied by non-Group companies at key subsidiaries of PJSC Gazprom, bcm
(under tolling arrangements)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural and associated gas	8.97	8.91	9.28	9.15	9.55

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

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Stable condensate and oil, thousand tonnes	6,410.8	7,448.1	8,216.4	8,688.7	8,234.3
Dry gas, bcm	23.3	24.2	24.0	23.6	23.6
Liquefied hydrocarbon gases, thousand tonnes	3,371.1	3,463.3	3,525.4	3,522.5	3,614.3
including abroad	130.4	137.9	115.0	103.0	97.0
Motor gasoline, thousand tonnes	12,067.9	12,395.2	12,270.0	11,705.6	12,044.9
including abroad	762.7	646.8	516.0	469.0	515.7
Diesel fuel, thousand tonnes	16,281.4	14,837.0	14,971.4	14,322.1	15,662.5
including abroad	1,493.8	1,470.1	1,363.0	1,299.0	1,571.2
Jet fuel, thousand tonnes	3,161.9	3,171.0	3,213.2	3,148.8	3,553.3
including abroad	108.5	107.9	122.0	155.0	190.4
Heating oil, thousand tonnes	9,318.0	8,371.4	7,787.2	6,585.9	6,880.6
including abroad	717.8	450.6	334.0	318.00	253.7
Marine fuel, thousand tonnes	4,139.0	4,172.2	3,177.2	3,367.3	2,952.0
Bitumen, thousand tonnes	1,949.2	1,883.8	2,112.0	2,662.1	3,122.3
including abroad	262.2	333.0	335.0	553.3	600.3
Oils, thousand tonnes	374.3	404.1	421.0	480.0	487.2
Sulphur, thousand tonnes	4,747.8	4,793.8	4,905.6	5,013.6	5,179.7
including abroad	15.6	17.8	22.0	24.0	23.0
Helium, mcm	3,997.5	4,969.7	5,054.1	5,102.2	5,088.9
Wide fraction of light hydrocarbons, thousand tonnes	1,553.4	1,728.2	1,807.0	1,349.7	1,465.5
Ethane fraction, thousand tonnes	373.8	377.4	377.9	363.0	347.3
Monomers, thousand tonnes	262.2	243.4	294.0	264.9	335.8
Polymers, thousand tonnes	161.8	157.9	179.1	154.3	185.6
Products of organic synthesis, thousand tonnes	83.5	90.4	89.6	44.7	71.3
Mineral fertilizers and raw materials for their production, thousand tonnes	778.2	775.9	953.0	913.2	836.4

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	Power engineering, metallurgy, ferospace industry, shipbuilding, mechanical engineering, medicine
Mineral fertilizers (carbamide, liquid ammonia, carbon dioxide, ammonium nitrate)	Agriculture
Monomers (ethylene, propylene, styrene)	Raw materials for the petrochemical industry
Products of organic synthesis (butyl, plasticizer DOF)	Raw materials for the petrochemical industry
Polymer-bitumen binder	Road construction
Polymers (polyethylene, polystyrene)	Manufacture of medical and household products, tapes, packaging and insulation materials
Ethane fraction	Raw materials for petrochemical industry
Coke	Manufacture of electrodes, anodes. Nonferrous and ferrous metallurgy
Wide fraction of light hydrocarbons	Raw materials for the petrochemical and gas chemical industry

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

	For the year ended 31 December				
	2014	2015	2016	2017	2018
PJSC Gazprom and its major subsidiaries*					
Stable gas condensate and oil, thousand tonnes	6,410.8	7,448.1	8,216.4	8,688.7	8,234.3
Dry gas, bcm	23.3	24.1	23.6	23.2	23.2
Liquefied hydrocarbon gases, thousand tonnes	2,441.7	2,487.4	2,578.4	2,828.5	2,814.3
Motor gasoline, thousand tonnes	2,519.7	2,532.7	2,497.9	2,234.5	2,150.7
Diesel fuel, thousand tonnes	1,585.7	1,362.1	1,435.6	1,496.8	1,373.4
Jet fuel, thousand tonnes	172.1	167.7	174.2	111.8	88.3
Heating oil, thousand tonnes	329.6	332.2	346.1	328.4	323.4
Sulphur, thousand tonnes	4,589.4	4,623.9	4,696.5	4,847.9	4,983.9
Helium, mcm	3,997.5	4,969.7	5,054.1	5,102.2	5,088.9
Wide fraction of light hydrocarbons, thousand tonnes	1,534.7	1,661.9	1,666.7	1,149.4	1,270.5
Ethane fraction, thousand tonnes	373.8	377.4	377.9	363.0	347.3
Gazprom Neft					
Dry gas, bcm	–	0.1	0.4	0.4	0.4
Liquefied hydrocarbon gases, thousand tonnes	929.4	975.9	947.0	694.0	800.0
Motor gasoline, thousand tonnes	8,844.8	9,081.2	9,176.0	8,555.0	8,863.8
Diesel fuel, thousand tonnes	12,147.7	11,874.5	12,023.0	11,325.0	12,323.6
Jet fuel, thousand tonnes	2,989.8	3,003.3	3,039.0	3,037.0	3,465.0
Heating oil, thousand tonnes	7,391.7	7,198.6	6,720.0	5,696.0	6,204.8
Marine fuel, thousand tonnes	4,076.3	3,666.9	2,410.0	2,671.0	2,576.4
Bitumen, thousand tonned	1,875.1	1,857.6	2,021.0	2,569.2	2,928.5
Oils, thousand tonnes	374.3	404.1	421.0	480.0	487.2
Sulphur, thousand tonnes	124.0	136.8	180.0	136.0	160.0
Wide fraction of light hydrocarbons, thousand tonnes	–	28.0	131.5	145.4	144.3
Gazprom neftekhim Salavat					
Motor gasoline, thousand tonnes	703.4	781.3	596.1	916.1	1,030.4
Diesel fuel, thousand tonnes	2,548.1	1,600.5	1,512.9	1,500.3	1,965.5
Heating oil, thousand tonnes	1,596.7	840.6	721.1	561.5	352.4
Sulphur, thousand tonnes	34.4	33.1	29.1	29.7	35.8
Marine fuel, thousand tonnes	62.7	505.3	767.2	696.3	375.6
Bitumen, thousand tonned	74.1	26.2	91.0	92.9	193.8
Monomars, thousand tonnes	262.2	243.4	294.0	264.9	335.8
Polimers, thousand tonnes	161.8	157.9	179.1	154.3	185.6
Products of organic synthesis, thousand tonnes	83.5	90.4	89.6	44.7	71.3
Mineral fertilizers and raw materials, thousand tonnes	778.2	775.9	953.0	913.2	836.4
Wide fraction of light hydrocarbons, thousand tonnes	18.7	38.3	8.8	54.9	50.7

* Taking into account the output of refined products of OOO Gazprom dobycha shelf Yuzhno-Sakhalinsk, OOO Sibmetakhim, OAO Tomskgazprom. Also taking into account the output of refined products of OOO Gazprom dobycha Irkutsk and OOO Servisneftegaz; the financial results of these entities are not included in Gazprom Group's IFRS consolidated financial statements due to insignificance.

Hydrocarbon processing. gas chemical and petrochemical plants

Name	Company	Location	Year of commissioning / establishment	Annual throughput / production capacity as at 31 December 2018	Product range	Key local investment projects underway as at 31 December 2018
Astrakhan GPP	OOO Gazprom pererabotka	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	The Renovation of Phase 1 and Phase 2 of the Astrakhan Gas Processing Plant into an Integrated Operation construction project 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 12.0 bcm of feedstock gas per year.
Orenburg GPP		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		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		Sosnogorsk, Republic of Komi	1946	3.0 bcm of natural gas; 2.5 mm tonnes of unstable condensate (stabilisation)	Dry marketable gas, liquefied gas, stable gas condensate, carbon black	–
Urengoy Condensate Pre-transportation Preparation Plant		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		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	Production of 2,800 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 2018	Product range	Key local investment projects underway as at 31 December 2018
Omsk Refinery	AO Gazprom neft — Omsk Refinery	Omsk	1955	22.23 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, hydrocracking catalysts	Projects to increase production depth: — Construction of an advanced oil refining facility comprising a hydrocracking and hydrodesulphirisation 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. — Construction of a combined primary refining unit (desalter and atmospheric/vacuum distillation unit) with an annual throughput of 8.4 mm tonnes of oil and 1.2 mm tonnes of stable gas condensate to replace obsolete units and ensure separate refining of oil and gas condensate to improve the low-temperature performance of jet fuels. — 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 anode grade coke. Other projects: — Construction of a diesel fuel hydrotreating 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. — Revamp of the 21-10/3M delayed coking unit with an annual capacity of 150 thousand tonnes. — Construction of a feed pre-treatment unit for needle coke production with an annual capacity of 38 thousand tonnes. — Upgrade of a catalytic reformer with an annual capacity of 759 thousand tonnes to refine secondary gasolines and eliminate high-sulphur low-octane components. — 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. — Construction of a catalytic cracking regeneration gas treatment unit to reduce SO2, NOX, and solid pollutants emissions from the 43-103 catalytic cracking unit.

Name	Company	Location	Year of commissioning / establishment	Annual throughput / production capacity as at 31 December 2018	Product range	Key local investment projects underway as at 31 December 2018
Moscow Refinery	AO Gazprom neft — Moscow Refinery	Moscow	1938	12.76 mm tonnes of oil	Motor gasoline, diesel fuel, jet fuel, fuel oil, oil bitumens, liquefied hydrocarbon gases, sulphur	Projects to increase production depth: — 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, — Construction of an advanced oil refining facility comprising a hydrocracking and a delayed coking unit with an annual capacity of 2.0 mm tonnes of vacuum gasoil and 2.4 mm tonnes of tar to decrease the output of fuel oil and increase the light product yield. Other projects: — Construction of a light product loading rack with a maximum daily capacity of 6.6 thousand tonnes. — Construction of an on-spot automatic loading station to load diesel fuel, marine fuel, and motor gasoline with a maximum daily capacity of 5.8 thousand tonnes. — Construction of a single-stage kerosene fraction hydrotreating unit with an annual capacity of 1.26 mm tonnes.
Oil refinery (Pancevo)	NIS	Pancevo (Serbia)	1968	4.6 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	Construction of an advanced oil refining facility with an annual capacity of 730 thousand tonnes to reduce the output of high-sulphur fuel oil, increase high-quality diesel fuel output, and launch petroleum coke production (project to increase production depth)
Oil refinery (Novi Sad)	NIS	Novi Sad (Serbia)	1968	Suspended	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	–
Moscow Lubricants Plant (MZSM)	AO Gazpromneft MZSM	Fryazino	2007	62 thousand tonnes of oils	Motor, transmission and industrial oils	Upgrades of production facilities
Omsk Lubricants Plant (OZSM)	OOO Gazprom neft — Lubricants	Omsk	2009	310 thousand tonnes of oils	Motor and industrial oils	Construction of a hydro-dewaxing unit to treat the hydrocracking residue and produce group II and III base oils
Ryazan Bituminous Materials Experimental Plant (RZBM)	OOO Gazpromneft — Ryazan bituminous materials	Ryazan	2011 (PMB binder unit)	120 thousand tonnes of PMB binder	PMB binder	–
Bitumen plant	TOO Gazpromneft-bitumen Kazakhstan	South Kazakhstan Region (Kazakhstan)	2011	280 thousand tonnes	Road and construction bitumen	–

Name	Company	Location	Year of commissioning / establishment	Annual throughput / production capacity as at 31 December 2018	Product range	Key local investment projects underway as at 31 December 2018
OOO Nova-Brit	OOO Nova-Brit	Vyazma, Smolensk Region	2005	80 thousand tonnes	Bituminous products used in road and airfield construction, housing and utilities, bridge construction and metro engineering: bitumen sealers and mastics, PMB joint tapes, bitumen emulsions and PMB binders, PMB emulsion mastics, road coverings, liquid rubber	–
ZAO SOVKHIMTEKH, OOO Poliefir OOO BCV-HIM	Rospolikhim Group of Companies	Nizhny Novgorod	2001	5 thousand tonnes 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	–
Refinery	OOO Gazprom neftekhim Salavat	Salavat	1955	10.0 mm tonnes of oil and stable gas condensate	Motor gasoline, pentane-isopentane fraction, isomerisation product, isopentane fraction, petroleum benzene, petroleum toluene, diesel fuel, fuel oil, feedstock for viscous road construction bitumens, technical sulphur, and petroleum bitumens	— Construction of a hydrogen unit with a pressure swing adsorption (PSA) facility with an hourly capacity of 25 thousand normal cubic metres of hydrogen, as well as PSA facilities with an hourly capacity of 42 thousand normal cubic metres of feedstock and an hourly capacity of at least 25 thousand normal cubic metres of hydrogen to increase the yields of Euro 5 compliant fuels — Construction of a catalytic cracking facility with an annual capacity of 1.095 mm tonnes of vacuum gasoil to process vacuum gasoil from ELOU-AVT-6 (desalter and atmospheric/vacuum distillation) and AVT-4 (atmospheric/vacuum distillation) units and hydrotreated vacuum gas oil from L-16-1 vacuum gas oil hydrotreater to produce the high-octane component for marketable gasolines — Construction of a propane-propylene processing unit with an annual capacity of 85 tonnes to produce propylene, a feedstock used for production of butyl alcohol and acrylic acid

Name	Company	Location	Year of commissioning / establishment	Annual throughput / production capacity as at 31 December 2018	Product range	Key local investment projects underway as at 31 December 2018
						— Construction of an elemental sulphur production unit with an annual capacity of 60 thousand tonnes to process additional volumes of hydrogen sulphide generated at the refinery's hydrotreaters following an increase in the throughput of high-sulphur feedstock — Upgrade of vacuum gas oil hydrotreaters with an annual capacity of 1.2 mm tonnes of feedstock and a pre-treatment unit for the catalytic reformer with an annual capacity of 1.0 mm tonnes of feedstock to increase the output of Euro 5 commercial gasolines.
Monomer plant	OOO Gazprom neftekhim Salavat	Salavat	1991	165.7 thousand tonnes of polyethylene; 45.9 thousand tonnes of polystyrene; 200.0 thousand tonnes of styrene; 230.0 thousand tonnes of ethylbenzene; 352.8 thousand tonnes of ethylene; 158.9 thousand tonnes of propylene; 152.3 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-isoprenecyclopentadiene fraction, butylene-butadiene fraction, heavy pyrolysis residue, styrene, etylbenzene, polystyrenes, high-density polyethylene, normal industrial butyl alcohol, industrial isobutyl alcohol, 2-ethylhexanol, DOP plasticiser	–
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	–
Acryl acid and butyl acrylate plant	OOO Akril Salavat	Salavat	2016	80 thousand tonnes of butyl acrylate 35 thousand tonnes of glacial acrylic acid (polymer-grade)	Butyl acrylate, glacial acrylic acid	–

Additionally, Gazprom Group has access to the following capacities:

Name	Company	Location	Year of commissioning/ establishment	Annual throughput / production capacity as at 31 December 2018	Product range
Slavneft-YANOS	OAO Slavneft-YANOS	Yaroslavl	1958–1961	15.0 mm tonnes of oil	Motor gasoline; stable natural gasoline; diesel fuel; j et fuel; fuel oil; oils; aromatic hydrocarbons; sulphur; sulphuric acid; paraffin and wax products
Mozyr Refinery	OAO Mozyr Oil Refinery	Mozyr (Republic of Belarus)	1975	14.0 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	134.0 thousand tonnes	Polypropylene
Poliom	OOO Poliom (joint venture with PAO SIBUR Holding and Titan Group)	Omsk	2013	218.0 thousand tonnes	Polypropylene
Total — PMB	OOO Gazpromneft-Total PMB (joint venture with Total)	Moscow	2014	40.0 thousand tonnes	Polymer-modified bitumens and 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 2018)
Novourengoysky 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 Novourengoysky 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. To optimise the capex project completion, a pre-investment study was started to assess the investment feasibility of upgrading the Novourengoysky Gas Chemical Complex and is to be completed in 2019.
Amur GPP. Goal: support comprehensive processing of natural gas from the Yakutsk and Irkutsk gas production centres.	PJSC Gazprom	Svobodnensky 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 39.0 bcm of marketable gas up to 2.0 mm tonnes of ethane up to 1.5 mm tonnes of LHGs up to 0.2 mm tonnes of pentane-hexane fraction 60.0 mmcm of helium	2021 (first section)	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. Earthwork operations have been fully completed, infrastructure has been prepared, full-scale construction of the facilities for a gas processing and helium complex is underway. Construction materials and equipment are supplied to the plant construction site.
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	Purovsky District, Yamal-Nenets Autonomous Area	Unstable condensate: 4.0 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 capacities to transport liquid hydrocarbons from the Nadym-Pur-Taz region

Project name	Company	Location	Annual design production capacity	Commissioning year
Urengoy — Surgut gas condensate pipeline (Line 2). The 107 km — 288 km section.	OOO Gazprom pererabotka	Purovsky District, Yamal-Nenets Autonomous Area	Transportation of 12.0 mm tonnes of hydrocarbons	2018

Gazprom Group's projects for transportation of liquid hydrocarbons from the Nadym-Pur-Taz region

Project name	Company	Location	Annual design production capacity	Commissioning year	Project status (as at 31 December 2018)
Urengoy oil pumping station	OOO Gazprom pererabotka	Purovsky 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		Purovsky District, Yamal-Nenets Autonomous Area	Transportation of 5.0 mm tonnes of hydrocarbons	2019	Construction and installation operations are underway.

Power and Heat Generation

Power and heat assets and projects of Gazprom Group

Power and heat facilities in operation

Power and heat facilities under construction and projected facilities

Heat supply area of PAO MIPC and its subsidiaries OOO TSK Novaya Moskva and OOO TSK Mosenergo

1	Moscow
2	Khimki (Moscow Region)
3	Elektrogorsk (Moscow Region)

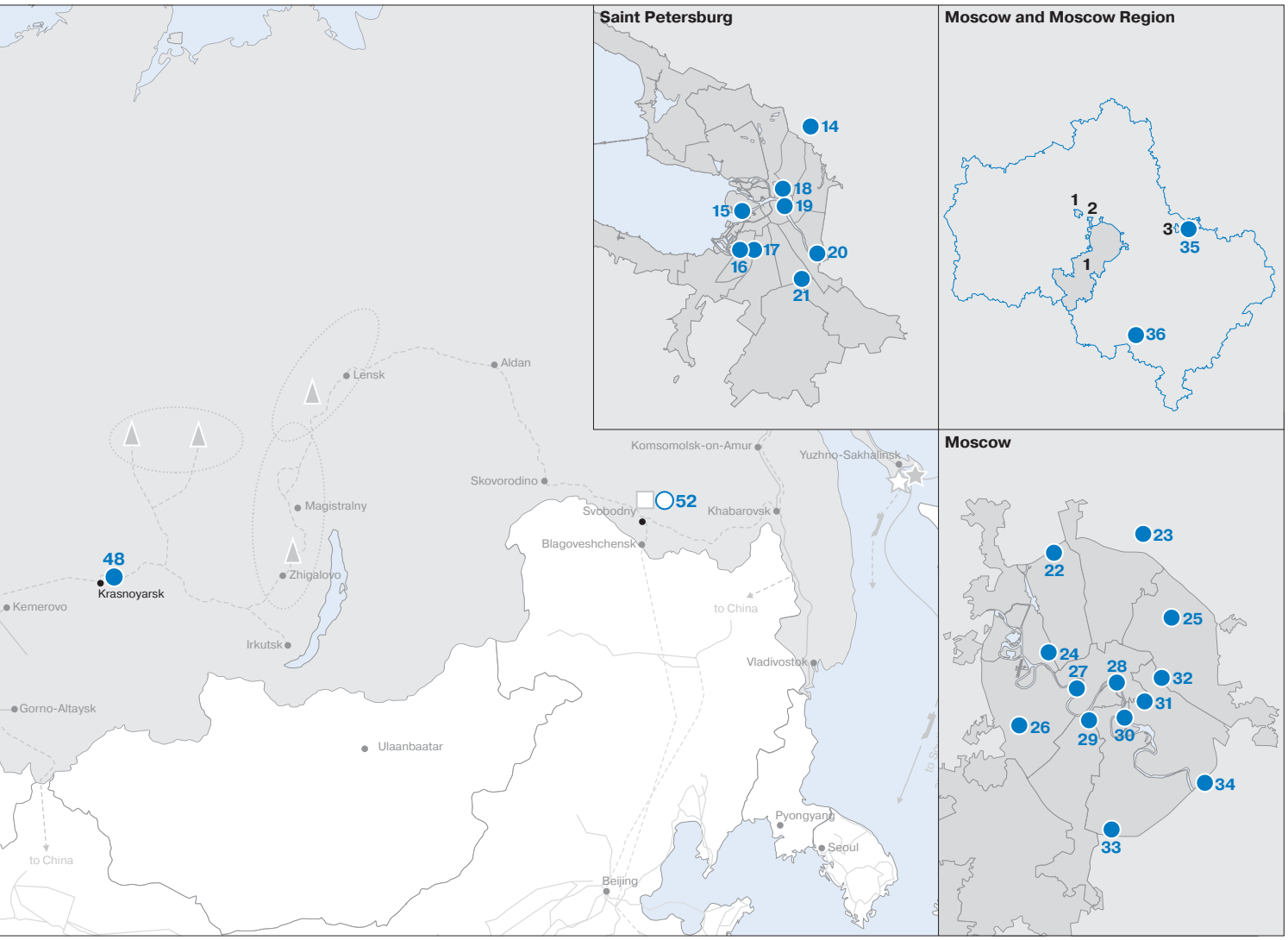
PAO TGC-1 in Murmansk Region, Republic of Karelia and Leningrad Region

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. As at 31 December 2018.



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

49	**Novo-Salavatskaya CHPP**
50	**Unit 5 at the Hrazdan TPP (Armenia)**
51	**CHPP project in Panchevo (Serbia)**
52	**Svobodnenskaya TPP project**

Electric power and heat generating capacity of Gazprom Group

Generating company	As at 31 December 2014	2015	2016	2017	2018
Electric power generating capacity, MW					
In Russia					
Gazprom energoholding					
PAO Mosenergo	12,737	12,915	12,963	12,873	12,798
PAO MIPC and subsidiaries	166	129	–	–	–
PAO OGK-2	18,422	18,024	18,955	18,997	18,828
PAO TGC-1 and subsidiaries	7,164	7,057	6,951	6,950	6,950
Total	**38,489**	**38,125**	**38,869**	**38,820**	**38,576**
Other assets					
Gazprom neftekhim Salavat	541	541	893	893	893
Other	–	–	3	3	3
Total	**541**	**541**	**896**	**896**	**896**
Total in Russia	**39,030**	**38,666**	**39,765**	**39,716**	**39,472**
Abroad					
ZAO Gazprom Armenia	467	467	467	467	467
Other	–	–	13	13	12
Total abroad	**467**	**467**	**480**	**480**	**479**
Total	**39,497**	**39,133**	**40,245**	**40,196**	**39,951**
Heat generating capacity, Gcalh					
In Russia					
Gazprom energoholding					
PAO Mosenergo	40,371	43,315	42,894	42,761	43,136
PAO MIPC and subsidiaries*	10,546	6,845	7,036	7,236	7,091
PAO OGK-2	4,336	4,336	4,169	4,162	3,934
PAO TGC-1 and subsidiaries	14,152	14,142	14,532	13,646	13,745
Total	**69,405**	**68,638**	**68,631**	**67,805**	**67,906**
Other assets					
Gazprom neftekhim Salavat**	1,619	1,619	2,352	2,352	2,352
Other	–	–	759	801	518
Total	**1,619**	**1,619**	**3,111**	**3,153**	**2,870**
Total in Russia	**71,024**	**70,257**	**71,742**	**70,958**	**70,776**
Abroad	–	–	9	9	9
Total	**71,024**	**70,257**	**71,751**	**70,967**	**70,785**

* Starting from 2015, heat generating capacity includes PAO MIPC's subsidiaries OOO TSK Novaya Moskva and OOO TSK Mosenergo.
** Since 2018, the installed heat generation capacity figures for Gazprom neftekhim Salavat's Novo-Salavatskaya CHPP have included the installed heat generation capacities of steam boilers. For data comparability, the 2016–2017 figures have been adjusted.

Electric power and heat generated by Gazprom Group

Generating company	For the year ended 31 December				
	2014	2015	2016	2017	2018
Electric power generating capacity, billion kWh					
In Russia					
Gazprom energoholding					
PAO Mosenergo	56.67	54.71	59.07	57.87	58.31
PAO MIPC	0.41	0.13	–	–	–
PAO OGK-2	68.69	64.36	67.09	63.43	58.92
PAO TGC-1 and subsidiaries	26.43	25.81	27.67	29.51	29.33
Total	**152.20**	**145.01**	**153.83**	**150.81**	**146.56**
Other capacity					
Gazprom neftekhim Salavat	2.37	2.35	2.90	4.65	4.94
Other	–	–	0.0	0.0	0.0
Total	**2.37**	**2.35**	**2.90**	**4.65**	**4.94**
Total in Russia	**154.57**	**147.36**	**156.73**	**155.46**	**151.50**
Abroad					
ZAO Gazprom Armenia	0.86	0.64	0.69	0.99	1.62
Other	–	–	0.09	0.10	0.07
Total abroad	**0.86**	**0.64**	**0.78**	**1.09**	**1.69**
Total	**155.43**	**148.00**	**157.51**	**156.55**	**153.19**
Heat generating capacity, mm Gcalh					
In Russia					
Gazprom energoholding					
PAO Mosenergo	70.32	71.68	81.83	79.45	82.29
PAO MIPC and subsidiaries*	18.43	12.29	10.19	9.85	10.17
PAO OGK-2	7.09	6.52	6.90	6.76	7.01
PAO TGC-1 and subsidiaries	24.34	23.02	24.44	24.71	24.89
Total	**120.18**	**113.51**	**123.36**	**120.77**	**124.36**
Other capacity					
Gazprom neftekhim Salavat	5.04	5.11	5.44	5.78	6.07
Other	–	–	0.69	0.79	0.82
Total	**5.04**	**5.11**	**6.13**	**6.57**	**6.89**
Total in Russia	**125.22**	**118.62**	**129.49**	**127.34**	**131.25**
Abroad	–	–	0.00	–	–
Total	**125.22**	**118.62**	**129.49**	**127.34**	**131.25**

* Starting from 2015, heat generation figures include PAO MIPC's subsidiaries OOO TSK Novaya Moskva and OOO TSK Mosenergo.

Gazprom Group's key power generation projects

Name	Company	Purpose	Project characteristics			
			Blocks quantity and type	Installed electric capacity	Installed heat capacity	Commissioning date
Construction of the Grozny TPP	Owner and developer, investor: OOO GEH Engineering. Operator under the CSA: PAO OGK-2	Improving reliability of power supply in the Chechen Republic	2 gas turbine units	356 MW	–	2019 (second block)
Construction of the Svobodnenskaya TPP	OOO Amur TPP	Power supply for the Amur GPP	2 STUs	160 MW	TBC	2020
Construction of a CHPP plant in Pančevo, Serbia	TE-TO Pančevo o.o.o.	Electricity and heat supply to Pančevo Refinery	CCGT (2 gas turbine units and a steam turbine unit)	200 MW	TBC	2020

Gas Sales

Natural gas sales volumes
(net of VAT, excise tax, and customs duties)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
RUB mm					
Russia	820,567	805,615	819,924	875,685	954,493
Far abroad	1,752,147	2,165,500	2,140,027	2,221,217	2,951,215
FSU countries	411,722	429,660	309,644	292,777	348,625
Retroactive gas price adjustments	949	26,482	33,175	–49,092	49,338
Total	**2,985,385**	**3,427,257**	**3,302,770**	**3,340,587**	**4,303,671**
USD mm*					
Russia	21,258	13,138	12,269	15,018	15,175
Far abroad	45,392	35,315	32,022	38,093	46,919
FSU countries	10,666	7,007	4,633	5,021	5,543
Retroactive gas price adjustments	25	432	496	–842	784
Total	**77,341**	**55,892**	**49,420**	**57,290**	**68,421**
EUR mm*					
Russia	16,093	11,849	11,082	13,264	12,879
Far abroad	34,363	31,850	28,923	33,645	39,822
FSU countries	8,075	6,319	4,185	4,435	4,704
Retroactive gas price adjustments	19	389	448	–744	666
Total	**58,550**	**50,407**	**44,638**	**50,600**	**58,071**

* Data is not derived from IFRS consolidated financial statements. Calculation based on 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				
	2014	2015	2016	2017	2018
Russia					
RUB per mcm	3,506.5	3,641.3	3,815.5	3,808.3	3,981.3
USD* per mcm	90.8	59.4	57.1	65.3	63.3
EUR* per mcm	68.8	53.6	51.6	57.7	53.7
Far abroad					
RUB per mcm	13,487.2	15,057.3	11,763.3	11,670.5	15,499.5
USD per mcm	349.4	245.6	176.0	200.2	246.4
EUR* per mcm	264.5	221.5	159.0	176.8	209.1
FSU countries					
RUB per mcm	10,115.9	11,911.0	10,263.1	9,237.0	10,225.9
USD per mcm	262.1	194.2	153.6	158.4	162.6
EUR* per mcm	198.4	175.2	138.7	139.9	138.0

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

Gazprom Group's natural gas sales volumes, bcm

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Russia	234.0	221.2	214.9	229.9	239.7
Far abroad	159.4	184.4	228.3	242.0	243.3
FSU countries	48.1	40.3	33.2	35.0	38.1
Total	**441.5**	**445.9**	**476.4**	**506.9**	**521.1**

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

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Far abroad					
Austria	4.2	5.0	7.5	9.8	9.0
Belgium	–	1.5	2.5	2.7	2.8
Bulgaria	2.8	3.1	3.2	3.3	3.2
Bosnia and Herzegovina	0.2	0.2	0.2	0.2	0.2
United Kingdom	15.5	22.5	25.7	29.1	34.2
Hungary	5.4	6.0	5.7	7.0	7.3
Germany	40.3	47.4	57.9	67.1	65.7
Greece	1.7	2.0	2.7	2.9	3.3
Denmark	0.4	0.7	1.7	1.8	1.7
Ireland	0.2	0.2	0.1	0.1	0.3
Spain	–	–	–	0.2	0.1
Italy	21.7	24.4	24.7	23.7	22.6
Macedonia	0.1	0.1	0.2	0.3	0.2
the Netherlands	4.7	8.4	27.5	17.4	21.4
Poland	9.1	8.9	11.1	10.5	9.9
Romania	0.5	0.3	1.7	1.4	1.5
Serbia	1.5	1.9	1.9	2.2	2.2
Slovakia	4.4	3.8	3.7	4.5	5.0
Slovenia	0.4	0.5	0.5	0.6	0.5

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Turkey	27.3	27.0	24.8	29.0	24.0
Finland	3.1	2.8	2.5	2.4	2.6
France	7.6	10.5	12.5	13.3	13.3
Croatia	0.6	0.6	0.8	2.8	2.8
Czech Republic	0.8	0.9	3.1	3.8	2.6
Switzerland	0.3	0.3	0.3	0.4	0.6
Other countries	6.6	5.4	5.8	5.5	6.3
Total	**159.4**	**184.4**	**228.3**	**242.0**	**243.3**
FSU countries					
Azerbaijan	–	0.1	–	0.4	1.0
Armenia	1.8	1.8	1.8	1.8	1.8
Belarus	19.6	18.4	18.3	18.8	20.0
Georgia	0.3	0.3	0.1	0.1	0.0
Kazakhstan	5.1	4.7	4.7	4.8	6.2
Kyrgyzstan	0.1	0.3	0.3	0.3	0.3
Latvia	1.0	1.3	1.3	1.8	1.3
Lithuania	2.5	2.2	0.9	1.4	1.4
Moldova	2.8	2.9	3.0	2.7	3.0
Ukraine	14.5	7.8	2.4	2.4	2.7
Estonia	0.4	0.5	0.4	0.5	0.4
South Ossetia	0.0	0.0	0.0	0.0	0.0
Total	**48.1**	**40.3**	**33.2**	**35.0**	**38.1**

Gazprom Group's large scale LNG sales volumes to foreign countries

	For the year ended 31 December				
	2014	2015	2016	2017	2018
trn BTU					
Argentina	41.1	16.2	19.7	–	–
Egypt	–	3.4	3.4	–	–
India	–	18.7	22.7	9.9	36.1
Spain	–	–	–	6.5	2.9
China	6.6	6.6	3.4	29.4	29.2
Kuwait	3.0	3.3	3.3	16.9	20.1
Malaysia	6.5	–	–	–	–
Mexico	–	–	6.5	–	–
UAE	–	–	6.5	3.1	–
Republic of Korea	36.2	26.5	3.3	13.2	26.4
Thailand	–	–	–	3.3	–
Taiwan (China)	–	9.9	26.0	19.8	19.3
Japan	49.2	78.1	78.5	56.9	29.7
FOB deliveries	17.1	7.0	3.0	–	21.4
Total*	**159.6**	**169.6**	**176.5**	**159.2**	**185.0**
Including LNG sales from Sakhalin-2 project	53.1	86.0	59.4	72.9	70.1
Total, mm tonnes	**3.35**	**3.56**	**3.71**	**3.34**	**3.88**
Total, bcm	**4.47**	**4.75**	**4.94**	**4.46**	**5.18**

* Due to rounding, some totals may not correspond with the sum of the separate figures.
Note. Calculated in accordance with the principles underlying management reporting. Parameters calculated using these methods might be not comparable between each other due to differences in the methodologies used for preparing consolidated financial statements and for management reporting.

Promising large scale LNG projects with Gazprom Group's participation

Name	Target market	Projected capacity	Implementation period	Project status (as at 31 December 2018)
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.	More than 10 mm tonnes of LNG per year	The project timeline will be determined after design documents are finalised	Pre-investment feasibility study for the project to construct an LNG plant in the Leningrad Region (Baltic LNG) has been completed, and a decision was made to move the project to the investment stage. Site for the LNG plant was selected as part of the pre-investment feasibility study (Ust-Luga seaport). In October 2018, PJSC Gazprom and Shell signed a Joint Design Concept Framework Agreement for the Baltic LNG project (pre-FEED). The design concept for the project is being developed by a dedicated company — OOO Gazprom LNG Saint Petersburg.
Third technological line of LNG plant within the framework of Sakhalin-2 project	Asia-Pacific countries	Up to 5.4 mm tonnes of LNG per year	2023–2024	Positive opinions were obtained from Russia's Main Directorate of State Expert Review (GlavgosExpertiza) for design documents developed to Russian standards for the expansion of the project's gas transportation system, construction of an LNG loading berth, and construction of the process train at the LNG plant.

Promising small and medium scale LNG projects with Gazprom Group's participation

Name	Target market	Projected capacity	Implementation period	Project status (as at 31 December 2018)
LNG production, storage, and shipping complex near the Portovaya compressor station	Markets of the Baltic and North Sea region, LNG vessel bunkering in the Baltic Sea, and, if necessary, LNG supplies to the LNG regasification terminal in the Kaliningrad Region	1.5 mm tonnes of LNG per year	2019	Design and detailed design documents for the project have been developed in full. The main equipment for the LNG facility was delivered to the construction site. Construction and installation are in progress. The 110 kV Mys substation was commissioned in 2018. Conversion of the acquired LNG ship into a floating storage and regasification unit is underway. Following the conversion, the FSRU will be moored to the berth of the LNG facility.
LNG plant near Vladivostok	Asia-Pacific including China and Japan, and LNG bunkering, including in Russia's Far East	1.5 mm tonnes of LNG per year	To be determined after the Pre-Investment Feasibility Study completion	Investment feasibility assessment is underway.

Gazprom Group's LNG receiving, storage and regasification capacities

Name	Purpose	Projected capacity	Year of comissioning
A floating storage and regasification unit (FSRU) terminal in the Kaliningrad Region	Ensuring energy security in the Kaliningrad Region	2.7 bcm of gas annually	2018

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

	For the year ended 31 December				
Country	**2014**	**2015**	**2016**	**2017**	**2018**
Austria	–	303.5	872.2	816.5	732.7
Belgium	–	620.7	1,530.7	1,539.8	1,736.4
United Kingdom	2,734.7	3,028.0	3,825.6	4,607.3	4,917.2
Hungary	–	104.8	197.4	846.6	330.1
Germany	–	3,665.7	13,163.4	16,408.1	13,953.4
Ireland	158.0	187.4	59.8	96.2	316.4
Macedonia	88.5	93.0	139.5	212.8	92.0
the Netherlands	29.4	1,335.5	3,220.8	2,537.9	2,991.6
Romania	–	22.8	169.7	221.5	70.7
France	510.1	780.9	947.9	1,013.3	1,083.0
Czech Republic	–	233.9	809.1	1,634.8	1,900.7
Slovakia	–	–	6.5	–	83.3
Total	**3,520.7**	**10,376.2**	**24,942.6**	**29,934.8**	**28,207.5**

Gazprom's share in domestic gas demand in Russia, bcm

	For the year ended 31 December				
	2014	**2015**	**2016**	**2017**	**2018**
Internal gas consumption in Russia	458.4	444.3	456.7	468.0	493.2
Domestic gas supply through Gazprom's gas transportation system (excluding technological needs of gas transportation system)	353.7	339.4	348.7	351.3	361.7
including Gazprom Group production (including purchases from companies not included in Gazprom Group)	237.8	221.9	226.9	231.3	244.1
Production of the Gazprom Group	237.0	211.2	210.2	216.3	224.9

Regulated weighted average wholesale prices for natural gas in Russia, RUB per bcm

	For the year ended 31 December				
	2014	2015	2016	2017	2018
All categories of consumers	3,656.5	3,759.4	3,938.2	3,988.5	4,117.2
Industrial consumers	3,848.9	3,958.1	4,158.1	4,202.3	4,316.4
Households	3,082.9	3,253.0	3,422.8	3,512.9	3,640.0

Note. 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.

Gas distribution and gasification in Russia

	For the year ended and as at 31 December				
	2014	2015	2016	2017	2018
Length of external gas pipelines, operated by Gazprom Group's subsidiaries and associated gas distribution companies (GDCs), thousand km	734.0	746.3	760.1	773.4	786.7
Natural gas transportation through gas distribution systems, operated by Gazprom Group's subsidiaries and associated GDCs, bcm	246.7	231.3	208.0	239.0	239.7
Consumers of Gazprom Group's subsidiaries and associated GDCs':					
Apartments and private households, mm units	27.0	26.8	27.0	28.5	27.7
Industrial sites, thousand units	31.5	32.8	32.9	31.6	32.4
Agricultural facilities, thousand units	6.5	6.9	7.2	7.6	8.1
Utilities, thousand units	286.9	303.6	312.3	326.1	332.6
Volume of Gazprom's gasification programs financing, RUB bn	28.8	27.6	25.0	29.5	36.7
Level of natural gas gasification*, including:	65.4%	66.2%	67.2%	68.1%	68.6%
towns and urban-type settlements	70.3%	70.4%	70.9%	71.4%	71.9%
country side	54.6%	56.1%	57.1%	58.7%	59.4%

* Calculation performed based on residential properties as at 2005.

Gazprom Group's gas distribution operations outside Russia

	For the year ended and as at 31 December				
	2014	2015	2016	2017	2018
Armenia					
Length of gas distribution pipelines maintained, km	14,135	14,330	14,701	15,063	18,245
Gas transported through gas distribution networks, mmcm	2,055.5	1,861.7	1,888.1	1,985.2	2,187.0
Gas consumers					
Apartments and private households, thousand units	659	669	678	689	702
Industrial facilities, units	1,766	1,819	1,873	1,933	1,991
Agricultural facilities, units	448	476	508	566	654
Utility facilities, units	11,931	12,502	12,254	13,044	13,522
Kyrgyzstan					
Length of gas distribution pipelines maintained, km	2,826	2,861	2,896	3,093	3,632
Gas transported through gas distribution networks, thousand units	239.3	261.1	262.7	282.5	312.4
Gas consumers					
Apartments and private households, million	289	292	296	303	317
Industrial facilities, units	155	159	200	203	203
Utility facilities, units	2,636	2,729	2,890	2,992	3,189
Romania*					
Length of gas distribution pipelines maintained, km	x	256	284	296	313
Gas transported through gas distribution networks, mmcm	x	61.5	63.0	71.5	73.0
Gas consumers					
Apartments and private households, thousand units	x	33	37	41	44
Industrial facilities, units	x	1,383	1,457	1,590	1,685

* Starting from the year Gazprom Group took control of the organisation responsible for gas distribution within the country.

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				
	2014	2015	2016	2017	2018
RUB mm					
Russia	51,603	77,519	81,302	71,434	64,645
Far abroad	141,618	155,509	307,128	438,754	631,560
FSU countries	16,013	27,580	23,528	29,770	38,748
Total	**209,234**	**260,608**	**411,958**	**539,958**	**734,953**
USD mm*					
Russia	1,337	1,264	1,217	1,225	1,028
Far abroad	3,669	2,536	4,596	7,525	10,041
FSU countries	415	450	352	511	616
Total	**5,421**	**4,250**	**6,165**	**9,261**	**11,685**
EUR mm*					
Russia	1,012	1,140	1,099	1,082	872
Far abroad	2,777	2,287	4,151	6,646	8,522
FSU countries	314	406	318	451	523
Total	**4,103**	**3,833**	**5,568**	**8,179**	**9,917**

* 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				
	2014	2015	2016	2017	2018
Russia	4.7	5.3	5.9	4.3	2.7
Far abroad	9.8	9.8	17.1	21.6	21.2
FSU countries	1.2	1.9	1.7	1.7	1.7
Total	**15.7**	**17.0**	**24.7**	**27.6**	**25.6**

Note. Excluding intra-group sales.

Refined products sales revenue
(net of VAT, excise tax, and customs duties)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
RUB mm					
Russia	953,136	981,792	980,352	1,115,125	1,394,137
Far abroad	586,204	468,464	428,327	454,330	640,977
FSU countries	79,874	105,335	88,883	117,635	144,658
Total	**1,619,214**	**1,555,591**	**1,497,562**	**1,687,090**	**2,179,772**
USD mm*					
Russia	24,693	16,011	14,669	19,124	22,164
Far abroad	15,187	7,640	6,409	7,792	10,190
FSU countries	2,069	1,718	1,330	2,017	2,300
Total	**41,949**	**25,369**	**22,408**	**28,933**	**34,654**
EUR mm*					
Russia	18,693	14,440	13,250	16,891	18,812
Far abroad	11,496	6,890	5,789	6,882	8,649
FSU countries	1,566	1,549	1,201	1,782	1,952
Total	**31,755**	**22,879**	**20,240**	**25,555**	**29,413**

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

Gazprom Group's refined products sales volumes, mm tonnes

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Russia	41.5	41.3	41.1	40.8	43.2
Far abroad	29.9	23.8	22.6	20.9	21.3
FSU countries	4.0	4.3	4.2	4.3	4.4
Total	**75.4**	**69.4**	**68.0**	**66.0**	**68.9**

Note. Excluding intra-group sales.

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

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Motor gasoline	13.45	13.65	14.92	13.39	15.53
Diesel fuel	17.31	15.49	15.85	15.89	17.25
Jet fuel	3.96	3.76	3.51	3.60	3.94
Heating oil	11.17	8.58	7.62	5.78	6.46
Oils	0.39	0.43	0.44	0.41	0.48
Liquefied hydrocarbon gases	5.44	4.85	4.49	3.70	4.10
Sulphur	5.54	5.19	5.46	5.31	5.25
Mineral fertilizers	0.70	0.69	0.95	0.89	0.86
Polymers	0.17	0.16	0.14	0.11	0.11
Other refined and petrochemical products	17.27	16.62	14.57	16.88	14.88
Total	**75.40**	**69.42**	**67.95**	**65.96**	**68.86**

Note. Excluding helium sales and intragroup sales.

Gazprom Group's helium sales volumes

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Helium gaseous, mmcm	2.74	3.04	3.18	3.32	3.42
Helium liquefied, tonnes	139.96	314.15	299.32	289.56	260.08

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				
	2014	2015	2016	2017	2018
RUB mm					
Russia	409,087	403,084	461,908	487,283	501,362
Far abroad	15,383	19,057	17,350	13,599	15,643
FSU countries	2,481	2,524	2,458	2,937	5,090
Total	**426,951**	**424,665**	**481,716**	**503,819**	**522,095**
USD mm*					
Russia	10,598	6,573	6,912	8,357	7,971
Far abroad	399	311	260	233	249
FSU countries	64	41	37	50	81
Total	**11,061**	**6,925**	**7,209**	**8,640**	**8,301**
EUR mm*					
Russia	8,023	5,929	6,243	7,381	6,765
Far abroad	302	280	234	206	211
FSU countries	49	37	33	44	69
Total	**8,374**	**6,246**	**6,510**	**7,631**	**7,045**

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

Gas transportation sales revenue
(net of VAT)

	For the year ended 31 December				
	2014	2015	2016	2017	2018
RUB mm	172,842	193,965	198,971	235,061	225,673
USD mm*	4,478	3,163	2,977	4,031	3,588
EUR mm*	3,390	2,853	2,689	3,560	3,045

* Data is not derived from IFRS consolidated financial statements. Calculation based on 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				
	2014	2015	2016	2017	2018
Total	121.1	121.5	129.0	137.9	136.4
Including Russian gas	113.7	113.9	121.3	130.4	128.3

Environmental Protection and Energy Saving

Key indicators of Gazprom Group's environmental impact in Russia

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Air pollutant emissions, thousand tonnes	**2,797.6**	**2,830.6**	**2,868.5**	**2,795.9**	**2,894.0**
including: carbon oxide	547.0	533.6	550.5	529.9	594.1
nitrogen oxide	313.1	286.3	288.5	313.6	328.6
sulfur dioxide	289.3	328.4	346.1	262.7	276.2
hydrocarbons (including methane)	1,398.5	1,430.8	1,462.3	1,495.7	1,497.8
Greenhouse gases emission, mm tonnes CO_2-equivalent	**228.3**	**220.0**	**228.2**	**233.8**	**240.0**
Waste water discharge into surface water bodies, mmcm	**4,179.1**	**3,853.8**	**3,855.5**	**3,905.3**	**3,658.4**
including: clean and treated as per standards	3,991.6	3,660.6	3,691.2	3,781.7	3,579.5
Waste generation, thousand tonnes	**4,831.4**	**4,954.0**	**4,289.8**	**4,130.3**	**3,555.1**
Area of land disturbed during the year, thousand ha	**15.4**	**58.1**	**27.0**	**42.2**	**25.8**
Area of land rehabilitated during the year, thousand ha	**12.6**	**18.2**	**42.5**	**19.6**	**15.8**

Gazprom Group's environmental costs in Russia, RUB mm

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Current operating costs	18,047.9	16,399.9	17,189.7	18,219.8	22,638.0
Fees for environmental protection services	9,403.5	12,806.3	14,725.6	14,495.6	14,584.1
Overhaul costs for fixed capital assets used in environmental protection	4,204.9	2,962.9	2,187.9	1,752.6	1,932.2
Negative environmental impact charges	1,746.9	1,790.4	824.8	768.0	615.8
Capital expenditures for environmental protection and sustainable use of natural resources	15,578.3	15,754.3	22,541.9	35,584.5	29,188.6
Total	**48,981.5**	**49,713.8**	**57,469.9**	**70,820.5**	**68,958.7**

Energy saving of PJSC Gazprom and its major subsidiaries

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Natural gas					
mmcm	2,070.7	2,255.3	2,285.0	3,013.5	2,951.9
thousand t c.e.	2,360.6	2,571.0	2,641.1	3,480.6	3,409.5
Electric power					
million kWh	254.6	260.6	256.0	331.4	364.3
thousand t c.e.	82.8	84.7	84.5	107.7	118.4
Heat power					
thousand Gcal	237.2	205.0	254.2	268.4	235.9
thousand t c.e.	33.9	29.3	36.4	38.4	33.7
Total, thousand t c.e.	**2,477.3**	**2,685.0**	**2,762.0**	**3,626.7**	**3,561.6**

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.

Patent management, R&D

Number of patents held by PJSC Gazprom and its subsidiaries and their use in operations

	For the year ended and as at 31 December				
	2014	2015	2016	2017	2018
Total number of patents held by PJSC Gazprom and its subsidiaries, units	2,131	2,238	2,269	2,365	2,555
Including those used in operations	351	356	406	427	441
Economic effect from the use of patented items in operations, RUB bn	3.1	6.1	7.1	8.0	10.3

Total spending on R&D projects commissioned by Gazprom Group and actual economic effect from the use of R&D results, RUB bn

	For the year ended 31 December				
	2014	2015	2016	2017	2018
Total spending on R&D projects commissioned by Gazprom Group (net of VAT)	10.8	9.9	6.3	8.2	9.0

Personnel

Gazprom Group's personnel structure

	As at 31 December				
	2014	2015	2016	2017	2018
Number of employees of the Group, in thousand:					
PJSC Gazprom	24.3	24.8	25.6	26.2	26.7
Gas production, transportation, processing and storage subsidiaries*	233.3	235.4	237.4	235.6	232.9
Gazprom Neft	66.4	65.0	71.4	67.6	68.5
Gazprom energoholding	45.5	45.0	44.9	44.2	43.3
Gazprom neftekhim Salavat	15.7	15.5	15.4	16.3	15.2
Other subsidiaries	74.4	76.7	72.7	79.7	79.5
Total	**459.6**	**462.4**	**467.4**	**469.6**	**466.1**
by categories:					
management	13.7%	13.7%	13.9%	13.9%	14.2%
specialists and other employees	30.9%	31.5%	31.6%	31.5%	32.4%
workers	55.4%	54.8%	54.5%	54.6%	53.4%
by age:					
under 30 years	18.5%	17.9%	16.9%	15.3%	14.4%
30-40 years	29.0%	29.7%	30.5%	31.3%	32.0%
40-50 years	27.0%	27.2%	27.8%	28.6%	29.4%
50 years and over	25.5%	25.2%	24.8%	24.8%	24.2%

* For the list of companies, see Glossary.
Note. Excluding companies where Gazprom has investments classified as joint operations.

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 million BTUs	0.028 mcm of gas 0.021 tonnes of LNG

Conventions

Sign	Meaning
x	Data cannot be given
–	Phenomenion is absent
0,0	Less than 0.05
0,00	Less than 0.005

Calculation of Financial Ratios

Unit	Definition
Statement of cash flows figures	
Seft-financing ratio	Ratio between Net cash from operating activities and Capital expenditures (figures from Statement of cash flows)
Return ratios	
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
Liquidity ratios	
Current liquidity ratio	Ratio between Current assets and Current liabilities
Quick liquidity ratio	Ratio between Current assets less Inventories and Current liabilities
Other ratios	
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

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 and 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 (head company) and its subsidiaries taken as a whole
Gcalh	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 $A+B_1+C_1$)	Russian classification of reserves. Reserves are classified into the following categories: A (producing, developed), B_1 (producing, undeveloped, explored), B_2 (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

Terms and abbreviations	Description
PJSC Gazprom and its major 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
PHF	Pentane-hexane fraction
PRMS Standards	International classification and assessment of hydrocarbon reserves under PRMS (Petroleum Resources Management System)
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

www.gazprom.com