Gazprom in Figures 2015–2019
Factbook

GAZPROM

Efficient Growth

Gazprom in Figures 2015–2019 Factbook contains information and statistics prepared for the annual General Shareholders Meeting of PJSC Gazprom in 2020. 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 refer 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).

Gazprom Group, the Group and Gazprom should be understood as a set of companies, consisting of PJSC Gazprom and its subsidiaries. For the purposes of this Handbook list of subsidiaries, list of entities, investments in which are classified as joint operations, list of associates and list of joint ventures of Gazprom Group are presented 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 presented 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 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 presented in the Factbook include share in the results of entities where Gazprom has investments classified as joint operations.

Some figures of PJSC Gazprom and its subsidiaries were derived from management accounts. Figures calculated using these methods may not be comparable 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 roubles. 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 2015–2019 Factbook

Gazprom in Russian and Global Energy Industry

	As at and for the year ended 31 December				
	2015	2016	2017	2018	2019
Share in the world natural gas industry					
Gas reserves*	16.9%	17.1%	16.7%	16.2%	16.3%
Gas production*	11.2%	11.2%	12.0%	12.1%	11.7%
Share in the Russian fuel and energy complex					
Russian natural gas reserves	71.6%	71.7%	71.7%	71.1%	71.1%
Gas production**	66.0%	65.6%	68.3%	68.7%	67.9%
Crude oil and gas condensate production**	11.1%	11.5%	11.8%	11.6%	11.5%
Primary processing of oil and stable gas condensate**	18.5%	18.4%	17.7%	18.2%	18.2%
Electricity generation**	14.3%	14.6%	14.8%	14.1%	13.7%
Total length of trunk pipelines and pipeline branches on the territory of Russia*, thousand km**	**171.2**	**171.8**	**172.1**	**172.6**	**175.2**

* Based on International Natural Gas Centre 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, the System operator of the Unified Energy System of Russia and PJSC Gazprom figures.
*** Including technological jumpers.

Financial Results

Major financial results and ratios of Gazprom Group

	As at and for the year ended 31 December				
	2015	**2016**	**2017**	**2018**	**2019**
Statement of Comprehensive Income figures					
Sales, RUB mm	6,073,318	6,111,051	6,546,143	8,224,177	7,659,623
Operating expenses, RUB mm	4,762,444	5,280,876	5,697,056	6,181,191	6,387,071
Operating profit, RUB mm	1,237,422	726,639	871,405	1,930,030	1,119,857
Adjusted EBITDA, RUB mm	1,883,847	1,323,258	1,467,692	2,599,284	1,859,679
Profit for the year, RUB mm	805,199	997,104	766,879	1,528,996	1,269,517
Profit for the year attributable to owners of PJSC Gazprom, RUB mm	787,056	951,637	714,302	1,456,270	1,202,887
Basic and diluted earnings per share for profit attributable to the owners of PJSC Gazprom, RUB	34.29	42.19	32.32	65.89	53.47
Balance Sheet figures					
Total assets, RUB mm	17,052,040	16,918,938	18,238,770	20,810,440	21,882,348
Current assets, RUB mm	3,993,722	3,234,346	3,469,266	4,212,230	3,828,153
Inventories, RUB mm	804,364	711,199	772,314	909,677	946,361
Current liabilities, RUB mm	2,124,701	1,921,808	2,589,516	2,473,695	2,527,476
Total debt, RUB mm	3,442,215	2,829,623	3,266,518	3,863,822	3,863,904
Net debt, RUB mm	2,083,120	1,932,895	2,397,511	3,014,403	3,167,847
Equity, excluding non-controlling interest, RUB mm	10,589,586	11,094,531	11,629,086	13,300,009	14,104,833
Equity, including non-controlling interest, RUB mm	10,914,622	11,441,839	12,015,481	13,776,153	14,615,687
Capital expenditures*, RUB mm	1,349,635	1,357,336	1,504,600	1,795,884	1,818,677
Statement of Cash Flows figures					
Cash flows from operating activities, RUB mm	2,030,927	1,571,323	1,187,022	1,617,384	1,709,384
Capital expenditures, RUB mm	(1,641,024)	(1,369,052)	(1,405,780)	(1,639,474)	(1,775,923)
Cash flows from investing activities, RUB mm	(1,664,156)	(1,445,965)	(1,368,131)	(1,617,718)	(1,938,109)
Cash flows from financing activities, RUB mm	(138,305)	(460,479)	149,944	(96,070)	152,375
Cash and cash equivalents as at the end of the reporting year, RUR mm	1,359,095	896,728	869,007	849,419	696,057
Self-financing ratio	124%	115%	84%	99%	96%
Adjusted financial statement measures**					
Profit for the year attributable to owners of PJSC Gazprom (adjusted), RUB mm	1,329,369	609,184	651,670	1,678,319	994,309
Net debt (adjusted), RUB mm	1,951,528	1,746,630	2,067,983	2,216,831	2,491,425
Return ratios***					
Return on operating profit	20%	12%	13%	23%	15%
Return on adjusted EBITDA	31%	22%	22%	32%	24%
Return on profit for the year	13%	16%	12%	19%	17%
Return on assets (ROA)	5%	6%	4%	8%	6%
Return on equity (ROE)	8%	9%	7%	12%	9%

	As at and for the year ended 31 December				
	2015	2016	2017	2018	2019
Ratios of total and net debt					
Total debt / equity and non-controlling interest	32%	25%	27%	28%	26%
Total debt / total debt, equity and non-controlling interest	24%	20%	21%	22%	21%
Total debt / total assets	20%	17%	18%	19%	18%
Total debt / adjusted EBITDA	1.83	2.14	2.23	1.49	2.08
Net debt / adjusted EBITDA	1.11	1.46	1.63	1.16	1.70
Net debt (adjusted) / adjusted EBITDA	1.04	1.32	1.41	0.85	1.34
Liquidity ratios* **					
Current liquidity ratio	1.88	1.68	1.34	1.70	1.51
Quick liquidity ratio	1.50	1.31	1.04	1.34	1.14
Other ratios* **					
EV / EBITDA	2.8	4.2	3.7	2.6	5.0
P / E	4.0	3.6	4.0	2.3	4.8
P / S	0.5	0.6	0.5	0.4	0.8

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

** These measures do not appear in the financial statements. Calculated in accordance with the Dividend Policy of PJSC Gazprom approved by PJSC Gazprom's Board of Directors in 2019 (Resolution of PJSC Gazprom's Board of Directors No. 3363 dated 24 December 2019). For calculation formulas, see the Calculation of Adjusted Financial Statement Measures and Financial Ratios section.

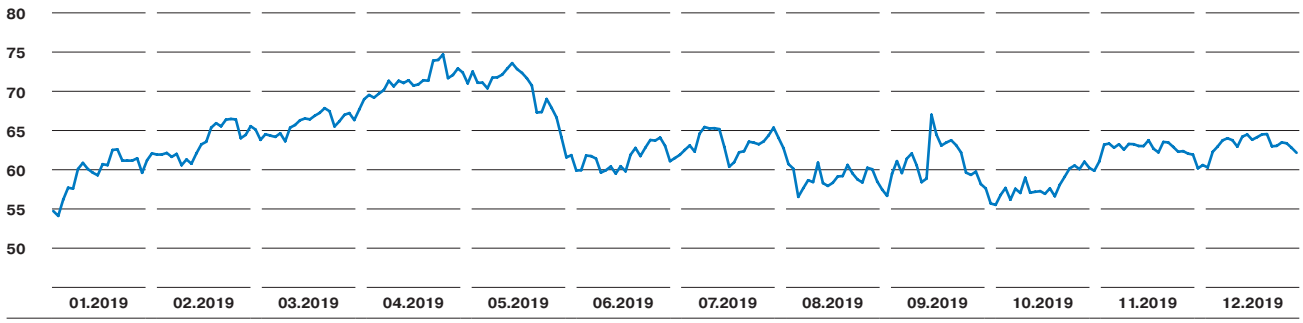
*** Calculation is provided in the Calculation of Financial Ratios section.

Macroeconomic Data

Indicator*	Measure	As at and for the year ended 31 December				
		2015	2016	2017	2018	2019
Consumer price index	%	12.9%	5.4%	2.5%	4.3%	3.0%
Producer price index	%	10.7%	7.4%	8.4%	11.7%	–4.3%
Average RUB/USD currency exchange rate for the period	RUB/USD	61.32	66.83	58.31	62.90	64.64
RUB/USD currency exchange rate at the end of the period	RUB/USD	72.88	60.66	57.60	69.47	61.91
Average RUB/EUR currency exchange rate for the period	RUB/EUR	67.99	73.99	66.02	74.11	72.35
RUB/EUR currency exchange rate at the end of the period	RUB/EUR	79.70	63.81	68.87	79.46	69.34
Brent oil price (Dated)**	USD/barrel	35.74	54.94	66.54	50.21	66.77
Urals oil price (average CIF MED/RDAM)**	USD/barrel	33.11	53.27	66.19	51.18	62.38
Brent average annual oil price (Dated)**	USD/barrel	52.39	43.73	54.19	71.31	64.21
Urals (average CIF MED/RDAM) average annual oil price**	USD/barrel	51.42	42.10	53.06	70.05	63.37

* 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 2019, USD/barrel



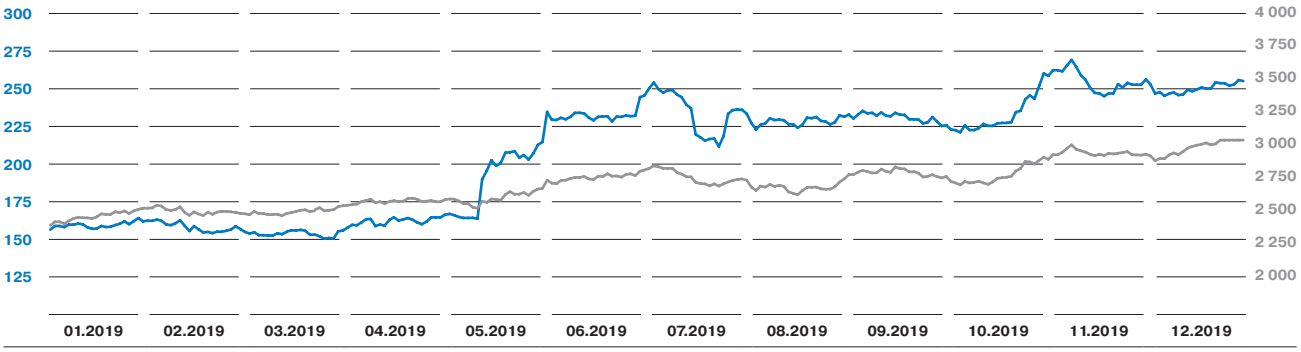
Source: Platts. Average quotes Urals Mediterranean and Urals Rotterdam.

Market Data

Indicator	Measure	As at and for the year ended 31 December 2015	2016	2017	2018	2019
Price per share on Moscow Exchange						
as at the end of the year	RUB	136.09	154.55	130.50	153.50	256.40
minimum	RUB	130.90	124.60	115.35	132.20	149.49
maximum	RUB	163.00	168.47	157.97	172.11	270.74
Price per ADR on LSE						
as at the end of the year	USD	3.69	5.05	4.41	4.43	8.23
minimum	USD	3.62	3.02	3.85	4.14	4.47
maximum	USD	6.24	5.27	5.27	5.31	8.35
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	1,573	1,573	1,573	29
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	22,101	22,101	22,101	23,645
Market capitalization**	USD bn	44.2	60.3	53.6	52.3	98.0
change (y-o-y)	%	–19.3%	36.4%	–11.1%	–2.4%	87.5%
MOEX Russia index	points	1,761	2,233	2,110	2,369	3,046
change (y-o-y)	%	26.1%	26.8%	–5.5%	12.3%	28.6%
RTS index	points	757	1,152	1,154	1,069	1,549
change (y-o-y)	%	–4.3%	52.2%	0.2%	–7.4%	44.9%
Daily average trading volume, Moscow Exchange	mm shares	32.5	29.9	28.9	26.3	37.0
Daily average trading volume, LSE	mm ADRs	16.4	15.9	12.0	9.2	8.1
Dividend per share***	RUB	7.89	8.0397	8.04	16.61	15.24
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*****	%	27.83%	26.86%	25.20%	24.13%	19.70%
Other registered holders	%	21.94%	22.91%	24.57%	25.64%	30.07%
Total	%	100%	100%	100%	100%	100%

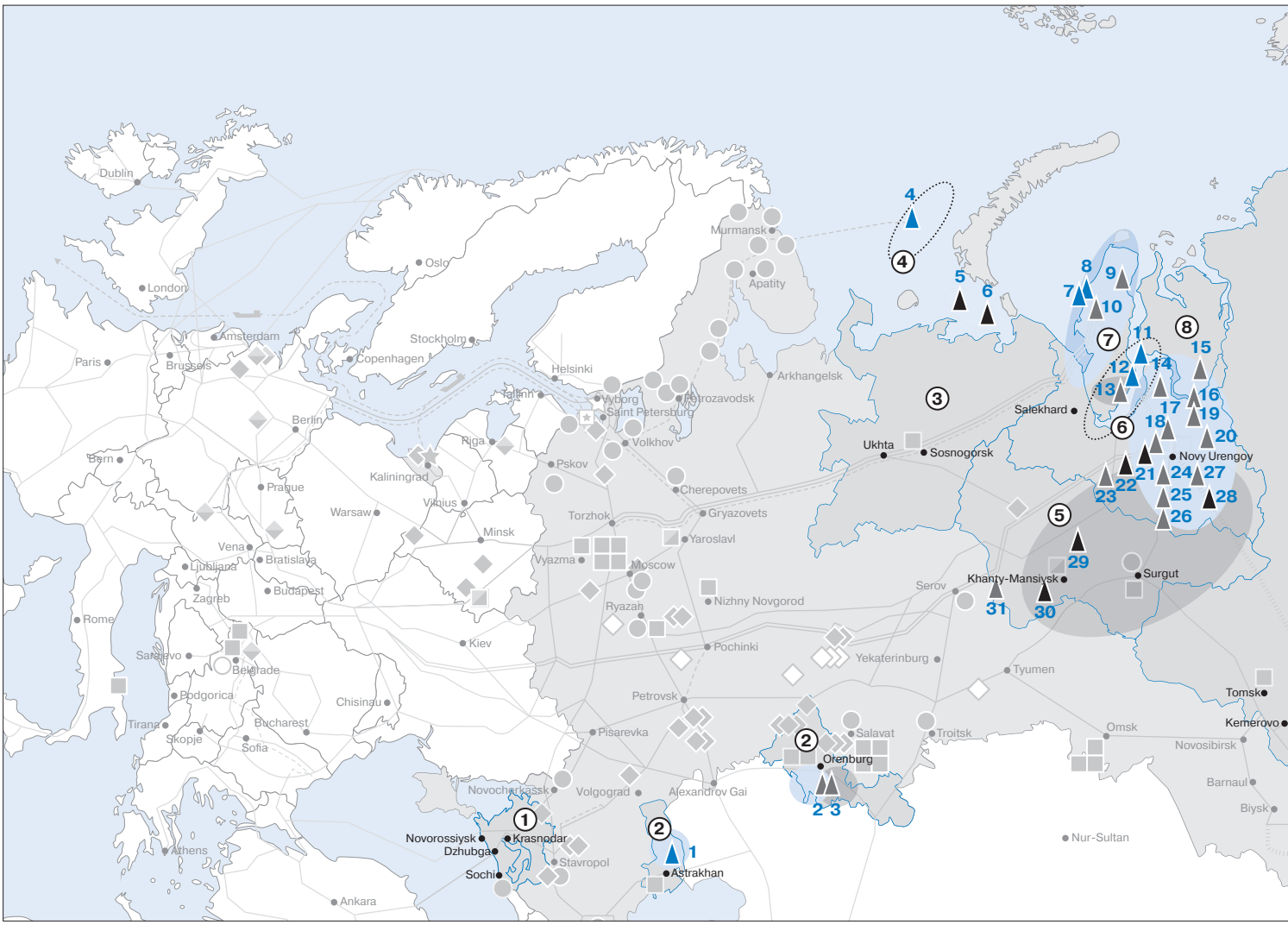
* As at 31 December of the respective year, there were no ordinary shares of PJSC Gazprom which belong to the Company.
** Market capitalization based on Moscow Exchange share price converted into USD.
*** For 2019 — recommended dividends.
**** As at 31 December 2017 and 31 December 2018, the cumulative 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 2019



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

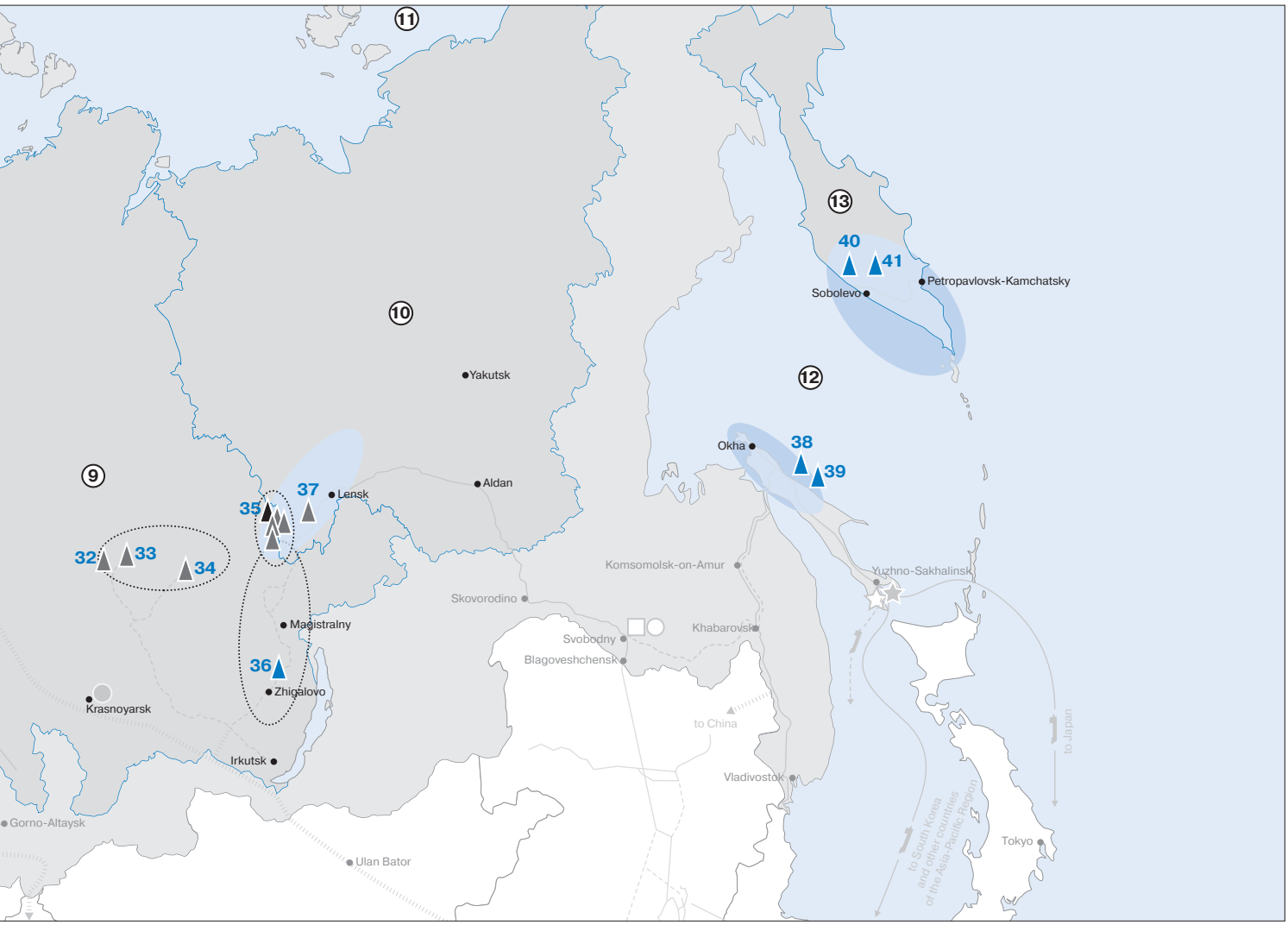


- Gas production centres
- Promising gas production centres
- Oil production centres
- Gas and gas condensate fields
- Oil and gas fields; and oil, gas and gas condensate fields
- Oil fields

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 the Kara Sea, the Barents Sea and the 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 the Vostochno-Sibirskoye Sea and the Chukotskoye Sea
⑫	Continental shelf of the Russian Federation in the Okhotsk Sea
⑬	Kamchatka Peninsula

Note. As at 31 December 2019.



Fields

1	Astrakhanskoye
2	Orenburgskoye
3	Estern section of the Orenburgskoye OGC field
4	Shtokmanovskoye
5	Dolginskoye
6	Prirazlomnoye
7	Kruzenshternskoye
8	Kharasaveiskoye
9	Tambeyskoye
10	Bovanenkovskoye
11	Severo-Kamennomysskoye
12	Kamennomysskoye-more
13	Novoportovskoye
14	Yamburgskoye
15	Vostochno-Messoyakhskoe*
16	Tazovskoye
17	Urengoyskoye
18	Yamsoveyskoye
19	Zapolyarnoye
20	Yuzhno-Russkoye
21	Zapadno-Yubileynoye
22	Meretoayakhinskoye
23	Sutorminskoye and Severo-Karamovskoye
24	Vyngayakhinskoye
25	Novogodnee
26	Vyngapurovskoye
27	Yety-Purovskoye
28	Zapadno-Chatylkinskoye
29	Priobskoye
30	Alexander Zhagrin field
31	Ervier (Ouryinskoye)* field
32	Omorinskoye
33	Kuymbinskoye*
34	Sobinskoye
35	Chonsky cluster
36	Kovyktinskoye
37	Chayandinskoye
38	Kirinskoye
39	Yuzhno-Kirinskoye
40	Kshukskoye
41	Nizhne-Kvakchikskoye

* 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 the Oil and Flammable Gases Classification (Russian classification of reserves, Classification) approved by the Ministry of Natural Resources of Russia (Decree No. 477 dated 1 November 2013). Reserves are now classified into the following categories: A (developed, drilled), B_1 (developed, undrilled, explored), B_2 (undrilled, 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 correspond to previously accepted categories A+B+C_1. Russian classification of reserves introduces recoverable gas reserves, which were previously assumed to equal geological reserves. The estimation of recoverable gas, gas condensate and oil reserves will be based on field development projects approved since 2016 onward. Since 2019, the gas recovery factor for explored fields is applied in accordance with the methodology approved by the State Reserves Commission in 2018 (developed by OOO Gazprom Geologorazvedka).

According to the Cassification, 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 occur gradually as new field development projects are approved, on the basis of which recoverable reserves will be approved. Also, based on newly approved field development projects, recoverable reserves will be determined for economically viable life of fields. When estimating the reserves of the explored fields, the gas recovery factor is applied in accordance with the methodology approved by the State Reserves Commission. As at 31 December 2019 the Company had completed the assessment of gas recovery factors for the fields containing 29% of Gazprom Group's A+B_1+C_1 gas reserves.

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.

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				
	2015	2016	2017	2018	2019
Natural gas, bcm					
Reserves, Russian classification	36,147.3	36,443.9	35,355.4	35,195.3	34,899.0
share audited under PRMS standards	94%	95%	94%	93%	93%
Proved	18,791.2	18,596.5	18,253.4	17,890.4	17,715.1
Probable	4,913.8	5,258.6	5,893.2	6,364.7	6,680.4
Proved + probable	**23,705.0**	**23,855.1**	**24,146.6**	**24,255.1**	**24,395.5**
Gas condensate, mm tonnes					
Reserves, Russian classification	1,499.5	1,534.9	1,595.6	1,604.4	1,569.7
share audited under PRMS standards	92%	94%	93%	94%	95%
Proved	699.5	759.2	797.7	759.7	730.2
Probable	233.8	259.7	308.0	330.5	333.0
Proved + probable	**933.3**	**1,018.9**	**1,105.7**	**1,090.2**	**1,063.2**
Crude oil, mm tonnes					
Reserves, Russian classification	2,082.0	2,078.5	2,045.3	2,015.7	2,005.7
share audited under PRMS standards	92%	93%	94%	94%	96%
Proved	792.7	789.5	736.8	712.3	707.5
Probable	562.7	589.2	623.2	623.1	667.3
Proved + probable	**1,355.4**	**1,378.7**	**1,360.0**	**1,335.4**	**1,374.8**

Oil equivalent

	As at 31 December				
	2015	2016	2017	2018	2019
Natural gas, mm boe					
Reserves, Russian classification	234,596.0	236,520.9	229,456.5	228,417.5	226,494.5
Proved	121,954.9	120,691.3	118,464.5	116,108.7	114,971.0
Probable	31,890.6	34,128.3	38,246.9	41,306.9	43,355.8
Proved + probable	**153,845.5**	**154,819.6**	**156,711.4**	**157,415.6**	**158,326.8**
Gas condensate, mm boe					
Reserves, Russian classification	12,265.9	12,555.5	13,052.0	13,124.0	12,840.1
Proved	5,721.9	6,210.3	6,525.2	6,214.3	5,973.0
Probable	1,912.5	2,124.3	2,519.4	2,703.5	2,723.9
Proved + probable	**7,634.4**	**8,334.6**	**9,044.6**	**8,917.8**	**8,696.9**
Crude oil, mm boe					
Reserves, Russian classification	15,261.1	15,235.4	14,992.1	14,775.1	14,701.8
Proved	5,810.5	5,787.0	5,400.7	5,221.2	5,186.0
Probable	4,124.6	4,318.8	4,568.1	4,567.3	4,891.3
Proved + probable	**9,935.1**	**10,105.9**	**9,968.8**	**9,788.5**	**10,077.3**

	As at 31 December				
	2015	2016	2017	2018	2019
Total, mm boe					
Reserves, Russian classification	262,123.0	264,311.8	257,500.6	256,316.6	254,036.4
Proved	133,487.3	132,688.6	130,390.4	127,544.2	126,130.0
Probable	37,927.7	40,571.5	45,334.4	48,577.7	50,971.0
Proved + probable	**171,415.0**	**173,260.1**	**175,724.8**	**176,121.9**	**177,101.0**

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	Oil mm tonnes
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
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

	Natural gas bcm	Gas condensate* mm tonnes	Oil mm tonnes
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 2017 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 2018 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**
Additions to reserves as a result of exploration	556.7	11.7	29.0
Transfer of reserves discovered in 2019 to the Undistributed Subsoil Fund of Russia** and to other companies, acquisition from other companies	–0.4	–	–0.2
Receipt of licenses, including	2.7	–	7.4
due to new fields discovery***	2.7	–	–
due to resolution of the Russian government, without tendering process	–	–	–
Return of licenses	–0.8	–	–0.1
Acquisition of assets	100.6	6.3	–
Disposal of assets	–	–	–
Revaluation	–455.4	–39.4	1.4
Production (including losses)	–499.7****	–13.3	–47.5
Reserves as at 31 December 2019	**34,899.0**	**1,569.7**	**2,005.7**

* 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.

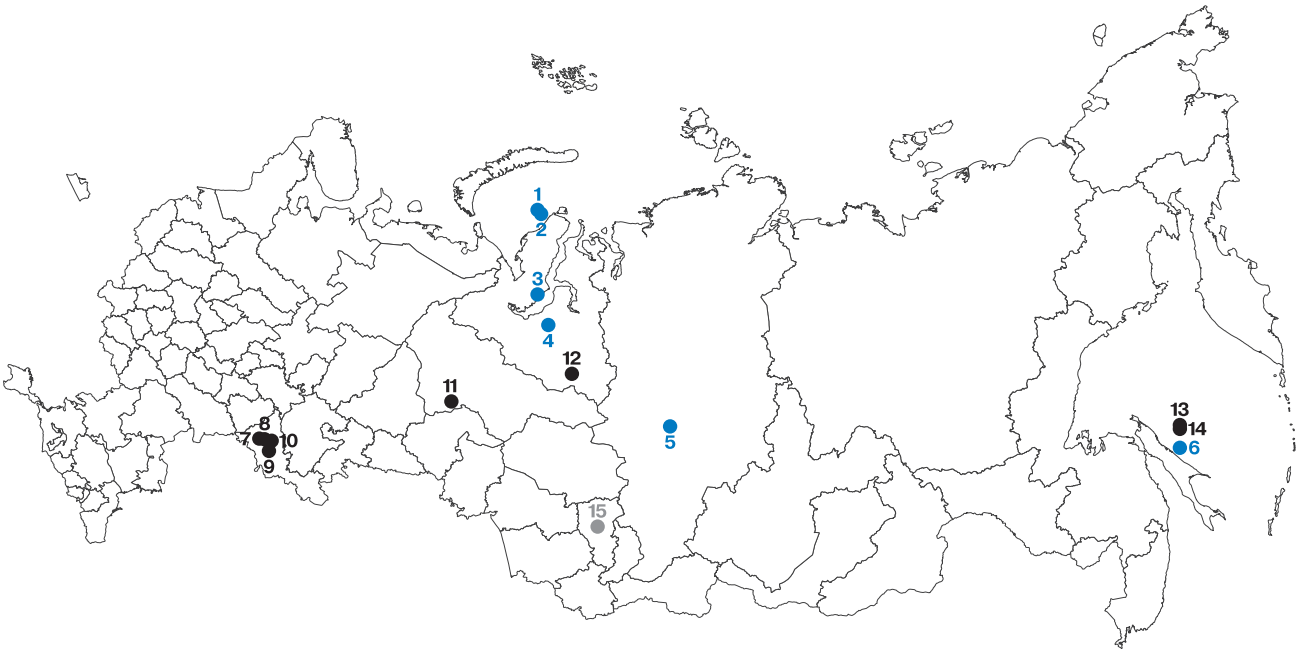
*** Including licenses received by Gazprom Group in previous years.

**** Excluding dissolved gas.

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Gazprom Group					
Fields	2	2	4	3	4
Deposits in previously discovered fields	22	15	47	12	25
Entities in which Gazprom has investments classified as joint operations (share in the reserves)					
Fields	–	–	1	1	1
Deposits in previously discovered fields	6	3	5	3	2

Hydrocarbon fields discovered by Gazprom Group in the Russian Federation in 2015–2019



	Gas and gas condensate fields
1	Dinkov field
2	Nyarmeyskoye
3	Blizhnenovoportovskoye
4	Padinskoye
5	Salairskoye
6	Yuzhno-Lunskoye

	Oil fields
7	Novozarinskoye
8	Novosamarskoye
9	Yagodnoye
10	Roshchinskoe
11	Alexander Zhagrin field
12	Zapadno-Chatylkinskoye
13	Triton
14	Neptune

	Coalbed methane field
15	Naryksko-Ostashkinskoye

Note. Excluding fields discovered by entities in which Gazprom has investments classified as joint operations.

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
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 field	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
	Blizhnenovoportovskoye	G	Yamal-Nenets Autonomous Area
2019	Dinkov field	GC	The Kara Sea continental shelf of Russia
	Nyarmeyskoye	G	The Kara Sea continental shelf of Russia
	Yagodnoye	O	Orenburg Region
	Roshchinskoe	O	Orenburg Region

* Field type according to the Russian classification of reserves: 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				
	2015	2016	2017	2018	2019
Natural gas	1.27	1.10	1.82	1.60	1.11
Gas condensate	6.12	3.25	7.97	1.74	0.88
Crude oil	0.47	0.41	0.07	0.41	0.61
Total	**1.32**	**1.08**	**1.81**	**1.49**	**1.06**

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				
	2015	2016	2017	2018	2019
Natural gas	87	87	75	71	70
Crude oil	47	44	43	43	42

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				
	2015	2016	2017	2018	2019
PJSC Gazprom and its major subsidiaries					
Proved	17,942.5	17,780.9	17,429.6	17,075.8	16,831.4
Probable	4,587.6	4,930.2	5,536.8	6,007.5	6,290.7
Proved + probable	**22,530.1**	**22,711.1**	**22,966.4**	**23,083.3**	**23,122.1**
PAO Gazprom Neft and its subsidiaries					
Proved	239.5	243.0	288.2	322.3	389.1
Probable	182.1	183.0	210.5	212.2	259.5
Proved + probable	**421.6**	**426.0**	**498.7**	**534.5**	**648.6**
ZAO Purgaz					
Proved	132.3	120.6	109.7	92.0	83.2
Probable	12.9	12.9	12.9	12.7	12.8
Proved + probable	**145.2**	**133.5**	**122.6**	**104.7**	**96.0**
OAO Severneftegazprom					
Proved	459.8	434.6	409.9	384.8	397.1
Probable	125.7	125.7	125.5	125.4	110.5
Proved + probable	**585.5**	**560.3**	**535.4**	**510.2**	**507.6**
Total (excluding share in the reserves of entities, investments in which are classified as joint operations)					
Proved	18,774.1	18,579.1	18,237.4	17,874.9	17,700.8
Probable	4,908.3	5,251.8	5,885.7	6,357.8	6,673.5
Proved + probable	**23,682.4**	**23,830.9**	**24,123.1**	**24,232.7**	**24,374.3**
Entities, investments in which are classified as joint operations (attributable to the share of Gazprom Group)					
Proved	17.1	17.4	16.0	15.5	14.3
Probable	5.5	6.8	7.5	6.9	6.9
Proved + probable	**22.6**	**24.2**	**23.5**	**22.4**	**21.2**
Total (including share in the reserves of entities, investments in which are classified as joint operations)					
Proved	18,791.2	18,596.5	18,253.4	17,890.4	17,715.1
Probable	4,913.8	5,258.6	5,893.2	6,364.7	6,680.4
Proved + probable	**23,705.0**	**23,855.1**	**24,146.6**	**24,255.1**	**24,395.5**

Gas condensate 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				
	2015	2016	2017	2018	2019
PJSC Gazprom and its major subsidiaries					
Proved	691.9	751.7	788.9	748.5	719.1
Probable	230.2	257.0	303.5	327.2	329.7
Proved + probable	**922.1**	**1,008.7**	**1,092.4**	**1,075.7**	**1,048.8**
PAO Gazprom Neft and its subsidiaries					
Proved	7.6	7.5	8.8	11.2	11.1
Probable	3.6	2.7	4.5	3.3	3.3
Proved + probable	**11.2**	**10.2**	**13.3**	**14.5**	**14.4**
Total					
Proved	699.5	759.2	797.7	759.7	730.2
Probable	233.8	259.7	308.0	330.5	333.0
Proved + probable	**933.3**	**1,018.9**	**1,105.7**	**1,090.2**	**1,063.2**

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				
	2015	2016	2017	2018	2019
PJSC Gazprom and its major subsidiaries					
Proved	44.7	44.6	16.5	17.2	22.0
Probable	35.0	35.0	46.5	46.7	58.1
Proved + probable	**79.7**	**79.6**	**63.0**	**63.9**	**80.1**
PAO Gazprom Neft and its subsidiaries					
Proved	655.6	652.8	630.8	611.1	605.0
Probable	458.7	486.1	507.4	507.7	535.8
Proved + probable	**1,114.3**	**1,138.9**	**1,138.2**	**1,118.8**	**1,140.8**
Total (excluding share in the reserves of entities, investments in which are classified as joint operations)					
Proved	700.3	697.4	647.3	628.3	627.0
Probable	493.7	521.1	553.9	554.4	593.9
Proved + probable	**1,194.0**	**1,218.5**	**1,201.2**	**1,182.7**	**1,220.9**
Entities, investments in which are classified as joint operations (attributable to the share of Gazprom Group)					
Proved	92.4	92.1	89.5	84.0	80.5
Probable	69.0	68.1	69.3	68.7	73.4
Proved + probable	**161.4**	**160.2**	**158.8**	**152.7**	**153.9**
Total (including share in the reserves of entities, investments in which are classified as joint operations)					
Proved	792.7	789.5	736.8	712.3	707.5
Probable	562.7	589.2	623.2	623.1	667.3
Proved + probable	**1,355.4**	**1,378.7**	**1,360.0**	**1,335.4**	**1,374.8**

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				
	2015	2016	2017	2018	2019
Natural gas, bcm					
Ural Federal District	21,613.5	21,309.0	20,302.6	19,735.7	19,257.7
Northwest Federal District	85.1	307.3	319.3	318.6	315.1
South Federal District and North Caucasian Federal District	2,985.3	2,973.1	2,961.1	2,948.2	2,924.6
Volga Federal District	663.5	648.9	640.7	626.9	666.6
Siberian Federal District	1,971.6	2,103.3	2,102.1	2,094.2	2,080.5
Far Eastern Federal District	1,402.1	1,488.3	1,420.1	1,415.8	1,425.4
Continental shelf of the Russian Federation	7,426.2	7,614.0	7,609.5	8,055.9	8,229.1
Total	**36,147.3**	**36,443.9**	**35,355.4**	**35,195.3**	**34,899.0**
Gas condensate, mm tonnes					
Ural Federal District	695.2	690.6	750.0	744.1	739.2
Northwest Federal District	20.5	31.3	33.1	33.0	32.3
South Federal District and North Caucasian Federal District	444.7	441.9	439.0	436.0	432.4
Volga Federal District	56.0	55.7	55.6	55.3	55.0
Siberian Federal District	92.3	97.0	96.9	96.0	94.6
Far Eastern Federal District	29.6	30.5	29.4	29.3	31.6
Continental shelf of the Russian Federation	161.2	187.9	191.6	210.7	184.6
Total	**1,499.5**	**1,534.9**	**1,595.6**	**1,604.4**	**1,569.7**
Crude oil, mm tonnes					
Ural Federal District	1,541.6	1,531.3	1,494.3	1,471.2	1,466.8
Northwest Federal District	5.6	19.8	20.3	20.3	19.5
South Federal District and North Caucasian Federal District	8.0	7.9	7.8	7.7	7.8
Volga Federal District	200.2	202.5	228.1	227.7	224.9
Siberian Federal District	205.0	201.3	199.6	187.4	188.4
Far Eastern Federal District	58.4	54.6	36.8	36.8	36.9
Continental shelf of the Russian Federation	63.2	61.1	58.4	64.6	61.4
Total	**2,082.0**	**2,078.5**	**2,045.3**	**2,015.7**	**2,005.7**

Note. Until 2016 hydrocarbon reserves are given under $A+B+C_1$ classification, since 1 January 2016 — under $A+B_1+C_1$ classification. Under the Oil and Flammable Gases Classification approved by the Ministry of Natural Resources of Russia (Decree No. 477 dated 1 November 2013, 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				
	2015	2016	2017	2018	2019
Natural gas, bcm	1,035.5	999.1	1,003.8	1,146.7	1,064.0
Gas condensate, mm tonnes	112.1	104.5	100.8	110.1	111.1
Crude oil, mm tonnes	566.9	571.5	578.3	592.0	588.6

Oil equivalent

	As at 31 December				
	2015	2016	2017	2018	2019
Natural gas, mm boe	6,720.4	6,484.2	6,514.7	7,442.1	6,905.4
Gas condensate, mm boe	917.0	854.8	824.5	900.6	908.8
Crude oil, mm boe	4,155.4	4,189.1	4,238.9	4,339.4	4,314.4
Total, mm boe	**11,792.8**	**11,528.1**	**11,578.1**	**12,682.1**	**12,128.6**

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 in Russian Federation

	As at 31 December				
	2015	2016	2017	2018	2019
Gazprom Group					
Number of subsoil licences for geological surveying, prospecting for, and exploration and production of hydrocarbons	267	267	265	274	302
Total area of license areas, thousand square km	546.9	545.6	547.5	559.3	573.2
Entities investments in which are classified as joint operations					
Number of subsoil licences for geological surveying, prospecting for, and exploration and production of hydrocarbons	35	36	36	36	37
Total area of license areas, thousand square km	22.9	23.1	23.1	23.1	23.9

License areas set out by federal districts of the Russian Federation, as at 31 December 2019, thousand square km

License category*	Ural FD	Northwest FD	South FD and North Caucasian FD	Volga FD	Siberian FD	Far Eastern FD	Continental shelf of the Russian Federation
Gazprom Group							
Licenses for prospecting, exploration and production of hydrocarbons (SEPL)	29.9	–	2.8	4.8	51.4	–	325.6
Licenses for exploration and production of hydrocarbons (EPL)	67.8	1.5	5.4	3.0	20.7	12.6	11.8
Licenses for geological survey (SL)	20.5	–	0.3	2.4	11.0	1.7	–
Total	**118.2**	**1.5**	**8.5**	**10.2**	**83.1**	**14.3**	**337.4**
Entities investments in which are classified as joint operations							
Licenses for prospecting, exploration and production of hydrocarbons (SEPL)	0.8	–	–	–	–	–	–
Licenses for exploration and production of hydrocarbons (EPL)	4.1	–	–	–	18.9	–	–
Licenses for geological survey (SL)	0.1	–	–	–	–	–	–
Total	**5.0**	**–**	**–**	**–**	**18.9**	**–**	**–**

* License types in accordance with Russian legislation.

Licenses for the main hydrocarbon fields as at 31 December 2019

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
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
Tambeyskoye (excluding Zapadno-Tambeysky, Severo-Tambeysky, Tasiysky license blocks)	–	PJSC Gazprom		OGC	EPL	2028
Kruzenshternskoye	–			GC	EPL	2028
Malyginskoye	–			GC	EPL	2028
Antypajutinskoye	–			G	EPL	2028
Tota-Yakhinskoe	–			G	EPL	2028
Tazovskoye	–	OOO Meretoyahaneftegaz	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
Vyngapurovskoye (Khanty-Mansi Autonomous Area)	1982			OGC	EPL	2090
Vyngapurovskoye (Yamal-Nenets Autonomous Area)	1982			OGC	EPL	2113
Southrn part of the Priobskoye field	1999	OOO Gazpromneft-Khantos	100%	O	EPL	2038

Field name	Year of production start	Subsidiary — license holder	Gazprom Group share*,%	Field type**	License category***	License expiration year****
Southern Russia (South FD)						
Astrakhanskoye	1986	OOO Gazprom Dobycha Astrakhan	100%	GC	EPL	2222
Zapadno-Astrakhanskoye	–			GC	SEPL	2029
South Ural region (Volga FD)						
Orenburgskoye	1974	OOO Gazprom Dobycha Orenburg	100%	OGC	EPL	2038
Estern section of the Orenburgskoye OGC field	1994	OOO Gazprom Neft Orenburg	100%	OGC	EPL	2138
Eastern Siberia and the Far East (Siberian and Far Eastern FDs)						
Chayandinskoye	2019	PJSC Gazprom		OGC	EPL	2028
Kovyktinskoye (including Khandinkaya 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
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

Field name	Year of production start	Subsidiary — license holder	Gazprom Group share*,%	Field type**	License category***	License expiration year****
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 (Tomsk Region)	1966			O	EPL	2145
Pervomayskoye (Tomsk Region)	1981			O	EPL	2105
Luginetskoye	1982			OGC	EPL	2098
Associated and jointly controlled companies						
Western Siberia (Ural 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)						
Kuymbinskoye	2018	OOO Slavneft-Krasnoyarskneftegas	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 Russian classification of reserves: 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 Russian classification of reserves.
**** 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.
***** The financial results of this entity are not included in the IFRS consolidated financial statements for 2019 due to insignificance.

Production

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

Metric units

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural and associated gas, bcm	419.52	420.13	472.05	498.68	501.22
Gas condensate, mm tonnes	15.34	15.85	15.94	15.93	16.71
Crude oil, mm tonnes	44.04	47.15	48.63	48.28	47.96

Oil equivalent

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural and associated gas, mm boe	2,722.68	2,726.64	3,063.60	3,236.43	3,252.92
Gas condensate, mm boe	125.48	129.65	130.39	130.31	136.69
Crude oil, mm boe	322.81	345.61	356.46	353.89	351.55
Total, mm boe	**3,170.97**	**3,201.91**	**3,550.45**	**3,720.63**	**3,741.16**

Note. For management accounting purposes, Gazprom Group measures hydrocarbon reserves and production in metric units. In this Factbook, gas production is 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 the production of entities, investments in which are classified as joint operations)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural and associated gas, mmcm / day	1,149.4	1,147.9	1,293.3	1,366.2	1,373.2
Gas condensate, thousand tonnes / day	42.0	43.3	43.7	43.7	45.8
Crude oil, thousand tonnes / day	120.7	128.8	133.2	132.3	131.4

Actual maximum daily natural and associated gas production in the autumn-winter period
(excluding entities, investments in which are classified as joint operations)

	Autumn-winter period				
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Date	10.12.2014	22.10.2015	02.12.2016	23.02.2018	19.01.2019
Production, mmcm	1,456.9	1,555.7	1,535.6	1,512.6	1,538.6
Incluging production in UGSS	1,318.1	1,320.2	1,529.0	1,494.3	1,510.5

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural and associated gas, bcm					
PJSC Gazprom and its major subsidiaries*	368.20	368.60	419.72	444.99	445.09
PAO Gazprom Neft and its subsidiaries	12.53	13.64	15.40	17.84	21.26
ZAO Purgaz	12.70	11.74	10.82	9.64	8.72
OAO Severneftegazprom	25.05	25.12	25.04	25.13	25.07
Total (excluding share in the production of companies, investments in which are classified as joint operations)	**418.48**	**419.10**	**470.98**	**497.60**	**500.14**
Entities, investments in which are classified as joint operations (attributable to the share of Gazprom Group)	1.04	1.03	1.07	1.08	1.08
Total (including share in the production of companies, investments in which are classified as joint operations)	**419.52**	**420.13**	**472.05**	**498.68**	**501.22**
Gas condensate, mm tonnes					
PJSC Gazprom and its major subsidiaries*	15.31	15.83	15.92	15.90	16.67
PAO Gazprom Neft and its subsidiaries	0.03	0.02	0.02	0.03	0.04
Total	**15.34**	**15.85**	**15.94**	**15.93**	**16.71**
Crude oil, mm tonnes					
PJSC Gazprom and its major subsidiaries*	1.74	1.55	1.50	1.45	1.67
PAO Gazprom Neft and its subsidiaries	34.30	37.74	39.48	39.46	39.11
Total (excluding share in the production of companies, investments in which are classified as joint operations)	**36.04**	**39.29**	**40.98**	**40.91**	**40.78**
Entities, investments in which are classified as joint operations (attributable to the share of Gazprom Group)	8.00	7.86	7.65	7.37	7.18
Total (including share in the production of companies, investments in which are classified as joint operations)	**44.04**	**47.15**	**48.63**	**48.28**	**47.96**

* Including the production volumes of OOO Gazprom dobycha shelf Yuzhno-Sakhalinsk, AO Tomskgazprom. Also including 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 the production of entities, investments in which are classified as joint operations)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural gas, bcm					
Ural Federal District	385.18	385.46	437.56	464.36	465.76
Northwest Federal District	2.14	2.06	2.02	1.89	1.99
South Federal District and North Caucasian Federal District	11.15	11.28	11.58	11.94	12.22
Volga Federal District	16.22	15.65	14.95	14.40	14.42
Siberian Federal District	3.82	4.55	4.88	4.91	4.86
Far Eastern Federal District	0.40	0.41	0.43	0.45	1.21
Continental shelf of the Russian Federation	0.61	0.72	0.63	0.73	0.76
Total	**419.52**	**420.13**	**472.05**	**498.68**	**501.22**
Gas condensate, mm tonnes					
Ural Federal District	11.14	11.59	11.51	11.38	12.10
Northwest Federal District	0.12	0.12	0.12	0.12	0.11
South Federal District and North Caucasian Federal District	3.51	3.56	3.68	3.81	3.90
Volga Federal District	0.15	0.14	0.12	0.12	0.13
Siberian Federal District	0.31	0.31	0.39	0.37	0.32
Far Eastern Federal District	0.01	0.01	0.01	0.02	0.02
Continental shelf of the Russian Federation	0.10	0.12	0.11	0.11	0.13
Total	**15.34**	**15.85**	**15.94**	**15.93**	**16.71**
Crude oil, mm tonnes					
Ural Federal District	32.39	34.45	35.71	36.82	36.34
Northwest Federal District	0.04	0.03	0.02	0.02	0.02
South Federal District and North Caucasian Federal District	0.09	0.09	0.09	0.08	0.12
Volga Federal District	2.76	2.85	2.85	2.79	3.10
Siberian Federal District	7.87	7.58	7.32	5.38	5.24
Far Eastern Federal District	0.00	–	0.00	0.00	0.00
Continental shelf of the Russian Federation	0.89	2.15	2.64	3.19	3.14
Total	**44.04**	**47.15**	**48.63**	**48.28**	**47.96**

Useful life of APG by Gazprom Group in Russia

	For the year ended 31 December				
	2015	2016	2017	2018	2019
APG usage, bcm					
PJSC Gazprom and its major subsidiaries*	1.87	1.79	1.64	1.57	1.66
PAO Gazprom Neft and its subsidiaries	6.51	7.63	8.71	11.29	14.81
Total excluding share in the production of entities where Gazprom has investments classifies as joint operations	**8.38**	**9.42**	**10.35**	**12.86**	**16.47**
Entities where Gazprom has investments classifies as joint operations, Gazprom's share	1.05	1.03	1.07	1.08	1.08
Total including share in the production of entities where Gazprom has investments classifies as joint operations	**9.43**	**10.45**	**11.42**	**13.94**	**17.55**
Level of useful life of APG, %					
PJSC Gazprom and its major subsidiaries*	95.6	97.8	98.4	98.1	98.5
PAO Gazprom Neft and its subsidiaries	79.6	79.2	76.2	78.4	89.0
Total excluding share in the production of entities where Gazprom has investments classifies as joint operations	**82.7**	**82.2**	**79.0**	**80.4**	**89.9**
Entities where Gazprom has investments classifies as joint operations, Gazprom's share	89.9	87.2	88.9	91.6	91.8
Total including share in the production of entities where Gazprom has investments classifies as joint operations	**83.5**	**82.7**	**79.8**	**81.8**	**90.1**

* Including the production volumes of AO 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				
	2015	2016	2017	2018	2019
Natural and associated gas, bcm	25.55	27.21	27.04	26.92	26.86
Gas condensate, mm tonnes	4.70	5.17	4.96	4.87	4.74
Crude oil, mm tonnes	9.59	9.93	10.91	11.22	11.77

Oil equivalent

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural and associated gas, mm boe	165.82	176.59	175.49	174.71	174.32
Gas condensate, mm boe	38.45	42.29	40.57	39.84	38.77
Crude oil, mm boe	70.29	72.79	79.97	82.24	86.27
Total, mm boe	**274.56**	**291.67**	**296.03**	**296.79**	**299.36**

Note. For management accounting purposes, Gazprom Group measures hydrocarbon reserves and production in metric units. In this Factbook, gas production is 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				
	2015	2016	2017	2018	2019
Exploration drilling, thousand m	143.6	111.6	85.9	157.6	201.7
Exploration wells completed, units	43	40	36	25	41
including wells producing flow	38	34	31	20	39
Seismic exploration 2D, thousand linear km	0.3	1.1	–	5.7	15.0
Seismic exploration 3D, thousand square km	20.0	20.6	18.7	9.5	7.9
Reserves growth due to geological exploration, mm boe	4,153.0	3,404.0	6,337.1	5,440.6	3,906.6
Drilling efficiency, boe / m	28.9	30.5	73.8	34.5	19.4

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Exploration drilling, thousand m	3.2	7.4	12.8	28.7	74.7
Exploration wells completed, units	1	2	4	8	18
including wells producing flow	1	1	4	5	14
Seismic exploration 2D, thousand linear km	–	–	–	–	–
Seismic exploration 3D, thousand square km	459	130	200	474	935

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Production wells completed, units					
natural gas	73	64	116	114	176
crude oil	802	725	660	545	623
at UGSFs	27	13	4	9	15
Total	**902**	**802**	**780**	**668**	**814**
Production drilling, thousand m					
natural gas	153.2	227.2	240.8	304.4	400.8
crude oil	3,163.0	2,735.8	2,559.5	2,202.6	2,811.7
at UGSF	47.5	23.7	13.6	19.4	14.2
Total	**3,363.7**	**2,986.7**	**2,813.9**	**2,526.4**	**3,226.7**

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Oil production wells completed, units	206	231	236	208	206
Oil production drilling, thousand m	789	785	784	749	744

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

	As at 31 December				
	2015	2016	2017	2018	2019
Fields in commercial development, units	135	136	136	138	144
Gas producing wells, units	7,881	7,916	7,945	7,976	8,061
active	7,358	7,441	7,438	7,418	7,438
Oil production wells, units	9,058	9,316	7,944	9,106	8,393
active	8,461	8,681	7,358	8,489	7,752
Comprehensive and preliminary gas treatment units, units	170	171	169	170	171
Booster compressor stations, units	53	58	60	62	64
Booster compressor stations aggregate capacity, MW	5,080.3	5,669.8	5,865.9	6,135.3	6,379.3

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

	As at 31 December				
	2015	2016	2017	2018	2019
Fields in commercial development, units	41	42	41	38	39
Gas producing wells, units	7	7	7	4	4
active	3	3	1	4	4
Oil production wells, units	3,768	3,733	3,810	3,866	3,819
active	3,163	3,379	3,472	3,534	3,516

Promising Fields

Fields under development operated by Gazprom Group

Field	Description	Annual design capacity	Year of commissioning	Year of design capacity	Project status (as at 31 December 2019)
Nadym-Pur-Taz region (Western Siberia)					
Nydinsky block of the Medvezhye field	Located within the Medvezhye field in the Purovsky District of the Yamal-Nenets Autonomous Area.	2.2 bcm of gas	2011	2022–2024	Gas production from the Aptian-Albian deposits is underway. PJSC Gazprom approved design documents for the field construction project to develop Berriasian-Valanginian deposits in the Nydinsky block of the Medvezhye oil and gas condensate field.
Urengoyskoye (Achimov deposits)	Located in the Purovsky District of the Yamal-Nenets Autonomous Area. 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	2020–2023	Development is underway, Operator — 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	2021–2024	Development design completed to achieve full capacity. PJSC Gazprom's approval of the design documentation obtained. Detailed design documents were developed in full. CGTU-21 expansion completed. Construction and installation operations at CGTU-22 are underway.
	Blocks 4–5	15.5 bcm of gas	2020	2027–2030	Development design was completed for Block 4 (Phase 1) and Block 5. PJSC Gazprom's approval of the design documentation obtained. Detailed design documents were developed in full. Site preparation for infrastructure facilities completed. Filling of well pads and motor roads completed. Installation of metal structures, building frames and process equipment at CGTU-41 and CGTU-51 are underway. Installation of external power supply lines and transformer substations at blocks 4A and 5A completed. Well construction is underway. Operator — OOO Achim Development — (a joint venture of PJSC Gazprom with Wintershall Dea GmbH (25.01% of of authorised capital)). In June 2019, PJSC Gazprom and OMV AG signed the Contract on the amendments to the Basic Agreement on Asset Sale first signed in 2018, according to which finalisation of the deal for OMV AG to obtain a 24.98% stake in the project was scheduled for 2020.[1]

[1] In March 2020, the parties signed a Contract on the amendments to the Basic Agreement on Asset Sale. Under the Contract the parties agreed to extend the negotiations for the final agreement on the deal until June 2022.

Field	Description	Annual design capacity	Year of commissioning	Year of design capacity	Project status (as at 31 December 2019)
Oil rims of the Yen-Yakhinskoye and Pestsovoye fields, oil deposits of Zapadno-Tarkosalynskoye field*	Located in the Purovsky District of the Yamal-Nenets Autonomous Area.	1.8 mm tonnes of liquid hydrocarbons	2021	2021–2022	Oil production was started in 2019 in accordance with the development projects of the En-Yakhinskoye, Zapadno-Tarkosalinskoye and Pestsovoye fields. In all projects, pilots and engineering surveys were completed, key engineering solutions were approved, design documents for full-scale development are being developed. In the Yen-Yakhinskoye and Pestsovoye fields' oil rim development projects, construction and installation operations started. In the Yen-Yakhinskoye field's oil rim development project, construction of an export pressure pipeline to OOO Gazprom pererabotka facilities is underway to transport liquid hydrocarbons from the Nadym-Pur-Taz region. In the Zapadno-Tarkosalynskoye field's oil rim development project, site preparation for well pads is underway.
Achimov oil deposits of the Yamburgskoye field	Located in the Taz and Nadym Districts of the Yamal-Nenets Autonomous Area.	8 mm tonnes of oil	2027	2028	First high-tech wells drilled, well design optimisation and cost reduction plan developed. Conceptual geological model updated, development efficiency options explored. In 2019, PAO Gazprom Neft and the government of the Yamal-Nenets Autonomous Area signed a memorandum of understanding on establishing a technology centre for Achimov deposits development.
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 Yamal Peninsula and is most explored.				
Cenomanian-Aptian deposits		115 bcm of gas	2012	2021 (completion of well commissioning to achieve design capacity)	Items constructed and commissioned under the project were three comprehensive gas treatment units with a total annual capacity of 120 bcm, eight booster compressor stations with a total capacity of 820 MW, and 536 gas production wells. Other construction is underway.
Neocomian-Jurassic deposits*		25 bcm of gas 2.3 mm tonnes of liquid hydrocarbons	2025–2027	2030–2032	Follow-up exploration is underway.
Novoportovskoye	Located in the south-eastern part of the Yamal Peninsula, where no infrastructure is available.	8.5 mm tonnes of oil	2016	2020	Oil production and production drilling are underway. Logistical arrangements were completed to enable year-round oil shipment and transportation from the Novoportovskoye field. The final stage of the project included the deployment of Andrey Vilkitsky icebreaker in the Ob Bay for icebreaking support and the launch of Kapitan, the world's first digital Arctic logistics management system. Construction of a gas pipeline through the Ob Bay to Russia's UGSS is underway.

* Operator — OOO Gazprom neft Zapolyar'ye under long-term risk-based operatorship agreements with PJSC Gazprom and its gas production subsidiaries.

Field	Description	Annual design capacity	Year of commissioning	Year of design capacity	Project status (as at 31 December 2019)
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 due to expensive technology used.		1986		Gas production in underway; 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					
Eastern section of the Orenburgskoye OGC field	Located 10-20 km away from Orenburg in a region that benefits from well-developed infrastructure and close vicinity to distribution markets.	3.3 mm tonnes of oil	1994	2029	Ongoing use of multi-stage hydraulic fracturing technology; oil production and production drilling are underway. In 2019 all 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.	4.2 mm tonnes of oil	2013	2024	Oil production and production drilling is underway. The project design provides for a total of 32 wells to be drilled.
Eastern Siberia and the Russian Far East					
Chayandinskoye	Located in the Lensk District of the Republic of Sakha (Yakutia).	25 bcm of gas	2019	2024	In 2019, gas production started at the field, with a 12.5 bcm per annum CGTU-3, a 100 MW booster compressor station and 69 production wells commissioned. Field development is ongoing with gas well pads, gas collection headers, power supply facilities, operational and maintenance facilities being constructed, and start-up and testing are underway at key field facilities.
		1.9 mm tonnes of oil	2014 (pilot production)	2020	Pilot completed. A 131 thousand tonnes per annum oil treatment unit commissioned in 2019. Engineering surveys completed, key engineering solutions approved, design documents for commercial development produced.
Continental shelf of the Russian Federation in the Okhotsk Sea					
Kirinskoye	Located on the continental shelf of the Russian Federation in the Okhotsk Sea, northeast of Sakhalin. Field development is part of Sakhalin III Project.	5.5 bcm of gas	2014	2023–2024	Gas production is underway. Design documents for production capacity additions at the Kirinskoye gas and condensate field have been approved by resolution of PJSC Gazprom. Design gas production level will be provided by seven already constructed production wells. As at 31 December 2019, two wells are in operation.

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

Fields in exploration and prospective licence blocks of Gazprom Group

Field (license block)	Description	Annual design capacity	Year of comissioning	Year of design capacity	Project status (as at 31 December 2019)
Yamal Peninsula and adjacent offshore areas					
Kharasaveyskoye	To be brought 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*		24.5 bcm of gas 1.9 mm tonnes of liquid hydrocarbons	2026	2029	Follow-up exploration is underway.
Kruzenshternskoye	Bovanenkovo group of fields.	33 bcm of gas	2028	2032–2033	A field development plan is being developed.
Continental shelf in Russia's Arctic					
Shtokmanovskoye	Located in the central part of the Barents Sea, northwest of the Novaya Zemlya archipelago and 650 km northeast of the city of Murmansk. Gas supplies are planned both through the Unified Gas Supply System and as LNG to remote markets.	71.7 bcm of gas expandable to 95 bcm of gas	To be determined following adjustment of the pre-investment feasibility study.		The pre-investment feasibility study for the comprehensive development of the Shtokman gas condensate field is being updated.
Ob and Taz Bays					
Kamennomysskoye-more	Fields are located in the middle part of the offshore area of the Ob Bay in the Yamal-Nenets Autonomous Area and are identified as the priority development targets in offshore areas of the Ob and Taz Bays.	15.1 bcm of gas	2025–2027	2027–2029	Development of the field construction design completed. Design documents are at the review stage. An addendum to the field development plan is being prepared.
Severo-Kamennomysskoye		14.5 bcm of gas	2027–2029	2032–2033	Basis of design and design specifications were approved. Development of the field construction design started.
Khanty-Mansi Autonomous Area — Yugra					
Alexander Zhagrin field	Located in the Kondinskiy District of the Khanty-Mansi Autonomous Area — Yugra.	6.4 mm tonnes of oil	2020	2022	3D seismic surveys completed, six exploration wells drilled. Following winter operation of wells, recoverable reserves increased by three times. A pressure pipeline was built and commissioned.

* Operator — OOO Gazprom neft Zapolyar'ye under long-term risk-based operatorship agreements with PJSC Gazprom's gas production subsidiaries.

Field (license block)	Description	Annual design capacity	Year of comissioning	Year of design capacity	Project status (as at 31 December 2019)
Nadym-Pur-Taz region (Western Siberia)					
Yuzhno-Novoportovskiy and Suroviy license blocks	The license blocks are adjacent to the Novoportovskoye field and the Yuzhno-Kamennomysskiy license block.	2.5 mm tonnes of oil	2026	2032	2D seismic surveys completed at the Yuzhno-Novoportovskiy licence block. 2D field seismic survey operations completed at the Suroviy licence block (2019–2020 season). The project perimeter was expanded with access obtained to the Khambateiskiy licence block.
Tazovskoye	Located in the Tazovsky District of the Yamal-Nenets Autonomous Area.	2 mm tonnes of oil	2021	2023	Government expert review passed, surface facilities construction started. Manufacturing and delivery of a modular oil treatment unit completed. Five high-tech production wells drilled.
Meretoyakhinskoye	Located in the Nadymsky District of the Yamal-Nenets Autonomous Area 135 km south-east of the town of Nadym.	2.1 mm tonnes of oil	2025	2027	A well was drilled confirming the feasibility of APG injection into low-permeability reservoirs using miscible gas injection (MGI) technology. Special Achimov deposit core and fluid studies contributed to designing the field development concept.
Zapadno-Yubileynoye	Located in the Nadymsky District of the Yamal-Nenets Autonomous Area 100 km north-west of the town of Nadym.	21 bcm of gas and 5 mm tonnes of oil	2026	2027	Site preparation started for drilling and rig mobilisation.
Gydan Peninsula					
Leskinskiy and Pukhutsyakhsky blocks (Yenisei project)	Licensed blocks are located on the Gydan Peninsula, on the left bank of the Yenisei River. Leskinsky site belongs to the Taimyrskiy Dolgan-Nenetskiy District of the Krasnoyarsk Territory. The Pukhutsyakhskiy block is located in the Taz District of the Yamal-Nenets Autonomous Area.	19.9 mm tonnes of oil	2027	2037	Inventory and service companies mobilised for a seismic survey and drilling of the first prospecting well. 2D field seismic survey operations started at the end of 2019. Inventory storage base established, winter road to the drilling site prepared. An agreement of intent signed with Repsol and Shell to set up a project joint venture.
Eastern Siberia and the Russian Far East					
Omorinskoye, Kamovskoye and Salairskoye fields within the Omorinskiy license block	Located within the Baikitskaya oil and gas bearing region of the Leno-Tungusskaya oil and gas bearing province in the Krasnoyarsk Territory.	2.2 mm tonnes of oil	2026	2032	A desktop exercise started to develop the block's seismic model.
Kovyktinskoye	Located in the Zhigalovskiy and Kazachinsko-Lenskiy Districts of the Irkutsk Region.	25 bcm of gas	2022	2025	The field is in the final pilot phase. Field construction and rig mobilisation for well construction started. Exploration activities are underway, potential production capacities of the existing production well stock are being analysed.
Chonsky cluster (Ignjalinskoye, Vakunayskoye, Severo-Vakunayskoye, Tympuchikanskoye and Verkhnechonskoye fields)	Located in the Katangskiy District of the Irkutsk Region and the Lenskiy District of the Republic of Sakha (Yakutia), 120-140 km east of the district centre, the village of Erbogachen.	2.2 mm tonnes of oil	2024	2030	Two prospecting wells and one horizontal production well were drilled. Average daily flow rates are above plan.

Field (license block)	Description	Annual design capacity	Year of comissioning	Year of design capacity	Project status (as at 31 December 2019)
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, north-east of Sakhalin Island. Field development is part of Sakhalin III Project.	21 bcm of gas	2023–2024	2029–2032	Exploration is completed. According to the field development plan, design gas production level will be provided by 37 production wells. Design documents for field construction and production well construction are being developed. Drilling of eight gas condensate production wells to the cap of the production interval completed by the end of 2019.

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

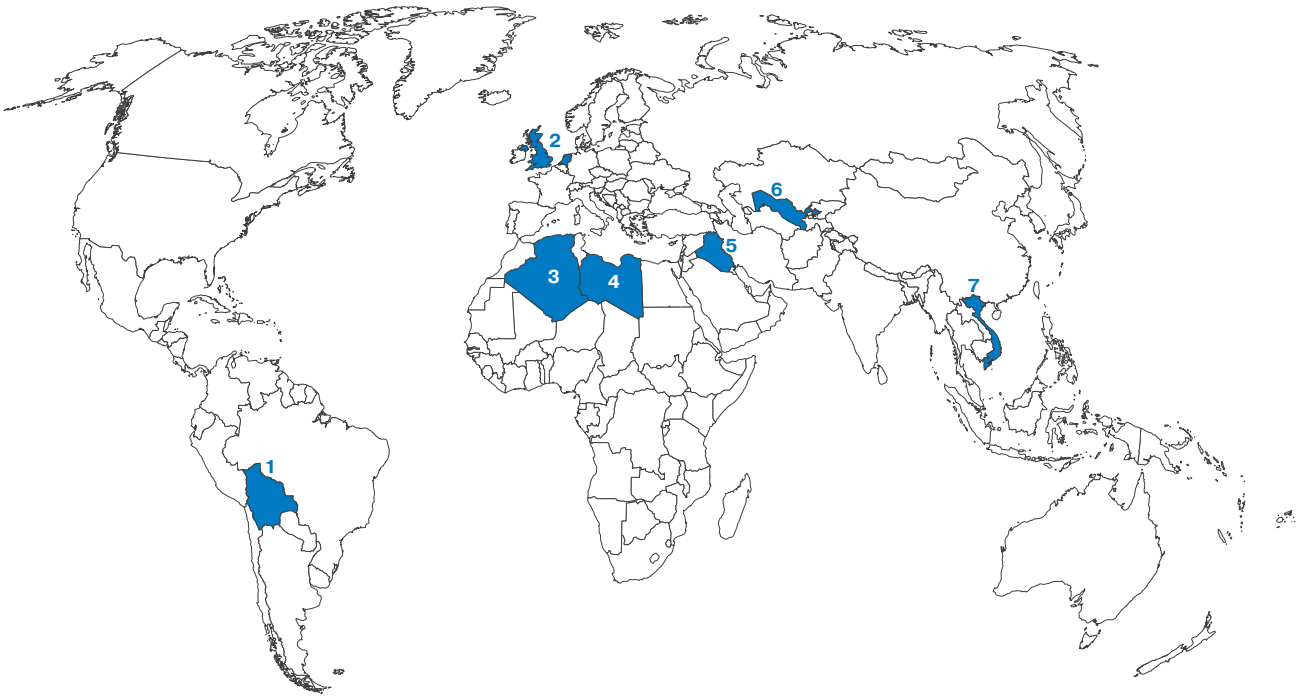
Fields of joint ventures of Gazprom Group

Field	Description	Partner	Annual design capacity	Year of comissioning	Year of design capacity	Project status (as at 31 December 2019)
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	6.0 mm tonnes of oil	2016	2022	Oil production and production drilling is underway. Construction and installation works on infrastructure facilities for APG utilization through gas re-injection into the reservoir were started.
Khanty-Mansi Autonomous Area — Yugra						
Ervier (Ouryinskoye) field	Located on the border of Khanty-Mansi Autonomous Area — Yugra and Sverdlovsk Region	Repsol	2.6 mm tonnes of oil	2024	2026	Pilot development of three wells completed. Subsoil licence for the Sverdlovskiy 4 block obtained.
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	5.0 mm tonnes of oil	2018	2028	Oil production and production drilling is underway. APG utilisation options are being studied.

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

Geological Exploration and Production Abroad

Gazprom Group's hydrocarbon exploration and production activities abroad



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 Aquio licence blocks	Wingate field		
5 Iraq	**6 Uzbekistan**	**7 Vietnam**	
Badra field, Sarkala field (Garmian block, Kurdistan)	Djel field	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 2019.

Key figures of Gazprom's hydrocarbon geological exploration abroad

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Exploration drilling, thousand m	28.3	9.7	18.4	21.9	18.6
Exploration wells completed, units	4	8	8	10	7
including wells producing flow, units	2	7	5	9	7
2D seismic survey, thousand linear km	–	1.5	–	–	–
3D seismic survey, thousand sq. km	1.4	0.8	1.2	1.1	0.7

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

Gazprom Group's hydrocarbon production capacity abroad

	As at 31 December				
	2015	2016	2017	2018	2019
Fields in commercial development, units	53	47	48	47	48
Gas producing wells, units	168	172	163	243	249
active	74	81	81	126	129
Oil production wells, units	963	931	946	887	908
active	661	681	737	734	757

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 production drilling abroad

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Production wells completed, units					
natural gas	–	2	–	4	2
crude oil	35	38	51	46	38
Total	**35**	**40**	**51**	**50**	**40**
Production drilling, thousand m					
natural gas	–	1.6	2.1	5.0	2.8
crude oil	75.0	40.9	67.5	61.5	68.1
Total	**75.0**	**42.5**	**69.6**	**66.5**	**70.9**

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

Gazprom Group hydrocarbon production abroad

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural gas, bcm	415	428	408	393	364
Associated gas, bcm	158	133	115	96	101
Gas condensate, thousand tonnes	31	33	35	6	6
Oil, thousand tonnes	1,086	986	933	910	888

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

Hydrocarbon production abroad, major projects with Gazprom Group's participation

Field name	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural gas, bcm					
Wingate	877	686	436	300	189
Moc Tinh and Hai Thach	1,884	2,142	2,099	2,350	2,193
Shakhpakthy	357	363	312	272	202
Incahuasi	–	740	2,519	2,579	2,608
Associated gas, bcm					
Badra	7	14	208	777	724
Gas condensate, thousand tonnes					
Wingate	5	3	3	2	2
Moc Tinh and Hai Thach	436	573	469	397	349
Incahuasi	–	75	270	280	290
Oil, thousand tonnes					
Badra	1,383	2,575	3,787	3,980	2,902
Sarkala	219	193	370	935	1,451

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

Exploration and production projects of Gazprom Group abroad 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 2019)
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 the 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 I, II and III are fulfilled. Development plans for fields ZERN, ZER, RSH, and RSHN have been prepared. 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. Whereas required performance targets had not been reached following the exploration efforts, licences for the ZER and ZERN fields were returned to the Algerian Government.

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 2019)
Hydrocarbon exploration and development at the Azero licence block.	2013	–	Implemented under the 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. Drilling of the Nyankauasu-1 prospecting well is underway (3,365 m drilled).

UK

Project name, purpose, and description	Project start	The Group's operator role	Terms of the Group's participation	Project status (as at 31 December 2019)
Exploration at the license blocks P1902 (block 44/23c) and P1903 (blocks 44/23d and 44/24c) on the UK continental shelf.	2012	–	Implemented under the Joint Operation Agreement. Gazprom Group finances 20% of the project costs. Partners: Wintershall Noordzee B.V.* (operator) — 49.5%, XTO UK — 15.5%, Gas Union — 15.0%.	Exploration wells 44/23g-14 (Winchelsea-1) and 44/23g-15 (Winchelsea-2) have been completed. Winchelsea field have been discovered. Whereas required performance targets had not been reached, the projects participants decided to suspend the project and return the P1902 and P1903 licences.

*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 2019)
Hydrocarbon prospecting and exploration at Block 112 (incl. extension) in the South China Sea.	2000	■	Implemented under the Production Sharing Agreement. 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 has been prepared. Addendum to the updated feasibility study for the integrated Power Plant — Bao Wang field project has been prepared. The process of extending the exploration phase for three years (until 31 December 2022) was initiated.
Hydrocarbon prospecting and exploration at Blocks 129–132 in the South China Sea.	2008	■	Implemented under the Production Sharing Agreement. 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 deepwater prospecting wells constructed at blocks 130 and 131 in 2015–2016. The Than Bien field was discovered by prospecting drilling in 2015. Geological and logging data was re-processed and re-interpreted. The prospecting and exploration programme and the project's feasibility study were updated.

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 2019)
Hydrocarbon exploration and development at the Shakal block in Kurdistan	2012	■	Implemented under the Production Sharing Agreement. 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 2019)
Development of the Tsentralnoye field on the continental shelf of the Caspian Sea (a joint project of 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, OOO Tsentralnaya Oil and Gas Company obtained a licence for exploration and production of hydrocarbons at the Tsentralnoye field, valid for 27 years. Prior 3D seismic data for the field re-processed and re-interpreted in 2019.

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 2019)
Hydrocarbon exploration and development at licence Blocks 19 (continental shelf of the Mediterranean Sea) and 64 (onshore, in the northern part of the Gadames oil and gas bearing basin).	2007	■	Implemented under exploration and production sharing agreements. Partner — Libyan National Oil Corporation. Gazprom Group finances 100% of the project costs at the exploration stage.	Force majeure continuing under relevant exploration and production sharing agreements.

Exploration and production projects of Gazprom Group abroad at the development and production stage

Bolivia

Project name, purpose, and description	Project start	Exploration results	The Group's operator role	Partners' stakes in the project	Year of comissioning	Annual design capacity	Project status (as at 31 December 2019)
Hydrocarbon exploration and development at the Ipati and Aquio licence blocks under the terms of the Operating Contract. 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	4.0 bcm of gas	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 comprehensive gas treatment unit's capacity was expanded to 11.0 mmcm of gas per day. Construction of the ICS-5 well completed, the previously drilled ICS-3 well put on stream. Work is in progress to connect to the Santa Cruz–Yakuiba (GSCY) trunk pipeline and expand condensate storage capacity. Commercial gas and gas condensate production is underway.

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 comissioning	Annual design capacity	Project status (as at 31 December 2019)
Construction, production, and follow-up exploration at the UK's offshore Wingate gas field (licence blocks P1239 and P1733) under the 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 the development.	–	Gazprom Group — 20%, Wintershall Noordzee B.V. — 64.5%, XTO UK — 15.5%.	2011	0.3 bcm of gas	Six production wells drilled, production is carried out from three production wells. The field is planned to be shut down in 2026.

* As at 31 December 2019, Gazprom Group's share in the company was 50%.

Project name, purpose, and description	Project start	Exploration results	The Group's operator role	Partners' stakes in the project	Year of comissioning	Annual design capacity	Project status (as at 31 December 2019)
Development and Production at the licence block D12b on the Dutch continental shelf. Operator — Wintershall Noordzee B.V.*	2011	A prospecting well was drilled at the Sillimanite cross-border prospect in 2015. The Sillimanite cross-border field was discovered.	–	Implemented under the 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%, GDF SUEZ E&P NEDERLAND B.V. — 5.243%.	2020	0.7 bcm of gas	Project participants signed a field unitisation agreement determining Gazprom Group share at 19.9%. An intergovernmental agreement was signed on the development of the Sillimanite field and its taxation. Construction of platform D12-B and a pipeline, modification of the receiving unit of the D15-A platform, and construction of the first well, D12-B16, were carried out.
Development and production at the licence block 44/19a on the UK's continental shelf. Operator — Wintershall Noordzee B.V.*	2014			Implemented under the 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%, GDF SUEZ E&P UK Ltd. — 8.739%.			

* As at 31 December 2019, 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 comissioning	Annual design capacity	Project status (as at 31 December 2019)
Hydrocarbon production at the Moc Tinh and Hai Thach fields in the South China Sea under 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 the development.	–	Gazprom Group — 49%, Petrovietnam — 51%.	2013	2.0 bcm of gas	Production at the fields was ramped up to design capacity in 2016. Commercial production of gas and gas condensate is underway, production is kept at minimum 2 bcm per year, in line with the field development plan.

Iraq

Project name, purpose, and description	Project start	Exploration results	The Group's operator role	Partners' stakes in the project	Year of comissioning	Annual design capacity	Project status (as at 31 December 2019)
Development of the Badra field under the 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 the development.	■	Gazprom Group — 30%, KOGAS — 22.5%, Petronas — 15%, TPAO — 7.5%, Iraq Government (represented by Oil Exploration Company) — 25%.	2014	5.7 mm tonnes of oil	A revision of the field development plan was put forward to bring poorly swept reserves to production through sidetracking and horizontal well drilling.
Hydrocarbon production at the Garmian block under the Production Sharing Agreement. 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	1.45 mm tonnes of oil	Oil production at the Sarkala field reached 35 thousand barrels of oil per day in 2019 as a result of the commissioning of a third well and the expansion of the oil treatment infrastructure, completed in 2018.

Project name, purpose, and description	Project start	Exploration results	The Group's operator role	Partners' stakes in the project	Year of comissioning	Annual design capacity	Project status (as at 31 December 2019)
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 under the Production Sharing Agreement. The costs are compensated by natural gas supplies. The gas remaining after the cost compensation 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, enhanced recovery initiatives being implemented. A supplementary agreement to the PSA was signed in 2018 to extend its validity till 2024.
Hydrocarbon production at the Djel field in the Republic of Uzbekistan under a PSA. Operator — OOO Operating Company Zarubezhneftegaz — Central Asia.	2018	The Djel field at the Shakhpakhty licence block was discovered in 2009 by exploration carried out as part of the Company's licence obligations.	■	Gazprom Group — 50%, AO Uzbekneftegaz — 50%.	2024	0.15 bcm of gas (first stage) 0.3 bcm of gas (full development)	A PSA was signed in October 2018. A Resolution of the President of the Republic of Uzbekistan approving the PSA for the Djel field development was signed in June 2019. The subsoil licence for the area covered by the PSA was obtained in August 2019. The applicable permit was issued to AO Uzbekneftegas in December 2019, and the Djel Field Development Plan was approved in accordance with the PSA provisions.

Prospecting, exploration and production projects of Associates and Joint Ventures abroad

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 is a party to the exploration and production sharing agreement for blocks 91 and 107 (previously concessions C96 and C97 respectively). Six fields are in production.
Wintershall Noordzee B.V.	the Netherlands, UK, 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 48 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-C, Q1-D and Sillimanite gas fields. In 2019, industrial production of oil from the Ravn field continued in the Danish sector of the North Sea.

Hydrocarbon production of Associates and Joint Ventures in hydrocarbon prospecting, exploration and production abroad

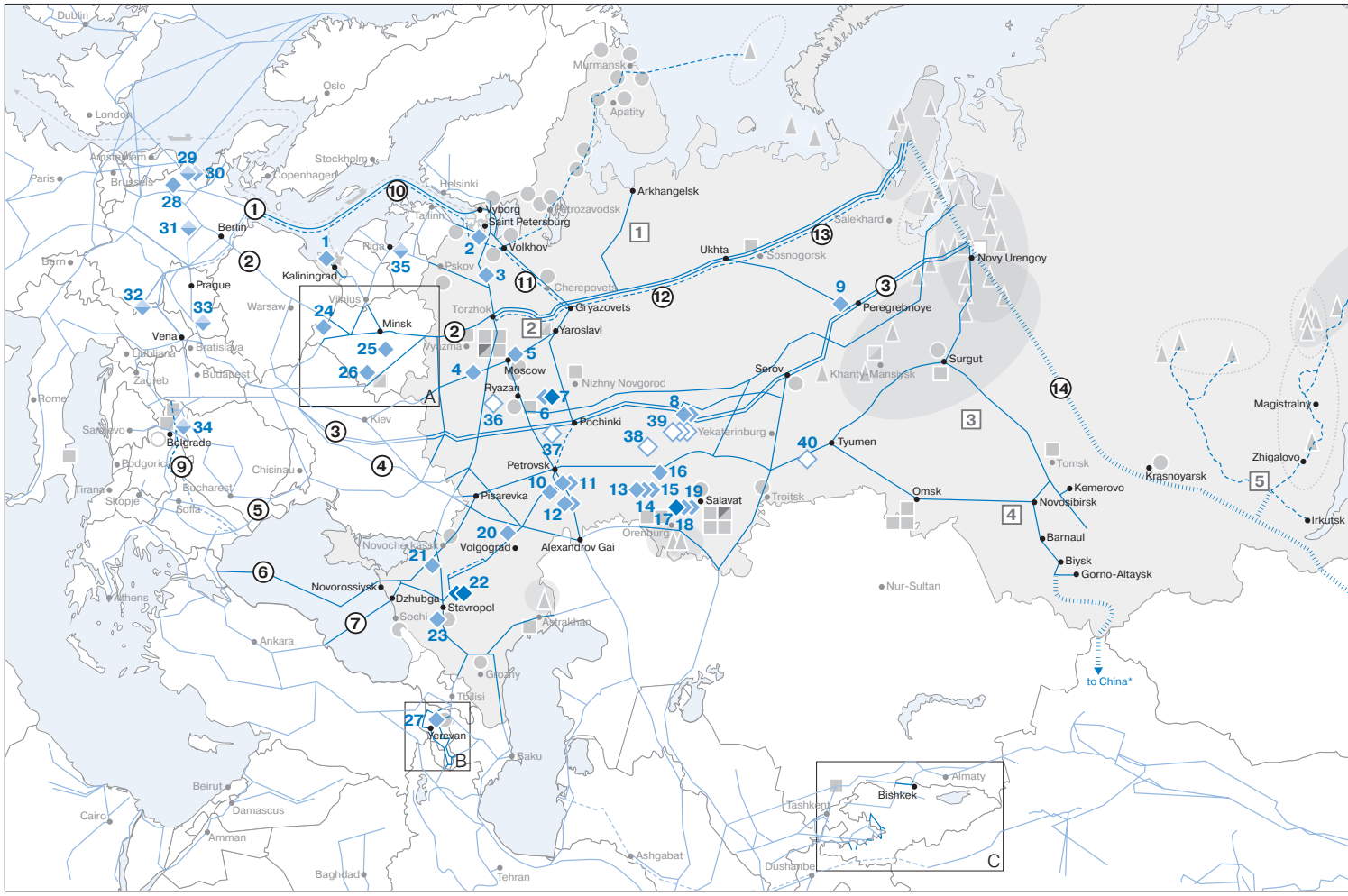
	For the year ended 31 December				
	2015	2016	2017	2018	2019
Wintershall AG					
Oil, thousand tonnes	534	504	1,528	2,148	2,392
Associated gas, mmcm	145	137	233	311	415
Wintershall Noordzee B.V.*					
Natural gas, mmcm	259	1,013	776	712	535
Gas condensate, thousand tonnes	2	5	8	5	4
Oil, thousand tonnes	7	1	17	52	58

* Data since Q4 2015

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

Gas Transportation and Underground Gas Storage

Assets and projects of Gazprom Group in gas 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
- Projected supply routes

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. Soyuz gas pipeline
5. Transbalkanskiy gas pipeline
6. Turkstream gas pipeline
7. Blue Stream gas pipeline
8. Power of Siberia gas pipeline

Gas transportation projects

9. Gas pipeline (interconnector) Bulgaria's border — Hungary's border***
10. Nord Stream 2 gas pipeline
11. Development of gas transportation capacity of the UGSS of the North-West region, section Gryazovets — Slavyanskaya CS
12. Ukhta — Torzhok 2 and Ukhta — Torzhok 3 gas pipelines
13. Bovanenkovo — Ukhta 2 and Bovanenkovo — Ukhta 3 gas pipelines
14. Power of Siberia 2 gas pipeline
15. Sakhalin — Khabarovsk — Vladivostok gas pipeline

Exploration areas for UGSFs

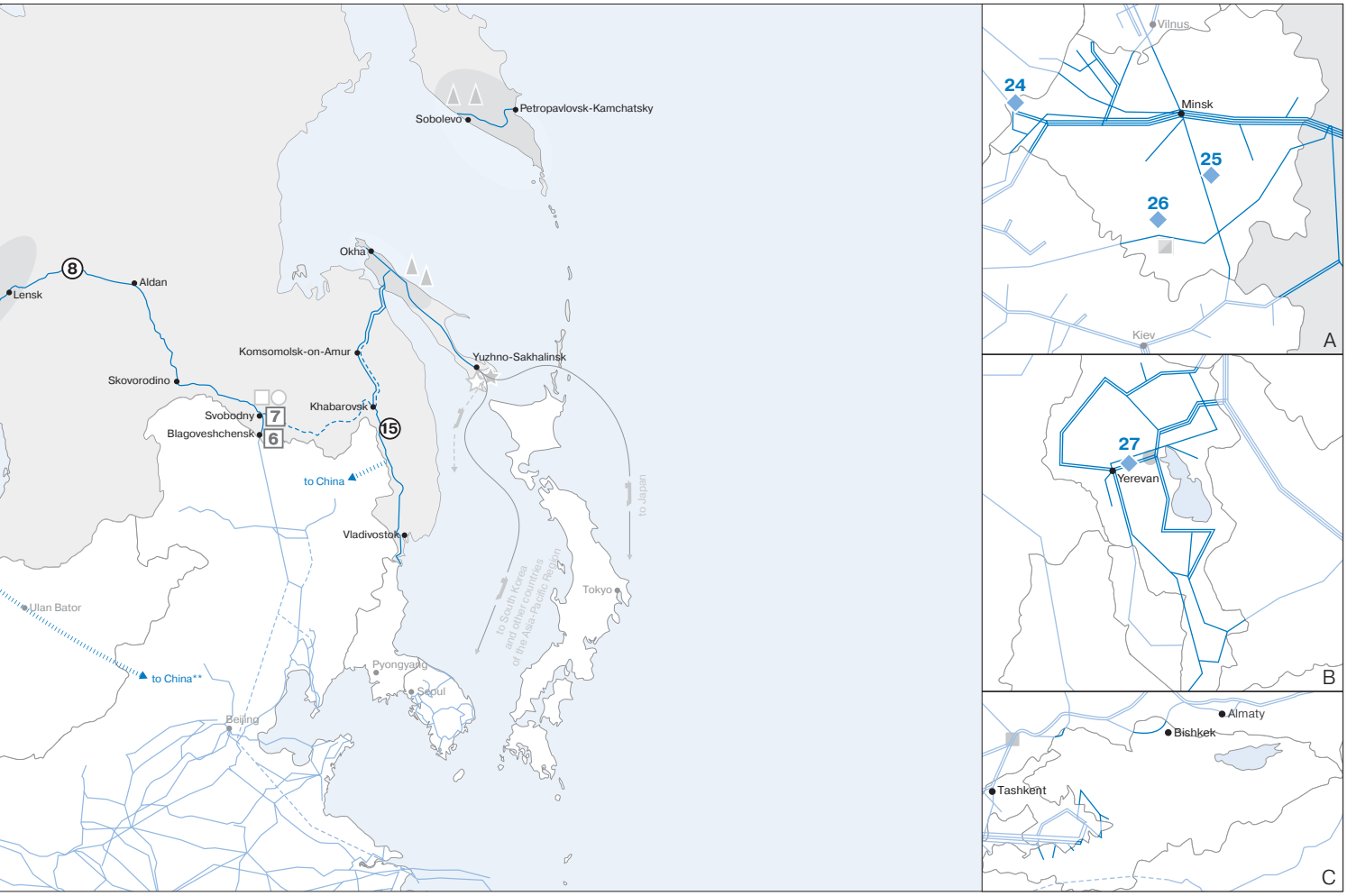
1. Arkhangelskaya
2. Skalinskaya
3. Tiginskaya
4. Utyanskaya
5. Angarskaya
6. Blagoveshchenskaya
7. Belogorskaya

* Negotiations are ongoing between PJSC Gazprom and CNPC to agree the commercial terms and technical conditions of gas supplies from Western Siberia fields to China via the eastern route.

** A study is underway to explore the possibility of gas supplies from Russia to China through Mongolia in accordance with the Memorandum of Understanding signed between PJSC Gazprom and the government of Mongolia on 5 December 2019.

*** The project is implemented by GASTRANS d.o.o. Novi Sad, Russian-Serbian joint venture.

Note. As at 31 December 2019.



UGSFs of Gazprom Group

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	Abovyanskaya underground gas storage station (Armenia)
28	Rehden (Germany)

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	Udmurtskiy reserve complex
40	Shatrovskoye

Gas Transportation

Development and overhaul of the GTS and decommissioning of excess capacity in Russia

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Commissioning of new gas trunk pipelines and branch pipelines, km	933	771	640	529	2,279
Upgrade of trunk pipelines, km	169	211	100	362	–
Overhauls, km	1,441	823	810	771	782
Number of technical faults per 1 thousand km	0.05	0.03	0.02	0.05	0.02

Diagnostics of the GTS in Russia, thousand km

	For the year ended 31 December				
	2015	2016	2017	2018	2019
In-pipe flaw detection, thousand km	19.9	23.9	22.1	25.1	28.9
Corrosion inspection, thousand km	17.9	17.3	18.0	14.9	21.6

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

	As at 31 December				
	2015	2016	2017	2018	2019
Length of gas trunk pipelines and pipeline branches, in single-line measuring, including technological jumpers, thousand km	171.2	171.8	172.1	172.6	175.2
Linear compressor stations, units	250	253	254	254	254
Gas pumping units (GPUs), units	3,829	3,852	3,844	3,812	3,788
GPUs installed capacity, thousand MW	46.2	46.7	46.7	47.1	46.8

Breakdown of Gazprom Group's trunk pipelines and pipeline branches, including technological jumpers, by operating life, thousand km

	As at 31 December				
	2015	2016	2017	2018	2019
Up to 10 years	19.9	17.3	17.3	16.7	17.5
from 11 to 20 years	19.1	15.8	16.2	15.7	15.5
from 21 to 30 years	47.3	40.9	40.9	34.8	35.3
from 31 to 40 years	49.2	55.2	55.2	59.1	60.0
from 41 to 50 years	23.3	24.9	24.8	26.3	26.7
Over 50 years	12.4	17.7	17.7	20.0	20.2
Total	**171.2**	**171.8**	**172.1**	**172.6**	**175.2**

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Injection into the GTS					
Gas injections into the GTS, including:	574.21	573.80	623.10	638.71	635.60
Central Asian gas	20.04	18.04	20.77	17.68	21.87
Azerbaijanian gas	–	–	–	–	–
Gas withdrawals from UGSFs in Russia and Latvia	24.27	44.94	45.69	51.99	40.54
Reduction of gas reserves in the GTS	4.09	3.85	3.30	2.37	2.82
Total	**602.57**	**622.59**	**672.09**	**693.07**	**678.96**
Distribution from the GTS					
Supply inside Russia, including:	342.32	351.68	354.00	364.74	357.70
Central Asian gas	0.03	0.03	0.03	0.02	–
Supply outside Russia, including:	196.75	209.44	232.37	234.75	233.87
Central Asian gas	20.01	18.01	20.74	17.66	21.87
Azerbaijanian gas	–	–	–	–	–
Gas pumped into UGSFs in Russia	27.08	24.65	44.18	49.44	45.02
Technical needs of the GTS and UGSFs	32.28	32.29	37.80	40.55	38.40
Increase of gas reserves in the GTS	4.14	4.53	3.74	3.59	3.97
Total	**602.57**	**622.59**	**672.09**	**693.07**	**678.96**

Gas transportation volumes of Nord Stream, Blue Stream and Power of Siberia gas pipelines, bcm

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Power of Siberia gas pipeline	x	x	x	x	0.33
Nord Stream gas pipeline (through Portovaya CS)	39.11	43.79	50.98	58.71	58.50
Blue Stream gas pipeline (through Beregovaya CS)	15.68	13.06	15.89	13.25	11.10

Gas transportation services provided to PJSC Gazprom in neighbouring countries, bcm

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Through the Imatra gas metering station (for supply to Finland)	2.76	2.53	2.36	2.62	2.46
Through Ukraine	67.08	82.20	93.46	86.78	89.59
Through Lithuania	2.07	2.21	2.43	2.63	2.45
Though Latvia	1.34	0.42	0.06	0.16	0.11
Through Estonia	2.40	1.72	1.24	1.44	1.51
Through Moldova	16.72	18.46	20.22	18.07	10.23
Through Kazakhstan	41.77	27.67	32.69	33.23	21.64

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

	As at and for the year ended 31 December				
	2015	2016	2017	2018	2019
Belarus (OAO Gazprom transgaz Belarus' GTS and a part of Yamal–Europe trunk gas pipeline passing through Belarus)					
Length*, thousand km	7.9	7.9	7.9	7.9	7.9
Number of compressor stations, units	10	10	10	10	10
Gas inflow to gas transportation system, bcm	64.20	60.33	61.17	62.59	60.78
including transit	45.41	41.69	42.16	42.26	40.51
Armenia (ZAO Gazprom Armenia)					
Length*, thousand km	1.7	1.7	1.7	1.7	1.7
Number of compressor stations, units	–	–	–	–	–
Gas inflow to gas transportation system	2.29	2.24	2.38	2.46	2.55
including transit	–	–	–	–	–
Kyrgyzstan (OsOO Gazprom Kyrgyzstan)					
Length*, thousand km	0.7	0.7	0.8	0.8	0.8
Number of compressor stations, units	1	1	1	1	1
Gas inflow to gas transportation system	4.66	4.52	6.64	6.35	6.79
including transit	4.40	4.25	6.36	6.03	6.49

*In single-line measuring.

Main existing PJSC Gazprom's export gas transportation routes

Gas pipeline	Annual design capacity, bcm	Length, km	Pipe diameter, mm	Countries which and/or the territorial waters of which the pipeline passes
Yamal — Europe	32.9	More than 2,000	1,420	Russia, Belarus, Poland, Germany
Nord Stream	55	1,224	1,220	Territorial waters of Russia, Denmark, Germany Exclusive economic zones of Russia, Finland, Sweden, Denmark, Germany
Urengoy — Pomary — Uzhgorod*	32	4,451	1,420	Russia, Ukraine
Soyuz*	26	2,750	1,420	Russia, Kazakhstan, Ukraine
Progress*	28.5	3,473	1,420	Russia, Ukraine
Transbalkanskiy*	20	2,750	800–1,200	Ukraine, Romania, Bulgaria, Turkey
Blue Stream (offshore part)	16	Two pipeline strings 382 km and 389 km long	600	Russia, Turkey
Turkstream (offshore part)**	31.5	Two pipeline strings 937 km and 939 km long	813	Russia, Turkey
Power of Siberia**	Up to 48	2,250.9 (Chayandinskoye field–China's border section)	1,420	Russia

* Gas pipelines of the Ukrainian corridor.
** Comissioned in 2019

Note. As at 31 December 2019.

Major gas transportation projects of Gazprom Group

Project	Purpose	Project highlights: Length	Project highlights: Number / total capacity of compressor stations (CS)	Project highlights: Annual capacity	Year of comissioning	Project status (as at 31 December 2019)
Gryazovets — Vyborg pipeline loopings to the second line on Gryasovets — Volkhov section (expansion)	Additional gas supplies to consumers in Saint Petersburg and the Leningrad Region	217.15 km	–	7.0 bcm	2017–2020	Construction and installation are underway. In 2018, a 63.6 km section was commissioned. Welding done on a 149.4 km-long section in 2019. Special works and preparation to seasonal works are ongoing.
Nord Stream 2	Gas supplies to consumers in Western and Central Europe	Two pipeline strings c. 1,235 km long	–	55 bcm	2020*	Installation of gas pipeline sections was completed on schedule in the territorial waters of Finland, Sweden and Russia, including three above-water tie-ins. On 30 October 2019, approval was obtained for the Nord Stream 2 gas pipeline route to run in Denmark's exclusive economic zone south-east of the island of Bornholm. As at 31 December 2019, over 2,300 km of pipe was laid under the Baltic Sea across all sections (94% of the route's total length). The construction of onshore sections in Germany and Russia is nearing completion. Following the signing of the National Defense Authorization Act for Fiscal Year 2020 by U.S. President Donald Trump on 20 December 2019, Allseas vessels left the pipe-laying area on the same day, as the bill contains sanctions against companies involved in the implementation of the Nord Stream 2 and TurkStream projects and laying pipeline at depths of over 100 feet. The offshore pipe-laying operations for the gas pipeline were suspended, and various alternative options are being explored to complete the construction of the pipeline and put it into operation.
Trunk gas pipeline (interconnector) Bulgaria's border — Hungary's border	Gas supplies to Eastern Europe consumers from the TurkStream pipeline	402 km	1 CS / 24 MW	12.8 bcm of gas	2020–2021	Construction and installation of the linear section of the trunk gas pipeline and the compressor station are underway. Welding is nearing completion, with total construction progress at 97%.
Murmansk — Volkhov	Gas transportation from the Shtokmanovskoye field to the Russian UGSS	C. 1,365 km (will be updated following the project design results)	Up to 10 CS / 1,225 MW (will be updated following the project design results)	Up to 46 bcm (Subject to the Shtokmanovskoye field development option)	Construction and commissioning will be scheduled after the Shtokmanovskoye field investment decision is made.	
Bovanenkovo — Ukhta 2	Gas transportation from the Yamal Peninsula fields	1,264.45 km	9 CS / 830 MW	57.5 bcm	2014–2021	The linear section and six compressor stations are in operation. Construction of three compressor stations is underway.

Project	Purpose	Project highlights				Project status (as at 31 December 2019)
		Length	Number / total capacity of compressor stations (CS)	Annual capacity	Year of comissioning	
Ukhta — Torzhok 2	Additional gas supplies to Russia's North-West to expand the domestic gas infrastructure and ensure export supplies via the Nord Stream 2 pipeline	970 km	7 CS / 625 MW	45 bcm	2014–2020	The linear section is in operation. Construction of two compressor stations completed, start-up and testing are underway. Construction of five compressor stations is underway.
Power of Siberia	Gas transportation from the Chayandinskoye field and the Kovyktinskoye to the gas infrastructure of the Far Eastern Federal District, and gas exports to China market	3,053.9 km	9 CS / 1,250 MW	Up to 48 bcm	Phased commissioning in accordance with the obligations under the natural gas sale and purchase agreement.	In December 2019, an official ceremony was held to celebrate the start of Russian pipeline gas supplies to China via the Power of Siberia gas pipeline.
section Chayandinskoye field — China's border		2,250.9 km	8 CS / 1,186 MW	Up to 48 bcm		The Chayandinskoye field–China's border section was commissioned: 2,250.9 km of the linear section (in full) and one 128 MW compressor station were put into operation. The linear section was commissioned in full. Construction of compressor stations continues.
section Kovyktinskoye field — Chayandinskoye field		803 km	1 CS / 64 MW	24 bcm (starting from 2025)		Expert review of design documentation is underway.
Expansion of UGSS transportation capacity in Northwest Russia, Gryazovets — CS Slavyanskaya section	Additional gas supplies to Russia's North-West and export supplies via the Nord Stream 2 pipeline	1,203.5 km	7 CS / 967 MW	58.4 bcm (stages 1–3), including up to 55 bcm of gas supplies to the Nord Stream 2 gas pipeline	Phased comissioning starting in 2018	Construction of the linear section of the trunk gas pipeline and compressor stations is underway. Construction of the 880 km linear section of the pipeline between Gryazovets and Slavyanskaya CS was completed.
Sakhalin — Khabarovsk — Vladivostok (second launch complex)	Additional gas supplies to consumers in the Primorye and Khabarovsk Territories, as well as export supplies	352.9 km	4 CS / 272 MW	C. 22 bcm to full development (to be adjusted based on design stage results)	Phased comissioning starting in 2021	Construction and installation are underway.
Bovanenkovo — Ukhta 3	Gas transportation from the Yamal Peninsula fields	C. 1,260 km (will be updated following the project design results)	10 CS / 1,486 MW (will be updated following the project design results)	C. 60 bcm	Phased comissioning starting in 2023	Design and survey are underway.
Ukhta — Torzhok 3	Additional gas supplies to Russia's North-West and export supplies	C. 972 km (will be updated following the project design results)	6 compressor shops / 708 MW (will be updated following the project design results)	C. 45 bcm	Phased comissioning starting in 2023	Design and survey are underway.

* Data as at 31 December 2019. Various alternative options are being explored to complete the construction of the pipeline and put it into operation.

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

Underground Gas Storage

Gazprom's UGSFs in Russia

	As at 31 December				
	2015	2016	2017	2018	2019
Number of UGSFs, units	26	26	26	27	27
Active capacity, bcm	73.56	73.62	74.93	75.01	75.01
Number of production wells at UGSFs, units	2,686	2,681	2,694	2,705	2,711

Gas storage in Russia

	Injection season				
	2015	2016	2017	2018	2019
Gas injection into UGSFs, mmcm					
Q1	–	–	23.2	99.8	635.7
Q2	10,158.4	8,468.8	17,443.9	23,418.6	21,177.3
Q3	14,498.1	14,209.2	24,434.7	23,616.1	21,411.4
Q4	2,425.3	1,973.1	2,275.4	2,349.9	1,816.4
Total for the season	**27,081.8**	**24,651.1**	**44,177.2**	**49,484.4**	**45,040.8**
	Withdrawal season				
	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
Gas withdrawal from UGSFs, mmcm					
Q3	92.8	114.2	164.4	99.8	450.5
Q4	5,172.1	18,834.6	17,117.2	20,415.6	15,874.4
Q1 of the next year	24,653.1	26,175.1	31,036.3	23,702.9	15,175.8
Q2 of the next year	1,234.2	2,022.8	435.6	513.4	1,107.5
Total for the season	**31,152.2**	**47,146.7**	**48,753.5**	**44,731.7**	**32,608.2**
Maximum potential daily capacity at the start of gas withdrawal season, mmcm per day	789.9	801.3	805.3	812.5	843.3

Major projects for the development of underground gas storage in Russia

Region of the Russian Federation	UGSF	UGSF type	Project highlights	
			Operational gas reserve, bcm	Maximum daily capacity, mmcm
Volgograd Region	Volgogradskoye	Deposits of salt rock	0.8	70.0
Kaliningrad Region	Kaliningradskoye	Deposits of salt rock	0.8	12.0
Republic of Tatarstan	Arbuzovskoye	Water bearing structures	0.7	7.6
Republic of Udmurtia	Udmurtskiy reserve complex	Water bearing structures	2.8	44.9
Tyumen Region	Punginskoye	Depleted field	5.0	50.0
Kurgan Region	Shatrovskoye	Water bearing structures	1.0	14.0
Krasnodar Territory	Kushchevskoye	Depleted field	5.3	70.0
Tula Region	Novomoskovskoye	Deposits of salt rock	0.3	40.0
Penza Region, Republic of Mordovia	Bednodemyanovskoye	Water bearing structures	5.0	70.0

UGSFs with Gazprom Group participation abroad

Country	UGSF	Group participation	UGSF capacity as at 31 December 2019						
			Aggregate active capacity, bcm		Daily withdrawal capacity employed by Gazprom Group, mmcm	CS	GPU	Installed capacity of GPUs, MW	Production wells / caverns
			Total	including employed by Gazprom Group					
Austria	Haidach	Co-investor (55.5%)	2.8	2.4 (of which OOO Gazprom Export — 2.4)	24.5 (of which OOO Gazprom Export — 24.5)	1	4	62	17
Serbia	Banatski Dvor	Co-investor (51%)	0.55	0.28 (of which OOO Gazprom Export — 0.28)	2.5 (of which OOO Gazprom Export — 2.5)	1	2	5	18
Germany	Jemgum	Co-investor (83.3%)	0.7	0.5 (capacity not employed by Gazprom Export)	16.6 (capacity not employed by Gazprom Export)	1	3	38	9
	Katharina	Co-investor (50%)	0.47	0.47 (of which OOO Gazprom Export — 0.47)	25.8 (of which OOO Gazprom Export — 25.8)	1	3	37	8
	Rehden	Ownership	4.16	4.16 (of which OOO Gazprom Export — 3.4)	50.5 (of which OOO Gazprom Export — 50.5)	1	7	90	16
	Etzel	Co-investor (33% share in caverns, 16% share in pipeline)	1.0	0.3 (capacity not employed by Gazprom Export)	6.9 (capacity not employed by Gazprom Export)	1	3	24	9
Czech Republic	Dambořice	Co-investor (50%)	0.3	0.3 (of which OOO Gazprom Export — 0.3)	5.1 (of which OOO Gazprom Export — 4.6)	1	3	10.5	14
Belarus	Pribugskoye	Ownership	0.5	0.5	8.0	1	5	7.1	41
	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	16
Latvia	Inchukalnskoye	Co-investor (34%)	2.3	–	–	1	6	33.1	93
Armenia	Abovyanskaya underground gas storage station	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 2019/2020 withdrawal season

Country	Aggregate active capacity employed by Gazprom Group, bcm	Daily withdrawal capacity employed by Gazprom Group, mmcm
the Netherlands (UGSF Bergermeer*)	1.85	26.1
Austria	1.20	8.6
Slovakia	0.86	5.0
Hungary	0.95	6.55

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

Gazprom's gas injection and withdrawal at UGSFs abroad, mmcm

	Injection season, Q1-Q4				
	2015	2016	2017	2018	2019
Gas injection into UGSFs abroad					
FSU countries					
Total, FSU countries	2,507.3	2,144.3	1,274.9	1,227.8	956.5
Far abroad countries*					
Austria	709.8	683.9	2,222.5	1,527.5	2,124.5
United Kingdom	224.4	–	–	–	–
Hungary	–	–	898.4	290.2	1,003.0
Germany	797.2	654.1	1,840.0	2,072.5	3,639.9
The Netherlands	1,176.9	1,195.0	1,782.0	1,558.1	283.8
Serbia	–	–	12.6	51.1	58.6
Slovakia	–	–	738.0	283.6	1,112.6
Czech Republic	–	105.3	190.8	393.8	26.8
Short-term contracts for storage in European UGSFs	–	–	909.9	412.9	–
Total, far abroad countries	**2,908.3**	**2,638.3**	**8,594.2**	**6,589.7**	**8,249.2**
Total for the season	**5,415.6**	**4,782.6**	**9,869.1**	**7,817.5**	**9,205.7**

* Gazprom Group gas injection under the contracts of OOO Gazprom Export.

	Withdrawal season, Q3-Q4 and Q1-Q2 of the next year				
	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
Gas withdrawal from UGSFs abroad*					
FSU countries					
Total, FSU countries	2,083.1	1,997.1	1,298.7	1,067.5	861.7
Far abroad countries**					
Austria	820.0	1,480.5	2,054.0	546.5	953.3
United Kingdom	224.4	–	–	–	–
Hungary	–	–	898.4	267.7	183.4
Germany	978.1	936.9	2,117.5	1,008.0	740.4
The Netherlands	1,129.8	1,981.3	1,532.8	368.7	500.2
Serbia	12.0	0.5	44.5	13.7	1.2
Slovakia	–	–	673.0	201.7	388.7
Czech Republic	–	104.5	183.2	147.0	46.6
Short-term contracts for storage in European UGSFs	–	–	974.9	–	412.9
Total, far abroad countries	**3,164.3**	**4,503.7**	**8,478.3**	**2,553.3**	**3,226.7**
Total for the season	**5,247.4**	**6,500.8**	**9,777.0**	**3,620.8**	**4,088.4**

* Excluding volumes sold in UGSFs.
** Gazprom Group gas withdrawal under the contracts of OOO Gazprom Export.

Promising UGSFs with Gazprom Group's participation abroad

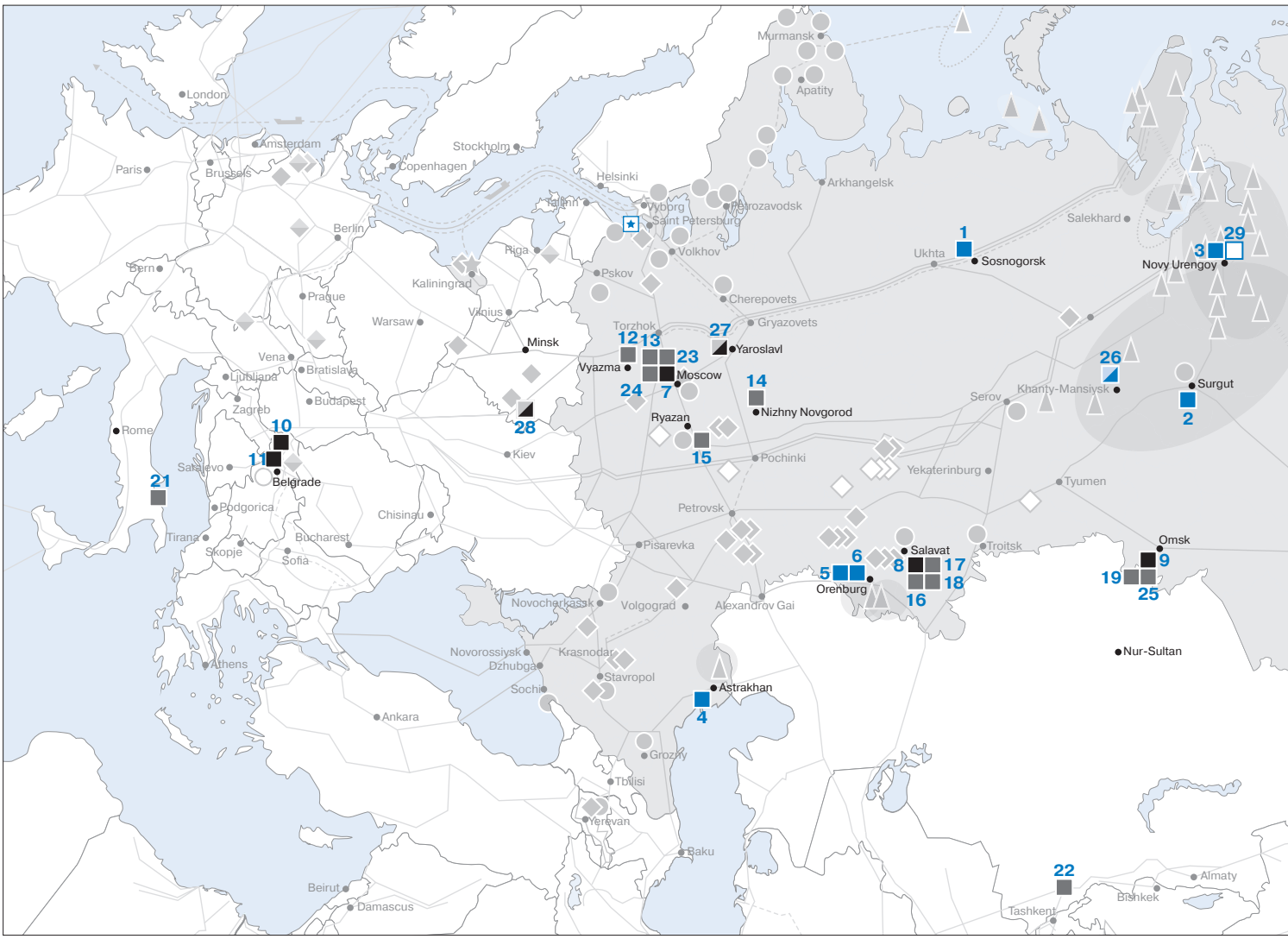
Country	UGSF	Type of construction	Type of UGSF	Project start	Group participation	Project highlights		Year of commissioning	Year of design capacity	Project status (as at 31 December 2019)
						Aggregate active capacity, bcm	Daily capacity, mmcm			
Germany	Jemgum	New construction	Deposits of salt rock	2009	Co-investor (83.3%)	0.9	23.2	2014	2020	Operation and construction of new capacity is underway.
	Katharina	New construction	Deposits of salt rock	2011	Co-investor (50%)	0.7	25.8	2011	2025	Operation and construction of new capacity is underway.
Serbia	Banatski Dvor	Expansion of existing UGSF	Depleted field	2009	Co-investor (51%)	0.8	10	2011	2022*	Operation and expansion is underway.
Czech Republic	Dambořice	New construction	Depleted field	2014	Co-investor (50%)	0.5	7.6	2016	2021	Operation and expansion is underway.

* Preliminary estimates.

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

Hydrocarbon Refining and Processing, Gas Chemical and Petrochemical Business

Main assets and projects of Gazprom Group and joint ventures in hydrocarbon refining and processing, gas chemical and petrochemical business



Existing refining/ processing, gas chemical and petrochemical assets

- GPPs
- Refineries
- Gas chemical and petrochemical facilities
- Gazprom Group's access to GPP capacity
- Gazprom Group's access to refinery capacity
- **Refining/ processing, gas chemical and petrochemical projects**
- **Integrated complex for gas processing and liquefaction near the seaport of Ust-Luga**

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 Pančevo (Serbia)

Gas chemical and petrochemical facilities

12	OOO NOVA-Brit
13	Moscow Lubricants Plant
14	AO 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 2019

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 of joint ventures.

Gazprom Group's access to GPP capacity

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

Gazprom Group's access to refinery 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, gas chemical and petrochemical projects

29	Novourengoyskiy Gas Chemical Complex
30	Amur GPP

Volumes of Gazprom Group's hydrocarbon processing
(excluding tolling arrangements)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural and associated petroleum gas, bcm					
PJSC Gazprom and its major subsidiaries*	30.64	30.06	29.94	30.14	30.60
Gazprom neftekhim Salavat	0.44	0.49	0.43	0.47	0.44
Gazprom Neft	0.10	0.44	0.45	0.45	0.43
Total	**31.18**	**30.99**	**30.82**	**31.06**	**31.47**
Processing of liquid hydrocarbons, mm tonnes					
PJSC Gazprom and its major subsidiaries* (unstable gas condensate, oil)	17.26	17.55	17.47	17.75	18.82
Gazprom Neft (oil, stable gas condensate)	43.07	41.89	40.11	42.91	41.48
including abroad	3.54	3.23	3.42	3.56	3.14
Gazprom neftekhim Salavat (oil, stable gas condensate, fuel oil)	6.44	6.47	6.48	6.74	6.83
Total	**66.77**	**65.91**	**64.06**	**67.40**	**67.13**

* Including the processing volumes of OOO Gazprom dobycha shelf Yuzhno-Sakhalinsk, OOO Sibmetakhim, AO Tomskgazprom. Also including 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 Gazprom's major subsidiaries, mm tonnes
(excluding tolling arrangements)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Stable gas condensate (oil)	6.44	6.58	6.49	6.21	6.65

Processing of natural and associated gas supplied by non-Group companies by Gazprom's major subsidiaries, bcm
(under tolling arrangements)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural and associated gas	8.91	9.28	9.15	9.55	9.11

Major types of Gazprom Group's refined and processed products, and gas chemical and petrochemical products
(excluding tolling arrangements)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Stable gas condensate and oil, thousand tonnes	7,448.1	8,216.4	8,688.7	8,234.3	8,362.0
Dry gas, mmcm	24,205.2	23,996.9	23,607.0	23,590.9	23,928.9
Liquefied hydrocarbon gases, thousand tonnes	3,463.3	3,525.4	3,522.5	3,614.3	3,663.8
including abroad	137.9	115.0	103.0	97.0	77.8
Motor gasoline, thousand tonnes	12,395.2	12,270.0	11,705.6	12,044.9	11,703.1
including abroad	646.8	516.0	469.0	515.7	445.2
Diesel fuel, thousand tonnes	14,837.0	14,971.4	14,322.1	15,662.5	15,514.6
including abroad	1,470.1	1,363.0	1,299.0	1,571.2	1,432.7
Jet fuel, thousand tonnes	3,171.0	3,213.2	3,148.8	3,553.3	3,433.8
including abroad	107.9	122.0	155.0	190.4	154.4
Heating oil, thousand tonnes	8,371.4	7,787.2	6,585.9	6,880.6	7,167.8
including abroad	450.6	334.0	318.00	253.7	186.4
Marine fuel, thousand tonnes	4,172.2	3,177.2	3,367.3	2,952.0	2,795.3
Bitumen, thousand tonnes	1,883.8	2,112.0	2,662.1	3,122.3	2,959.0
including abroad	333.0	335.0	553.3	600.3	572.3
Oils, thousand tonnes	404.1	421.0	480.0	487.2	539.3
Sulphur, thousand tonnes	4,793.8	4,905.6	5,013.6	5,179.7	5,377.8
including abroad	17.8	22.0	24.0	23.0	13.8
Helium, mcm	4,969.7	5,054.1	5,102.2	5,088.9	4,731.5
Wide fraction of light hydrocarbons, thousand tonnes	1,728.2	1,807.0	1,349.7	1,465.5	1,383.8
Ethane fraction, thousand tonnes	377.4	377.9	363.0	347.3	337.3
Monomers, thousand tonnes	243.4	294.0	264.9	335.8	293.3
Polymers, thousand tonnes	157.9	179.1	154.3	185.6	171.6
Products of organic synthesis, thousand tonnes	90.4	89.6	44.7	71.3	49.7
Mineral fertilizers and feedstock, thousand tonnes	775.9	953.0	913.2	836.4	799.7

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

Product	Area of utilization
Acrylic acid, acrylates	Production of absorbent products, water-emulsion paints and other adhesive coatings
Bitumen oil	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, aerospace industry, shipbuilding, mechanical engineering, medicine
Mineral fertilizers (urea, technical liquid ammonia, carbon dioxide, ammonium nitrate)	Agriculture
Monomers (ethylene, propylene, styrene)	Feedstock for the petrochemical industry
Products of organic synthesis (butanol, DOP plasticizer)	Feedstock 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	Feedstock for the petrochemical industry
Cokes	Manufacture of electrodes, anodes. Nonferrous and ferrous metallurgy.
Wide fraction of light hydrocarbons	Feedstock for the petrochemical and gas chemical industry

Refined products produced by major Gazprom Group's subsidiaries
(excluding tolling arrangements)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
PJSC Gazprom and its major subsidiaries*					
Stable gas condensate and oil, thousand tonnes	7,448.1	8,216.4	8,688.7	8,234.3	8,362.0
Dry gas, mmcm	24,119.2	23,620.1	23,223.1	23,211.3	23,568.3
Liquefied hydrocarbon gases, thousand tonnes	2,487.4	2,578.4	2,828.5	2,814.3	2,944.4
Motor gasoline, thousand tonnes	2,532.7	2,497.9	2,234.5	2,150.7	2,319.8
Diesel fuel, thousand tonnes	1,362.1	1,435.6	1,496.8	1,373.4	1,618.6
Jet fuel, thousand tonnes	167.7	174.2	111.8	88.3	95.0
Heating oil, thousand tonnes	332.2	346.1	328.4	323.4	395.4
Sulphur, thousand tonnes	4,623.9	4,696.5	4,847.9	4,983.9	5,154.4
Helium, mcm	4,969.7	5,054.1	5,102.2	5,088.9	4,731.5
Wide fraction of light hydrocarbons, thousand tonnes	1,661.9	1,666.7	1,149.4	1,270.5	1,212.4
Ethane fraction, thousand tonnes	377.4	377.9	363.0	347.3	337.3
Gazprom Neft					
Dry gas, mmcm	86.0	376.8	383.9	379.6	360.6
Liquefied hydrocarbon gases, thousand tonnes	975.9	947.0	694.0	800.0	719.4
including abroad	137.9	115.0	103.0	97.0	77.8
Motor gasoline, thousand tonnes	9,081.2	9,176.0	8,555.0	8,863.8	8,015.2
including abroad	646.8	516.0	469.0	515.7	445.2
Diesel fuel, thousand tonnes	11,874.5	12,023.0	11,325.0	12,323.6	11,870.4
including abroad	1,470.1	1,363.0	1,299.0	1,571.2	1,432.7
Jet fuel, thousand tonnes	3,003.3	3,039.0	3,037.0	3,465.0	3,338.8
including abroad	107.9	122.0	155.0	190.4	154.4
Heating oil, thousand tonnes	7,198.6	6,720.0	5,696.0	6,204.8	6,447.2
including abroad	450.6	334.0	318.00	253.7	186.4
Marine fuel, thousand tonnes	3,666.9	2,410.0	2,671.0	2,576.4	2,490.8
Bitumen, thousand tonnes	1,857.6	2,021.0	2,569.2	2,928.5	2,780.9
including abroad	333.0	335.0	553.3	600.3	572.3
Oils, thousand tonnes	404.1	421.0	480.0	487.2	539.3
Sulphur, thousand tonnes	136.8	180.0	136.0	160.0	186.4
including abroad	17.8	22.0	24.0	23.0	13.8
Wide fraction of light hydrocarbons, thousand tonnes	28.0	131.5	145.4	144.3	136.2
Gazprom neftekhim Salavat					
Motor gasoline, thousand tonnes	781.3	596.1	916.1	1,030.4	1,368.1
Diesel fuel, thousand tonnes	1,600.5	1,512.9	1,500.3	1,965.5	2,025.6
Heating oil, thousand tonnes	840.6	721.1	561.5	352.4	325.2
Sulphur, thousand tonnes	33.1	29.1	29.7	35.8	37.0
Marine fuel, thousand tonnes	505.3	767.2	696.3	375.6	304.5
Bitumen, thousand tonnes	26.2	91.0	92.9	193.8	178.1
Monomers, thousand tonnes	243.4	294.0	264.9	335.8	293.3
Polymers, thousand tonnes	157.9	179.1	154.3	185.6	171.6
Products of organic synthesis, thousand tonnes	90.4	89.6	44.7	71.3	49.7
Mineral fertilizers and feedstock, thousand tonnes	775.9	953.0	913.2	836.4	799.7
Wide fraction of light hydrocarbons, thousand tonnes	38.3	8.8	54.9	50.7	35.2

* Including output of refined products of OOO Gazprom dobycha shelf Yuzhno-Sakhalinsk, OOO Sibmetakhim, AO Tomskgazprom. Also including 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 refining/processing, gas chemical and petrochemical plants

Plant	Company	Location	Year of commissioning / establishment	Annual hydrocarbons processing / production capacity as at 31 December 2019	Product range	Major investment projects implemented in 2019
Astrakhan GPP	OOO Gazprom pererabotka	Astrakhan	1986	12.0 bcm of natural gas, 7.3 mm tonnes of unstable gas condensate 2.5 mm tonnes of stable gas condensate and oil	Dry marketable gas, stable gas condensate, liquefied gas, wide fraction of light hydrocarbons (WFLH), automobile gasoline, light gas condensate distillate, diesel fuel, fuel oil, heavy gas condensate distillate, gas condensate middle distillate, gas 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 WFLH 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 unstable gas condensate and oil	Dry marketable gas, stable gas condensate, liquefied gas, WFLH, gas sulphur, odorant	–
Orenburg Helium Plant		Orenburg	1978	15.0 bcm of natural gas	Helium gaseous and liquid, dry marketable gas, ethane fraction, liquefied gases, WFLH, 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, WFLH, diesel fuel, light distillate of gas condensate TS-1 jet fuel, de-ethanised gas	–
Surgut Condensate Stabilisation Plant		Surgut	1985	4.0 mm tonnes of stable gas condensate and oil or 12.05 mm tonnes of oil and gas condensate mixture (stabilisation)	Stable gas condensate (oil), motor gasoline, diesel fuel, TS-1 jet fuel, liquefied gas, WFLH, pentane-hexane fraction, light gas condensate distillate	Construction of a propane fraction methanol removal unit with a marketable product drying module to improve the quality and environmental performance of marketable products — industrial propane and propane autogas (commissioned in 2019).

Plant	Company	Location	Year of commissioning / establishment	Annual hydrocarbons processing / production capacity as at 31 December 2019	Product range	Major investment projects implemented in 2019
Plant for the Production of Methanol, Methanol Formalin and Carbamide-Formaldehyde Concentrate	OOO Sibmetakhim	Tomsk	1983	Feedstock: 930.98 mmcm of gas. Production: 884.55 thousand tonnes of methanol	Methanol	— Methanol capacity expansion project (Phase 2). — Retrofitting.
			2016	Feedstock: 49.94 thousand tonnes of methanol 15.49 thousand tonnes of urea Production: 61.51 thousand tonnes of urea-formaldehyde concentrate UFC-85 15.05 thousand tonnes of formalin	Formalin methanol, urea-formaldehyde concentrate	Retrofitting.
Omsk Refinery	AO Gazprom neft — Omsk Refinery	Omsk	1955	22.23 mm tonnes of oil and 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 2.0 mm tonnes of vacuum gasoil to increase the output of high-octane gasolines, jet fuel, and diesel fuel; hydrogen and sulphur production unit. — Construction of a combined primary refining unit ELOU-AVT (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 (commissioned in 2019). — Revamp of the 21-10/3M delayed coking unit with an annual capacity of 740 thousand tonnes annually. — Construction of a feed pre-treatment unit for needle coke production with an annual capacity of 38 thousand tonnes. — Upgrade of a catalytic reformer increasing the annual capacity from 600 to 900 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.

Plant	Company	Location	Year of commissioning / establishment	Annual hydrocarbons processing / production capacity as at 31 December 2019	Product range	Major investment projects implemented in 2019
						— Construction of a catalytic cracking regeneration gas treatment unit to reduce SO2, NOX, and solid pollutants emissions from the 43-103 catalytic cracking unit (commissioned in 2019). — Upgrade of the aromatics complex to increase the operation time between repairs to four years and enable processing of the benzene fraction from the catalytic reformer. — Upgrade of the heavy product loading rack. — Upgrade of the flare facilities. — TSU-0.5 hybrid bunker fuel preparation, storage and shipping process (commissioned in 2019). — Construction of a 1 MW solar power plant (commissioned in 2019).
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 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 per day. — Construction of a single-stage kerosene fraction hydrotreating unit with an annual capacity of 1.26 mm tonnes. — Construction of the elemental sulphur production unit. — Construction of a light product loading rack with a maximum capacity of 6.6 thousand tonnes per day (commissioned in 2019).
Oil Refinery (Pančevo)	NIS	Pančevo (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, propylene	Projects to increase production depth: — Construction of an advanced oil refining facility with an annual capacity of 700 thousand tonnes to reduce the output of high-sulphur fuel oil, increase high-quality diesel fuel output and launch petroleum coke production. Other projects: — Upgrade of the catalytic cracking unit, increasing annual capacity from 600 to 660 thousand tonnes. — Construction of an ETBE unit with an annual capacity of 50 thousand tonnes.
Oil Refinery (Novi Sad)	NIS	Novi Sad (Serbia)	1968	Suspended	Motor gasoline, diesel fuel, fuel oil, bitumens	–

Plant	Company	Location	Year of commissioning / establishment	Annual hydrocarbons processing / production capacity as at 31 December 2019	Product range	Major investment projects implemented in 2019
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 Lubricant Plant (MZSM)	AO Gazpromneft MZSM	Fryazino, Moscow Region	2007	62 thousand tonnes of oils	Motor oils, transmission oils, industrial oils	Upgrades of production facilities.
Omsk Lubricant Plant (OZSM)	OOO Gazpromneft — Lubricants	Omsk	2009	310 thousand tonnes of oils	Motor oils, industrial oils	Construction of a hydro-dewaxing unit to treat the hydrocracking residue and produce group II and III base oils.
Ryazan Bitumen Materials Experimental Plant (RZBM)	OOO Gazpromneft — Ryazan Bitumen Materials Plant	Ryazan	2011 (Polymer-bitumen binder unit)	120 thousand tonnes of polymer-bitumen binder	PMB binder	–
Bitumen Plant	TOO Gazpromneft — Bitumen Kazakhstan	South Kazakhstan region (Kazakhstan)	2011	280 thousand tonnes	Road and construction bitumen	–
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, PMB binders, PMB emulsion mastics, road coverings, liquid rubber	–
AO SOVKHIMTEKH, OOO Poliefir OOO BCV-CHEM	Rospolikhim Group of Companies	Nizhny Novgorod	2001	5 thousand tonnes of oils	Aviation, hydraulic, tempering, compressor, vacuum, transmission, refrigerator, industrial, and rolling mill oils, cooling lubricants, plasticisers, preservative lubricants, deicing fluid, vinylin, additives, lubricant bases	–

Plant	Company	Location	Year of commissioning / establishment	Annual hydrocarbons processing / production capacity as at 31 December 2019	Product range	Major investment projects implemented in 2019
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, petroleum fuel, feedstock for viscous road construction bitumens, technical sulphur, oil 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 sulphur-alkaline wastewater neutralisation plant with a capacity of 50 tonnes per hour that will provide advanced treatment of process wastewater, reduce the load on treatment facilities and recycle 100% pure water into the water system. — 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 highsulphur 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, 202.0 thousand tonnes of styrene, 230.0 thousand tonnes of ethylbenzene, 369.0 thousand tonnes of ethylene, 163.0 thousand tonnes of propylene, 152.3 thousand tonnes of benzene, 183.8 thousand tonnes of alcohols, 37.6 thousand tonnes 2-ethylhexanol, 21.9 thousand tonnes of hydrogen, 38.4 thousand tonnes of dioctyl phthalate plasticiser, 16.3 thousand tonnes of phthalic anhydride	Ethylene, propylene, benzene, pentane-isoprene-cyclopentadiene fraction, butylene-butadiene fraction, heavy pyrolysis residue, styrene, ethylbenzene, polystyrenes, high-density polyethylene, high-pressure 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 Akryl Salavat	Salavat	2016	80 thousand tonnes of butyl acrylate, 35 thousand tonnes of glacial acrylic acid (polymer-grade)	Butyl acrylate, glacial acrylic acid	–

* Given in normal cubic meters of gas, which correspond to cubic meters of gas measured under pressure of one atmosphere at 0°C.

Additionally, Gazprom Group has access to the following capacities:

Plant	Company	Location	Year of commissioning / establishment	Annual processing / production capacity as at 31 December 2019	Product range
Slavneft-YANOS	PAO Slavneft-YANOS	Yaroslavl	1958–1961	15.0 mm tonnes of oil	Motor gasoline, stable gas gasoline, diesel fuel, jet fuel, heating oil, oils, aromatic hydrocarbons, sulphur, sulfuric acid, paraffin-wax products
Mozyr Refinery	OAO Mozyr Oil Refinery	Mozyr (Republic of Belarus)	1975	14.0 mm tonnes of oil	Motor gasoline, lighting kerosene, diesel fuel, household heating oil, heating oil, oil bitumen, liquefied petroleum gases, vacuum gasoil, petroleum benzene
NPP Neftekhimiya	OOO NPP Neftekhimiya (joint venture with PAO SIBUR Holding)	Moscow	2003	140.0 thousand tonnes	Polypropylene
Poliom	OOO Poliom (joint venture with PAO SIBUR Holding)	Omsk	2013	218.4 thousand tonnes	Polypropylene
Total — PMB	OOO Gazpromneft — Total PMB (joint venture with Total)	Moscow	2014	40.0 thousand tonnes	Polymer-modified bitumen and polymer-bitumen 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, wide fraction of light hydrocarbons

Major Gazprom Group's new hydrocarbon refining and processing, gas chemical and petrochemical projects

Project name and purpose	Company	Location	Annual processing / production design capacity	Year of comissioning	Project status (as at 31 December 2019)
Novourengoysky Gas Chemical Complex. Purpose — process de-ethanised condensate gases from the Nadym-Pur-Taz region. Potential target markets for marketable products include Russia, Europe and Asia.	OOO NGHK	Novy Urengoy	1,456 thousand tonnes of ethane-containing gas, 400 thousand tonnes of low-density polyethylene	Will be determined following facility diagnostics	A pre-investment feasibility study for upgrading the Novourengoysky Gas Chemical Complex with optimal investment project completion options was developed in 2019. Further project implementation will continue under the Coordination Agreement between PJSC Gazprom and PAO SIBUR Holding to look into the possibility of joining forces in implementing major investment projects in gas processing and gas chemical production signed in September 2019. A roadmap was signed in October 2019 for implementation of the Agreement, with 2020 activities including engineering surveys, diagnostics of previously procured and installed equipment, pipelines and technical devices, inspection of buildings and structures, drawing up design documentation in order to complete the construction of the Novy Urengoy Gas Chemical Complex.

Project name and purpose	Company	Location	Annual processing / production design capacity	Year of comissioning	Project status (as at 31 December 2019)
Amur GPP. Purpose — comprehensive processing of natural gas from the Yakutsk and Irkutsk gas production centres.	OOO Gazprom pererabotka Blagoveschensk	Svobodnensky District, Amur region	Processing of 42.0 bcm of natural gas Production 39.0 bcm of marketable gas, up to 2.0 mm tonnes of etane, up to 1.6 mm tonnes of compressed natural gas, up to 0.2 mm tonnes of pentane-hexane fraction, 60.0 mmcm of helium*	First start-up complex — 2021, second start-up complex — 2022, third start-up complex — 2023, fourth start-up complex — 2024, fifth start-up complex — 2025	Project design work completed in full with positive opinions of governmental and non-governmental expert reviews obtained for all stages. Preparatory works and infrastructure preparation were completed. Full-scale construction of the facilities for the gas processing and helium complex is underway. Work is underway on the facilities of four process trains. Construction of pile footings, foundations and cast concrete structures, installation of metal structures and large equipment, welding of process piping are ongoing. Work at the connection point to the Power of Siberia trunk gas pipeline is nearing completion. At the end of December 2019, OOO Gazprom Pererabotka Blagoveshchensk and PJSC Gazprom completed the signing of project finance documentation for the construction of the Amur GPP.
A stabilisation unit for Achimov deposit condensate from the Nadym-Pur-Taz region. Purpose — creation of treatment and transport arrangements for heavy paraffinous raw material (oil and condensate of the Achimov deposits) in the north of the Tyumen Region.	OOO Gazprom pererabotka	Purovsky District, Yamal-Nenets Autonomous Area	Unstable gas condensate — 4.0 mm tonnes, de-ethanised condensate — 2.4 mm tonnes, stable condensate — 1.2 mm tonnes, de-ethanised gases — 0.4 bcm.	2020	The facility is in the final construction stage.
A gas-to-olefins complex for conversion of natural gas to ethylene and propylene and further conversion of the olefins to petrochemical derivatives at OOO Gazprom neftekhim Salavat. Purpose — natural gas monetisation through production of high value-added products.	OOO Gazprom neftekhim Salavat	Salavat	Future feedstock volumes — 1.5–3 bcm of natural gas*	2025	Investment feasibility assessment is underway.
Catalyst production. Objectives: — Creation of a new knowledge-intensive business unit at PAO Gazprom Neft for production and servicing of catalytic cracking, hydrotreatment and hydrocracking catalysts; — Addressing import substitution and own innovation commercialisation; — Launching a large-scale high-tech production of modern effective catalysts for Gazprom Neft's refineries as well as other refineries in Russia, the CIS and far abroad countries.	OOO Gazprom-neft — CS	Omsk	21 thousand tonnes of catalysts	2021	Project design work completed in full with positive opinions of government expert review obtained for all stages. Preparatory works and infrastructure preparation were completed. Full-scale construction of offsites and the pilot centre, construction of pile footings and foundations of main production facilities are ongoing. Delivery of large equipment to the site is in progress. A special investment contract to obtain tax benefits was signed with the Ministry of Industry and Trade and the Omsk Region government in February 2019.

* Given in normal cubic meters of gas, which correspond to cubic meters of gas measured under pressure in one atmosphere at 0°C.

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

Prospective hydrocarbon refining and processing, gas chemical and petrochemical projects where Gazprom Group participates

Project and purpose	Company	Location	Gazprom Group terms of participation	Annual processing / production design capacity	Year of commissioning	Project status (as at 31 December 2019)
Integrated complex for gas processing and liquefaction near the seaport of Ust-Luga. Purpose — comprehensive processing of ethane-rich gas from the Nadym-Pur-Taz region of the Yamal-Nenets Autonomous Area.	OOO RusKhimAlyans (established on a parity basis by OOO Gazprom invest RGK (a subsidiary of OOO Gazprom mezhregiongaz) and AO RusGazDobycha)	Leningrad Region, Kingisepp District	Financing of the project by PJSC Gazprom: 50% — prior to obtaining project finance 15% — after obtaining project finance.	Processing of 45 bcm of natural gas with production of dry stripped gas, LPG, ethane and pentane-hexane fractions	First stage — late 2023, Second stage — late 2024	Preparations are ongoing in obtaining licensed technology and procurement; a project contracting strategy and a roadmap to obtain project finance developed. Design is underway, engineering surveys were completed, construction site is being prepared.

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

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

Project	Company	Location	Annual design capacity	Year of commissioning	Project status (as at 31 December 2019)
Urengoyskaya oil pumping station	OOO Gazprom pererabotka	Purovsky District, Yamal-Nenets Autonomous Area	Transportation of 5.0 mm tonnes of hydrocarbons	2020	The facility is in the final construction stage.
Urengoy — Purpe oil and condensate pipeline		Purovsky District, Yamal-Nenets Autonomous Area	Transportation of 5.0 mm tonnes of hydrocarbons	2020	The facility is in the final construction stage.

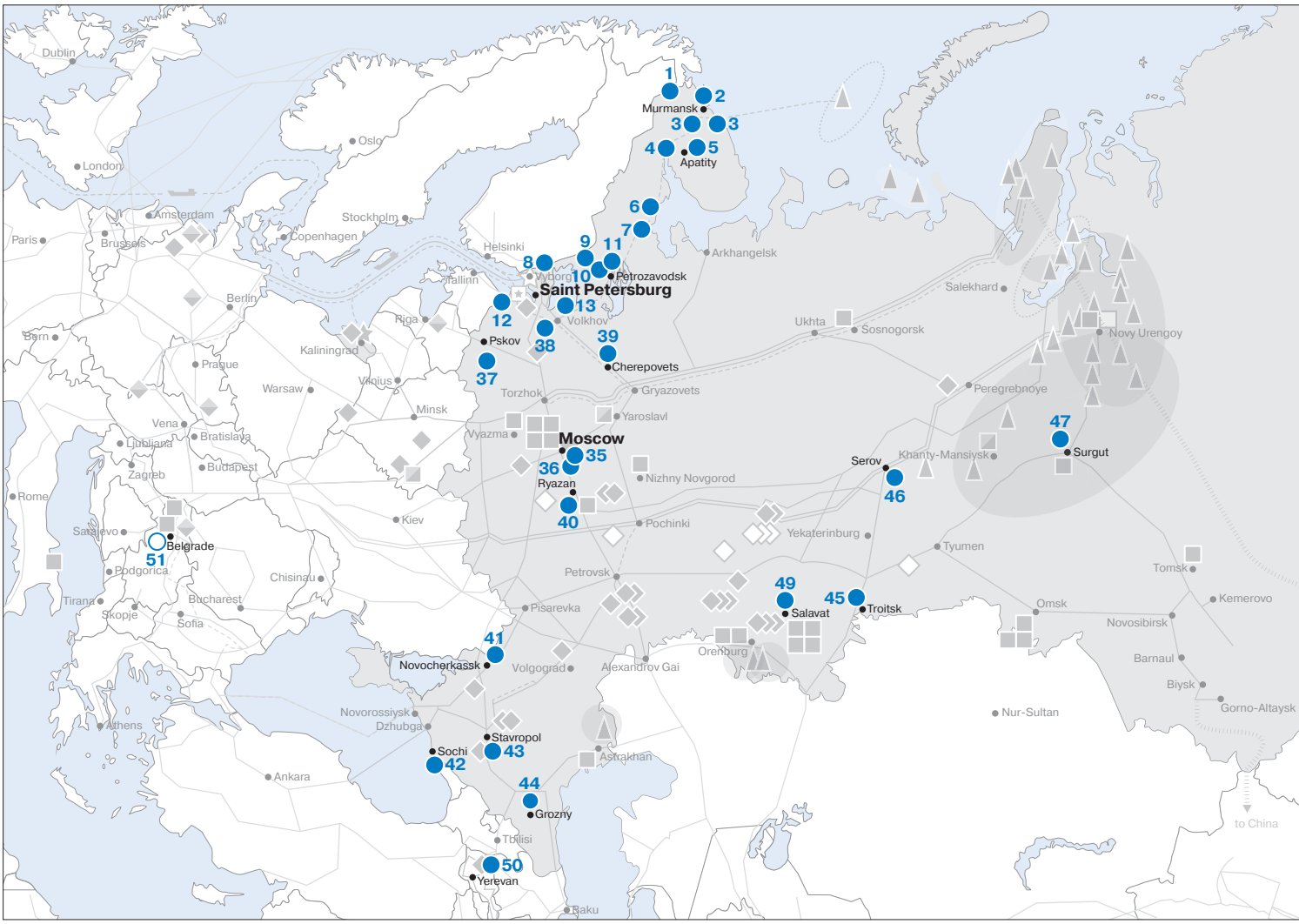
Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

Gazprom Group's capacities to transport liquid hydrocarbons from the Nadym-Pur-Taz region

Pipeline	Company	Location	Annual design capacity	Year of commissioning
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

Power and Heat Generation

Power and heat assets and projects of Gazprom Group



Existing power and heat facilities

Power and heat facilities under construction and projected facilities

Heat supply area of PAO MIPC and its subsidiary OOO TSK Mosenergo

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

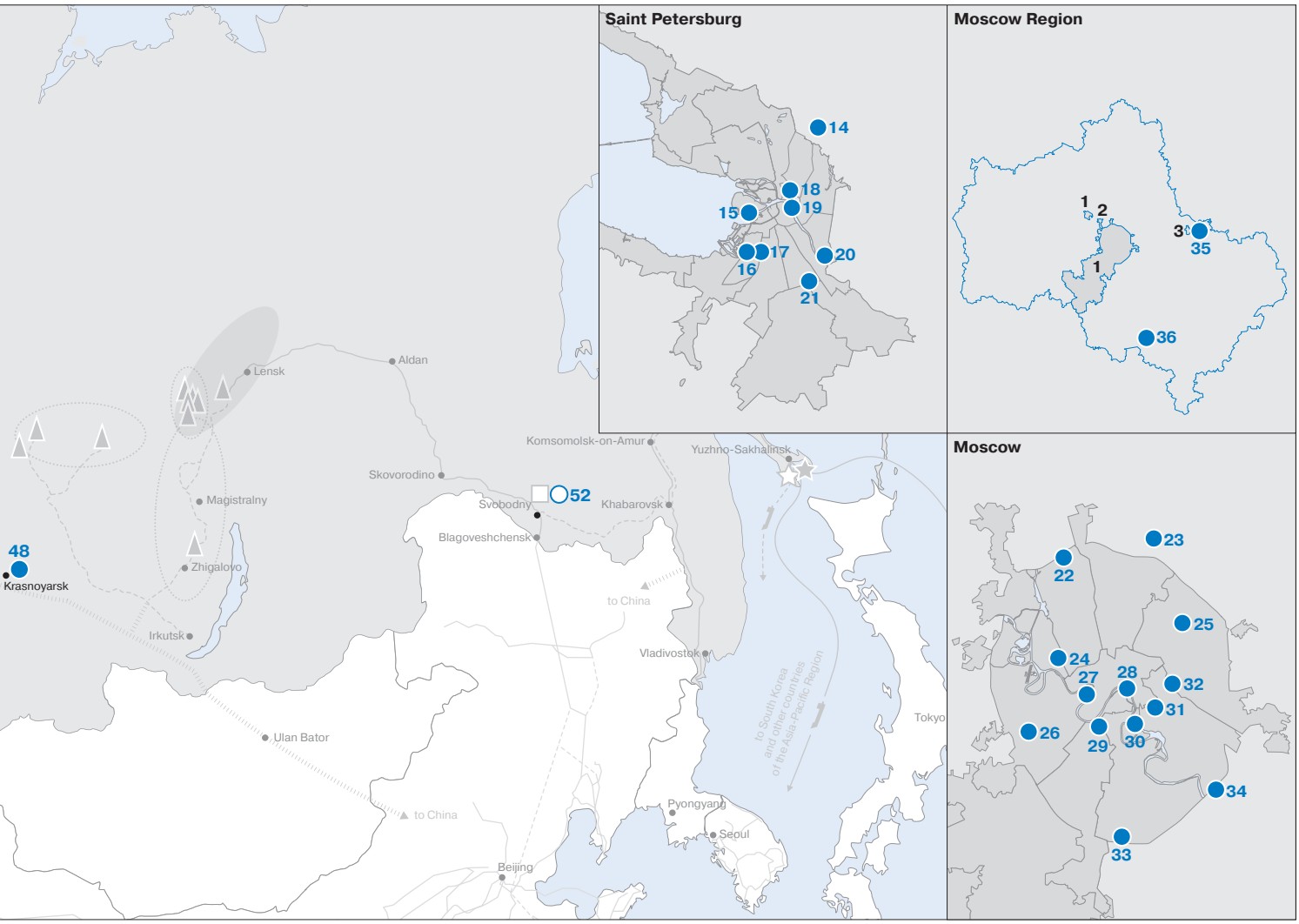
PAO TGC-1 in Murmansk Region, Republic of Karelia and Leningrad Region

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 2019



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

* The GRES is operated by PAO OGK-2 until the end of the transition period after which the plant will be operated by JSC Yeniseiskaya TGC (TGC-13) pursuant to the agreement for the sale of the plant entered into in December 2019.

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

Electric power and heat generating capacity of Gazprom Group

Generating company	As at 31 December 2015	2016	2017	2018	2019
Electric power generating capacity, MW					
In Russia					
Gazprom energoholding					
PAO Mosenergo	12,915	12,963	12,873	12,798	12,825
PAO MIPC and subsidiaries	129	–	–	–	
PAO OGK-2	18,024	18,955	18,997	18,828	19,012
PAO TGC-1 and subsidiaries	7,057	6,951	6,950	6,950	6,918
Total	**38,125**	**38,869**	**38,820**	**38,576**	**38,755**
Other capacity					
Gazprom neftekhim Salavat	541	893	893	893	893
Other	–	3	3	3	3
Total	**541**	**896**	**896**	**896**	**896**
Total in Russia	**38,666**	**39,765**	**39,716**	**39,472**	**39,651**
Abroad					
ZAO Gazprom Armenia	467	467	467	467	467
Other	–	13	13	12	12
Total abroad	**467**	**480**	**480**	**479**	**479**
Total	**39,133**	**40,245**	**40,196**	**39,951**	**40,130**
Heat generating capacity, Gcal					
In Russia					
Gazprom energoholding					
PAO Mosenergo	43,315	42,894	42,761	43,136	43,211
PAO MIPC and subsidiaries	6,845	7,036	7,236	7,091	6,661
PAO OGK-2	4,336	4,169	4,162	3,934	3,959
PAO TGC-1 and subsidiaries	14,142	14,532	13,646	13,745	13,487
Total	**68,638**	**68,631**	**67,805**	**67,906**	**67,318**
Other capacity					
Gazprom neftekhim Salavat	1,619	2,352	2,352	2,352	2,429
Other	–	759	801	518	489
Total	**1,619**	**3,111**	**3,153**	**2,870**	**2,918**
Total in Russia	**70,257**	**71,742**	**70,958**	**70,776**	**70,236**
Abroad	–	9	9	9	28
Total	**70,257**	**71,751**	**70,967**	**70,785**	**70,264**

Electricity and heat generation by Gazprom Group

Generating company	For the year ended 31 December				
	2015	2016	2017	2018	2019
Electricity generation, billion kW•h					
In Russia					
Gazprom energoholding					
PAO Mosenergo	54.71	59.07	57.87	58.31	60.11
PAO MIPC and subsidiaries	0.13	–	–	–	–
PAO OGK-2	64.36	67.09	63.43	58.92	54.69
PAO TGC-1 and subsidiaries	25.81	27.67	29.51	29.33	28.27
Total	**145.01**	**153.83**	**150.81**	**146.56**	**143.07**
Other capacity					
Gazprom neftekhim Salavat	2.35	2.90	4.65	4.94	4.92
Other	–	0.00	0.00	0.00	0.01
Total	**2.35**	**2.90**	**4.65**	**4.94**	**4.93**
Total in Russia	**147.36**	**156.73**	**155.46**	**151.50**	**148.00**
Abroad					
ZAO Gazprom Armenia	0.64	0.69	0.99	1.62	0.94
Other	–	0.09	0.10	0.07	0.08
Total abroad	**0.64**	**0.78**	**1.09**	**1.69**	**1.02**
Total	**148.00**	**157.51**	**156.55**	**153.19**	**149.02**
Heat generation, mm Gcal					
In Russia					
Gazprom energoholding					
PAO Mosenergo	71.68	81.83	79.45	82.29	75.37
PAO MIPC and subsidiaries	12.29	10.19	9.85	10.17	9.07
PAO OGK-2	6.52	6.90	6.76	7.01	6.65
PAO TGC-1 and subsidiaries	23.02	24.44	24.71	24.89	24.17
Total	**113.51**	**123.36**	**120.77**	**124.36**	**115.26**
Other capacity					
Gazprom neftekhim Salavat	5.11	5.44	5.78	6.07	6.31
Other	–	0.69	0.79	0.82	0.81
Total	**5.11**	**6.13**	**6.57**	**6.89**	**7.12**
Total in Russia	**118.62**	**129.49**	**127.34**	**131.25**	**122.38**
Abroad	–	0.00	–	–	–
Total	**118.62**	**129.49**	**127.34**	**131.25**	**122.38**

Investment Projects in Power and Heat

Major projects to create new capacity

Project	Company	Purpose	Project highlights			
			Blocks quantity and type	Installed electric capacity	Installed heat capacity	Year of commissioning
Construction of the Svobodnenskaya TPP	OOO Svobodnenskaya TPP	Power supply for the Amur GPP	2 stream turbine units	160 MW	TBC	2020
Construction of a CHPP plant in Pančevo, Serbia	Gazprom Energoholding Serbia TE-TO Pančevo o.o.o.	Heat supply to Pančevo Refinery, as well as electricity sales on the open electricity market	Combined cycle gas turbine (2 gas turbine units and a steam turbine unit)	200 MW	TBC	2020

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

Major upgrade and modernization projects

Projects selected under the procedure of the competitive selection of projects for modernization of generating facilities of thermal power plants in Russia

Company	Power plant	Object	Year to start capacity supply	Capacity after the implementation of the project, MW
PAO TGC-1	Avtovskaya CHPP	Turbo unit №7	2022	116.4
		Turbo unit №6	2024	120.0
	Severnaya CHPP	Turbo unit №4	2025	100.0
PAO OGK-2	Kirishskaya GRES	Steam turbine №2	2022	65.0
		Steam turbine №1	2024	60.0
		Turbo unit №4	2025	65.0
	Surgutskaya GRES-1	Power unit №13	2025	190.0
		Power unit №16	2025	215.0
PAO Mosenergo	CHPP-22	Power unit №10	2024	250.0
	CHPP-23	Turbo unit №4	2024	110.0
	CHPP-21	Turbo unit №7	2025	80.0
	CHPP-25	Power unit №4	2025	257.0
OOO Novo-Salavatskaya CHPP	Novo-Salavatskaya CHPP	Turbo unit №5	2022	105.0
		Turbo unit №1	2023	50.0
		Turbo unit №7	2024	135.0
	Total			**1,918.4**

Other upgrade and modernization projects in Russia

Company	Power station	Object	Year of commissioning	Capacity after the implementation of the project, MW
PAO TGC-1	Verkhne-Tulomskaya hydro-electric power station-12	Hydraulic units № 1–4	2020–2023	300
	Central CHPP	Water boiler house of power plant № 2	2023	849
PAO Mosenergo	CHPP-22	Equipment of energy block № 9	2021	295

Gas Sales

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
RUB mm					
Russia	805,615	819,924	875,685	954,493	970,913
Far abroad	2,165,500	2,140,027	2,221,217	2,951,215	2,490,372
FSU countries	429,660	309,644	292,777	348,625	356,102
Retroactive gas price adjustments	26,482	33,175	–49,092	49,338	–16,657
Total	**3,427,257**	**3,302,770**	**3,340,587**	**4,303,671**	**3,800,730**
USD mm*					
Russia	13,138	12,269	15,018	15,175	15,020
Far abroad	35,315	32,022	38,093	46,919	38,527
FSU countries	7,007	4,633	5,021	5,543	5,509
Retroactive gas price adjustments	432	496	–842	784	–258
Total	**55,892**	**49,420**	**57,290**	**68,421**	**58,798**
EUR mm*					
Russia	11,849	11,082	13,264	12,879	13,420
Far abroad	31,850	28,923	33,645	39,822	34,421
FSU countries	6,319	4,185	4,435	4,704	4,922
Retroactive gas price adjustments	389	448	–744	666	–230
Total	**50,407**	**44,638**	**50,600**	**58,071**	**52,533**

* Data is not part of IFRS consolidated financial statements; calculation based on the average currency exchange rate for the respective period.

Average natural gas price
(net of VAT, including excise tax and customs duties)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Russia					
RUB per mcm	3,641.3	3,815.5	3,808.3	3,981.3	4,118.2
USD* per mcm	59.4	57.1	65.3	63.3	63.7
EUR* per mcm	53.6	51.6	57.7	53.7	56.9
Far abroad					
RUB per mcm	15,057.3	11,763.3	11,670.5	15,499.5	13,613.0
USD per mcm	245.6	176.0	200.2	246.4	210.6
EUR* per mcm	221.5	159.0	176.8	209.1	188.2
FSU countries					
RUB per mcm	11,911.0	10,263.1	9,237.0	10,225.9	10,175.9
USD per mcm	194.2	153.6	158.4	162.6	157.4
EUR* per mcm	175.2	138.7	139.9	138.0	140.6

* Data is not part of 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				
	2015	2016	2017	2018	2019
Russia	221.2	214.9	229.9	239.7	235.8
Far abroad	184.4	228.3	242.0	243.3	232.4
FSU countries	40.3	33.2	35.0	38.1	38.7
Total	**445.9**	**476.4**	**506.9**	**521.1**	**506.9**

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Far abroad					
European far abroad countries					
Austria	5.0	7.5	9.8	9.0	9.1
Belgium	1.5	2.5	2.7	2.8	1.3
Bulgaria	3.1	3.2	3.3	3.2	2.4
Bosnia and Herzegovina	0.2	0.2	0.2	0.2	0.2
United Kingdom	22.5	25.7	29.1	34.2	59.0
Hungary	6.0	5.7	7.0	7.3	10.5
Germany	47.4	57.9	67.1	65.7	44.9
Greece	2.0	2.7	2.9	3.3	2.5
Denmark	0.7	1.7	1.8	1.7	1.7
Ireland	0.2	0.1	0.1	0.3	0.1
Spain	–	–	0.2	0.1	0.5
Italy	24.4	24.7	23.7	22.6	22.0
the Netherlands	8.4	27.5	17.4	21.4	16.3
Poland	8.9	11.1	10.5	9.9	9.7
Romania	0.3	1.7	1.4	1.5	1.1
North Macedonia	0.1	0.2	0.3	0.2	0.2
Serbia	1.9	1.9	2.2	2.2	2.2
Slovakia	3.8	3.7	4.5	5.0	6.5
Slovenia	0.5	0.5	0.6	0.5	0.3
Turkey	27.0	24.8	29.0	24.0	15.4
Finland	2.8	2.5	2.4	2.6	2.5
France	10.5	12.5	13.3	13.3	13.0
Croatia	0.6	0.8	2.8	2.8	2.8
Czech Republic	0.9	3.1	3.8	2.6	2.2
Switzerland	0.3	0.3	0.4	0.6	0.3
China	0.2	0.1	0.8	0.8	1.5
including via Power of Siberia trunk gas pipeline	x	x	x	x	0.3
Other far abroad countries	5.2	5.7	4.7	5.5	4.2
Total	**184.4**	**228.3**	**242.0**	**243.3**	**232.4**
FSU countries					
Azerbaijan	0.1	–	0.4	1.0	–
Armenia	1.8	1.8	1.8	1.8	2.0
Belarus	18.4	18.3	18.8	20.0	19.9
Georgia	0.3	0.1	0.1	0.0	0.2
Kazakhstan	4.7	4.7	4.8	6.2	7.7
Kyrgyzstan	0.3	0.3	0.3	0.3	0.3
Latvia	1.3	1.3	1.8	1.3	1.7
Lithuania	2.2	0.9	1.4	1.4	0.9
Moldova	2.9	3.0	2.7	3.0	2.9
Ukraine	7.8	2.4	2.4	2.7	2.8
Estonia	0.5	0.4	0.5	0.4	0.3
South Ossetia	0.0	0.0	0.0	0.0	0.0
Total	**40.3**	**33.2**	**35.0**	**38.1**	**38.7**

Gazprom Group's LNG sales volumes to foreign countries

	For the year ended 31 December				
	2015	2016	2017	2018	2019
trillion BTU					
Argentina	16.2	19.7	–	–	–
Great Britain	–	–	–	–	21.4
Egypt	3.4	3.4	–	–	–
India	18.7	22.7	9.9	36.1	39.9
Spain	–	–	6.5	2.9	10.9
China	6.6	3.4	29.4	29.2	41.4
Kuwait	3.3	3.3	16.9	20.1	–
Malaysia	–	–	–	–	–
Mexico	–	6.5	–	–	–
UAE	–	6.5	3.1	–	–
Republic of Korea	26.5	3.3	13.2	26.4	20.2
Thailand	–	–	3.3	–	–
Taiwan (China)	9.9	26.0	19.8	19.3	3.3
Japan	78.1	78.5	56.9	29.7	19.6
FOB deliveries	7.0	3.0	–	21.4	23.5
Total*	**169.6**	**176.5**	**159.2**	**185.0**	**180.1**
Including LNG sales from Sakhalin-2 project	86.0	59.4	72.9	70.1	60.1
Total, mm tonnes	**3.56**	**3.71**	**3.34**	**3.88**	**3.78**
Total, bcm	**4.75**	**4.94**	**4.46**	**5.18**	**5.04**

* 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.

Gazprom Group's LNG receiving, storage and regasification capacities

Name	Purpose	Annual design capacity	Year of comissioning
A receiving, storage and regasification terminal based on the floating regasification unit in the Kaliningrad Region	Ensuring energy security in the Kaliningrad Region	2.7 bcm of gas	2018

Promising large scale LNG projects with Gazprom Group's participation

Project	Company	Target markets	Annual design capacity	Year of comissioning	Project status (as at 31 December 2019)
Integrated complex for gas processing and liquefaction near the seaport of Ust-Luga	OOO RusKhimAlyans (established on a parity basis by OOO Gazprom invest RGK (a subsidiary of OOO Gazprom mezhregiongaz) and AO RusGazDobycha)	Target markets to be determined following market research	13 mm tonnes of LNG	Phase 1 — late 2023, Phase 2 — late 2024	Preparations are ongoing in obtaining licensed technology and procurement; a project contracting strategy and a roadmap to obtain project finance developed. Design is underway, engineering surveys were completed, construction site is being prepared.
Third technological line of LNG plant within the framework of Sakhalin-2 project	Sakhalin Energy Investment Company Ltd. (a Gazprom Group associate)	Asia-Pacific countries	Up to 5.4 mm tonnes of LNG	Will be determined by a joint decision of Sakhalin Energy Investment Company Ltd. shareholders	Positive opinions were obtained from Russia's Main Directorate of State Expert Review (Glavgosexpertiza of Russia) for design documents developed to Russian standards for the expansion of GTS, construction of an LNG loading berth, and construction of the technological line at the LNG plant. Final decision on implementing the project not made yet.

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

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

Name	Target market	Annual design capacity	Year of comissioning	Project status (As at 31 December 2019)
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	2020	Design and detailed design documents for the project were developed in full. The main equipment for the LNG facility was delivered to the construction site. The 110 kV Mys substation was commissioned in December 2018. Conversion of the acquired LNG ship into a floating storage and regasification unit (FSRU) Portovy that will be moored to the berth of the LNG facility is completed. Sea trials and gas trials were conducted. Installation of an automated process control system and preparations for operation are underway, including no-load start-up and testing and preparation for system cooling and trial operation.
LNG plant near Vladivostok	Asia-Pacific including China and Japan, and LNG bunkering, including in Russia's Far East	To be determined after the Pre-Investment Feasibility Study completion	To be determined after the Pre-Investment Feasibility Study completion	Investment feasibility assessment is underway.

Note. As at 31 December 2019. Timelines for commissioning and ramp-up may be adjusted subject to the energy market environment.

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Austria	303.5	872.2	869.7	733.3	771.8
Belgium	620.7	1,530.7	1,881.3	1,736.4	1,168.5
United Kingdom	3,028.0	3,825.6	4,610.7	4,917.2	4,935.3
Hungary	104.8	197.4	296.2	330.1	349.3
Germany	3,665.7	13,163.4	14,892.5	14,012.4	9,992.6
Ireland	187.4	59.8	96.2	316.4	109.2
the Netherlands	1,335.5	3,220.8	2,075.0	2,991.5	2,578.3
Romania	22.8	169.7	221.5	70.8	41.8
North Macedonia--	93.0	139.5	–	–	–
Slovakia	–	6.5	173.8	242.0	246.8
France	780.9	947.9	1,014.3	1,083.0	1,621.9
Czech Republic	233.9	809.1	1,755.3	1,961.5	1,123.3
Total	**10,376.2**	**24,942.6**	**27,886.5**	**28,394.6**	**22,938.8**

Note. Gazprom Germania GmbH and its subsidiaries' figures. Data for 2017–2018 amended due to the reclassification of individual counterparties and the corresponding sales volumes.

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Internal gas consumption in Russia	444.3	456.7	468.0	493.2	481.0
Domestic gas supply through Gazprom's gas transportation system (excluding technological needs of gas transportation system)	339.4	348.8	351.3	361.7	353.9
Gazprom Group supply through GTS (including purchases from companies not included in Gazprom Group)	222.0	226.9	231.3	244.1	240.0
Domestic gas supply from Gazprom Group production*	211.2	210.2	216.3	224.9	221.2

* Excluding GTS technological needs.

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
All categories of consumers	3,759.4	3,938.2	3,988.5	4,117.2	4,224.8
Industrial consumers	3,958.1	4,158.1	4,202.3	4,316.4	4,423.7
Households	3,253.0	3,422.8	3,512.9	3,640.0	3,734.4

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

	As at and for the year ended 31 December				
	2015	2016	2017	2018	2019
Length of external gas pipelines, operated by Gazprom Group's subsidiaries and associated gas distribution companies (GDCs), thousand km	746.3	760.1	773.4	786.7	802.8
Natural gas transportation through gas distribution systems, operated by Gazprom Group's subsidiaries and associated GDCs, bcm	231.3	208.0	239.0	239.7	232.6
Consumers (natural gas) of Gazprom Group's subsidiaries and associated GDCs':					
Apartments and private households, mm units	26.8	27.0	28.5	27.7	28.0
Industrial sites, thousand units	32.8	32.9	31.6	32.4	32.8
Agricultural facilities, thousand units	6.9	7.2	7.6	8.1	9.1
Utilities, thousand units	303.6	312.3	326.1	332.6	344.0
Gazprom's gasification programs financing, RUB bn	27.6	25.0	29.5	36.7	34.3
Level of natural gas gasification*, including:	66.2%	67.2%	68.1%	68.6%	70.1%
towns and urban-type settlements	70.4%	70.9%	71.4%	71.9%	73.0%
country side	56.1%	57.1%	58.7%	59.4%	61.8%

* Calculation performed based on residential properties as at 2005.

Gazprom Group's gas distribution operations abroad

	As at and for the year ended 31 December				
	2015	2016	2017	2018	2019
Armenia					
Length of gas distribution pipelines maintained, km	14,330	14,701	15,063	18,245	18,808
Gas transported through gas distribution networks, mmcm	1,861.7	1,888.1	1,985.2	2,187.0	2,233.1
Gas consumers:					
Apartments and private households, thousand units	669	678	689	702	714
Industrial facilities, units	1,819	1,873	1,933	1,991	2,070
Agricultural facilities, units	476	508	566	654	800
Utility facilities, units	12,502	12,254	13,044	13,522	14,320
Kyrgyzstan					
Length of gas distribution pipelines maintained, km	2,861	2,896	3,093	3,632	3,717
Gas transported through gas distribution networks, mmcm	261.1	262.7	282.5	312.4	314.4
Gas consumers:					
Apartments and private households, thousand units	292	296	303	317	343
Industrial facilities, units	159	200	203	203	203
Utility facilities, units	2,729	2,890	2,992	3,189	3,400
Romania*					
Length of gas distribution pipelines maintained, km	256	284	296	313	x
Gas transported through gas distribution networks, mmcm	61.5	63.0	71.5	73.0	x
Gas consumers:					
Apartments and private households, thousand units	33	37	41	44	x
Industrial facilities, units	1,383	1,457	1,590	1,685	x

* In 2019, the Group exited from a subsidiary focused on gas distribution in Romania.

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				
	2015	2016	2017	2018	2019
RUB mm					
Russia	77,519	81,302	71,434	64,645	62,173
Far abroad	155,509	307,128	438,754	631,560	648,752
FSU countries	27,580	23,528	29,770	38,748	41,865
Total	**260,608**	**411,958**	**539,958**	**734,953**	**752,790**
USD mm*					
Russia	1,264	1,217	1,225	1,028	962
Far abroad	2,536	4,596	7,525	10,041	10,036
FSU countries	450	352	511	616	648
Total	**4,250**	**6,165**	**9,261**	**11,685**	**11,646**
EUR mm*					
Russia	1,140	1,099	1,082	872	859
Far abroad	2,287	4,151	6,646	8,522	8,967
FSU countries	406	318	451	523	579
Total	**3,833**	**5,568**	**8,179**	**9,917**	**10,405**

* Data is not part of IFRS consolidated financial statements; calculation based on the average currency exchange rate for the respective period.

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Russia	5.35	5.92	4.26	2.66	2.62
Far abroad	9.76	17.06	21.61	21.15	22.94
FSU countries	1.88	1.69	1.71	1.74	1.71
Total	**16.99**	**24.67**	**27.59**	**25.55**	**27.27**

Note. Excluding intra-group sales.

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
RUB mm					
Russia	981,792	980,352	1,115,125	1,394,137	1,355,139
Far abroad	468,464	428,327	454,330	640,977	629,731
FSU countries	105,335	88,883	117,635	144,658	126,311
Total	**1,555,591**	**1,497,562**	**1,687,090**	**2,179,772**	**2,111,181**
USD mm*					
Russia	16,011	14,669	19,124	22,164	20,964
Far abroad	7,640	6,409	7,792	10,190	9,742
FSU countries	1,718	1,330	2,017	2,300	1,954
Total	**25,369**	**22,408**	**28,933**	**34,654**	**32,660**
EUR mm*					
Russia	14,440	13,250	16,891	18,812	18,730
Far abroad	6,890	5,789	6,882	8,649	8,704
FSU countries	1,549	1,201	1,782	1,952	1,746
Total	**22,879**	**20,240**	**25,555**	**29,413**	**29,180**

* Data is not part of IFRS consolidated financial statements; calculation based on the average currency exchange rate for the respective period.

Gazprom Group's refined products sales volumes, breakdown by geographical segments, mm tonnes

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Russia	41.28	41.11	40.83	43.18	43.12
Far abroad	23.84	22.60	20.85	21.31	23.51
FSU countries	4.30	4.24	4.28	4.37	3.55
Total	**69.42**	**67.95**	**65.96**	**68.86**	**70.18**

Note. Excluding intra-group sales.

Gazprom Group's sales volumes of refined products, gas chemical and petrochemical products, breakdown by types, mm tonnes

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Motor gasoline	13.65	14.92	13.39	13.64	13.53
Diesel fuel	15.49	15.85	15.89	17.20	17.36
Jet fuel	3.76	3.51	3.60	3.94	3.98
Heating oil	8.58	7.62	5.78	6.46	7.00
Oils	0.43	0.44	0.41	0.48	0.48
Liquefied hydrocarbon gases	4.85	4.49	3.70	4.10	4.25
Sulphur	5.19	5.46	5.31	5.24	6.46
Mineral fertilizers	0.69	0.95	0.89	0.86	0.81
Polymers	0.16	0.14	0.11	0.11	0.10
Other refined, gas chemical and petrochemical products	16.62	14.57	16.88	16.83	16.21
Total	**69.42**	**67.95**	**65.96**	**68.86**	**70.18**

Note. Excluding helium sales volumes and intra-group sales.

Gazprom Group's helium sales volumes

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Helium gaseous, mmcm	3.04	3.18	3.32	3.42	3.63
Helium liquefied, tonnes	314.15	299.32	289.56	260.08	214.56

Sales of Electricity, Heat and Gas Transportation Services

Electricity and heat sales revenue
(net of VAT)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
RUB mm					
Russia	403,084	461,908	487,283	501,362	495,581
Far abroad	19,057	17,350	13,599	15,643	19,447
FSU countries	2,524	2,458	2,937	5,090	3,345
Total	**424,665**	**481,716**	**503,819**	**522,095**	**518,373**
USD mm*					
Russia	6,573	6,912	8,357	7,971	7,667
Far abroad	311	260	233	249	301
FSU countries	41	37	50	81	52
Total	**6,925**	**7,209**	**8,640**	**8,301**	**8,020**
EUR mm*					
Russia	5,929	6,243	7,381	6,765	6,850
Far abroad	280	234	206	211	269
FSU countries	37	33	44	69	46
Total	**6,246**	**6,510**	**7,631**	**7,045**	**7,165**

* Data is not part of IFRS consolidated financial statements; calculation based on the average currency exchange rate for the respective period.

Gas transportation services sales revenue
(net of VAT)

	For the year ended 31 December				
	2015	2016	2017	2018	2019
RUB mm	193,965	198,971	235,061	225,673	215,335
USD mm*	3,163	2,977	4,031	3,588	3,331
EUR mm*	2,853	2,689	3,560	3,045	2,976

* Data is not part of 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				
	2015	2016	2017	2018	2019
Total	121.5	129.0	137.9	136.4	132.1
including Russian gas	113.9	121.3	130.4	128.3	124.3

Environmental Protection and Energy Saving

Gazprom Group's environmental performance in Russia

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Air pollutant emissions, thousand tonnes	2,830.6	2,868.5	2,795.9	2,894.0	2,862.7
including:					
carbon oxide	533.6	550.5	529.9	594.1	596.4
nitrogen oxides	286.3	288.5	313.6	328.6	307.7
sulphur dioxide	328.4	346.1	262.7	276.2	221.5
hydrocarbons (including methane)	1,430.8	1,462.3	1,495.7	1,497.8	1,542.6
GHG emissions, mm tonnes of CO2 equivalent	220.0	228.2	233.8	240.0	236.5
Wastewater discharge into surface water bodies, mmcm	3,853.8	3,855.5	3,905.3	3,658.4	3,241.8
Including:					
including clean and treated as per standards	3,660.6	3,691.2	3,781.7	3,579.5	3,152.7
Waste generation, thousand tonnes	4,954.0	4,289.8	4,130.3	3,555.1	3,337.1
Area of land disturbed in the reporting year, thousand ha	58.1	27.0	42.2	25.8	22.9
Area of land rehabilitated during the year, thousand ha	18.2	42.5	19.6	15.8	17.7

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

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Current environmental protection costs	16,399.9	17,189.7	18,219.8	22,638.0	14,964.6
Environmental protection services fees	12,806.3	14,725.6	14,495.6	14,584.1	15,601.9
Costs of overhauling major production assets for environmental protection	2,962.9	2,187.9	1,752.6	1,932.2	1,613.7
Negative environmental impact charges	1,790.4	824.8	768.0	615.8	617.7
Capital expenditures for environmental protection and sustainable use of natural resources	15,754.3	22,541.9	35,584.5	29,188.6	20,421.3
Total	**49,713.8**	**57,469.9**	**70,820.5**	**68,958.7**	**53,219.2**

Energy saving of PJSC Gazprom and its major subsidiaries

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Natural gas					
mmcm	2,255.3	2,285.0	3,013.5	2,951.9	3,286.9
thousand t c.e.	2,571.0	2,641.1	3,480.6	3,409.5	3,796.4
Electricity					
million kWh	260.6	256.0	331.4	364.3	330.5
thousand t c.e.	84.7	84.5	107.7	118.4	107.4
Heat					
thousand Gcal	205.0	254.2	268.4	235.9	252.7
thousand t c.e.	29.3	36.4	38.4	33.7	36.1
Total, thousand t c.e.	**2,685.0**	**2,762.0**	**3,626.7**	**3,561.6**	**3,939.9**

Note. Fuel and energy saving rates have been converted to t c.e. using the following ratios: 1 mcm of gas = 1.155 t c.e. (2015: 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.

Occupational Safety

Occupational safety at Gazprom Group entities covered by the UOHSMS*

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Industrial safety incidents at hazardous production facilities	52	31	26	16	10
Fires at facilities	5	4	4	3	2
Accidents	76	65	49	63	37
Number of injuries resulting from accidents	102	77	61	89	47
Number of fatalities resulting from accidents	7	4	6	3	7
Lost time injury frequency rate (LTIFR)*	0.18	0.16	0.11	0.17	0.09
Fatal accident rate (FAR)*	1.42	0.79	1.17	0.57	1.35

* For the definitions, see Glossary.

Occupational safety at Gazprom Group entities outside the UOHSMS

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Gazprom neftekhim Salavat					
Industrial safety incidents at hazardous production facilities	4	3	1	9	2
Accidents	2	1	2	–	2
Number of injuries resulting from accidents	2	1	2	–	2
Lost time injury frequency rate (LTIFR)*	0.15	0.07	0.14	–	0.13
Fatal accident rate (FAR)*	–	–	6.97	–	–
Gazprom Neft					
Industrial safety incidents at hazardous production facilities	2,513	2,387	2,183	1,068	915
Accidents	39	36	36	29	33
Number of injuries resulting from accidents	43	38	36	29	34
Lost time injury frequency rate (LTIFR)*	0.47	0.40	0.33	0.26	0.26
Fatal accident rate (FAR)*	2.20	2.90	0.92	0.89	1.56
Gazprom energoholding					
Industrial safety incidents at hazardous production facilities	196	177	129	99	69
Accidents	12	19	16	18	8
Number of injuries resulting from accidents	13	19	16	18	8
Lost time injury frequency rate (LTIFR)*	0.20	0.30	0.25	0.28	0.12
Fatal accident rate (FAR)*	–	1.56	1.57	–	–

* For the definitions, see Glossary.

Patent Management, R&D

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

	As at and for the year ended 31 December				
	2015	2016	2017	2018	2019
Total number of patents held by PJSC Gazprom and its subsidiaries, units	2,238	2,269	2,365	2,555	2,674
Including those used in operations	356	406	427	441	459
Economic effect from the use of patented items in operations, RUB bn	6.1	7.1	8.0	10.3	14.5

Total spending on R&D projects commissioned by Gazprom Group, RUB bn

	For the year ended 31 December				
	2015	2016	2017	2018	2019
Total spending on R&D projects commissioned by Gazprom Group (net of VAT)	9.9	6.3	8.2	9.0	12.1

Personnel

Gazprom Group's personnel structure

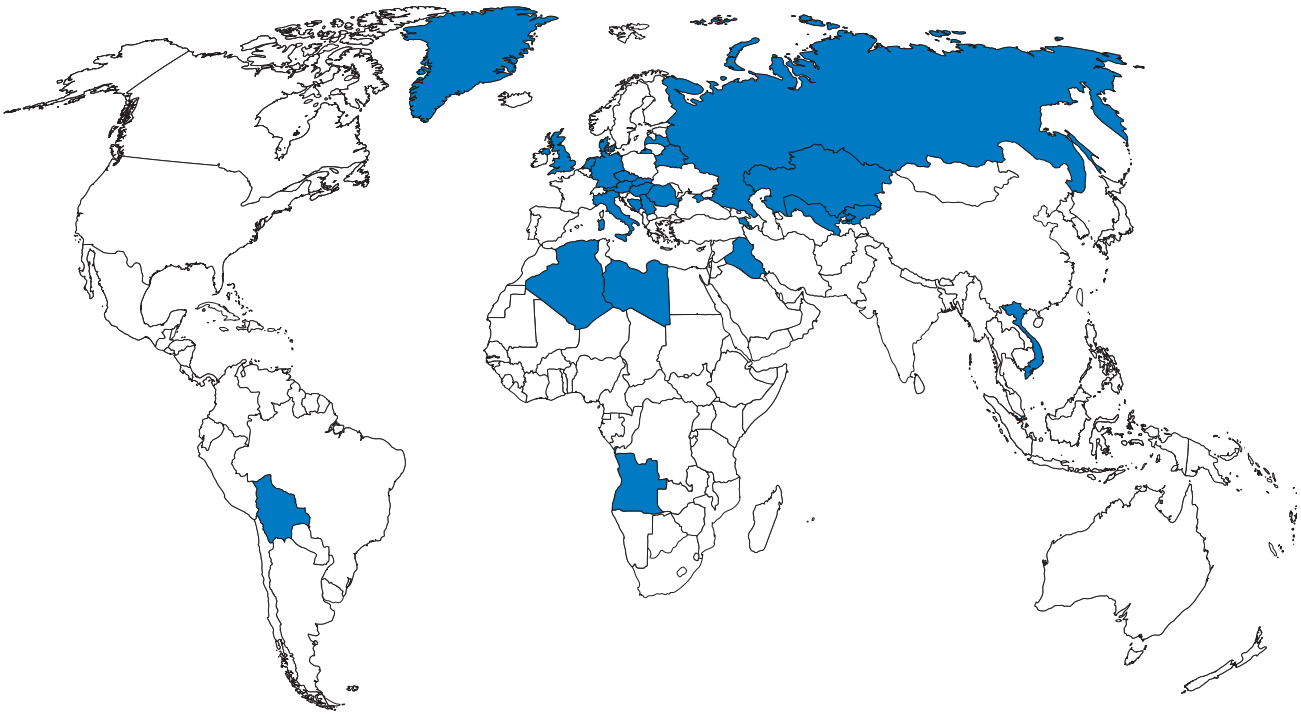
	As at 31 December				
	2015	2016	2017	2018	2019
Number of employees of the Group, in thousand:					
PJSC Gazprom	24.8	25.6	26.2	26.7	27.1
Gas production, transportation, processing and storage subsidiaries*	235.4	237.4	235.6	232.9	234.9
Gazprom Neft	65.0	71.4	67.6	68.5	72.7
Gazprom energoholding	45.0	44.9	44.2	43.3	45.7
Gazprom neftekhim Salavat	15.5	15.4	16.3	15.2	14.7
Other subsidiaries	76.7	72.7	79.7	79.5	78.7
Total	**462.4**	**467.4**	**469.6**	**466.1**	**473.8**
by categories:					
management	13.7%	13.9%	13.9%	14.2%	14.4%
specialists and other employees	31.5%	31.6%	31.5%	32.4%	33.0%
workers	54.8%	54.5%	54.6%	53.4%	52.6%
by age:					
up to 30 years	17.9%	16.9%	15.3%	14.4%	13.4%
30-40 years	29.7%	30.5%	31.3%	32.0%	32.3%
40-50 years	27.2%	27.8%	28.6%	29.4%	29.8%
50 years and over	25.2%	24.8%	24.8%	24.2%	24.5%

* For the list of companies, see Glossary.

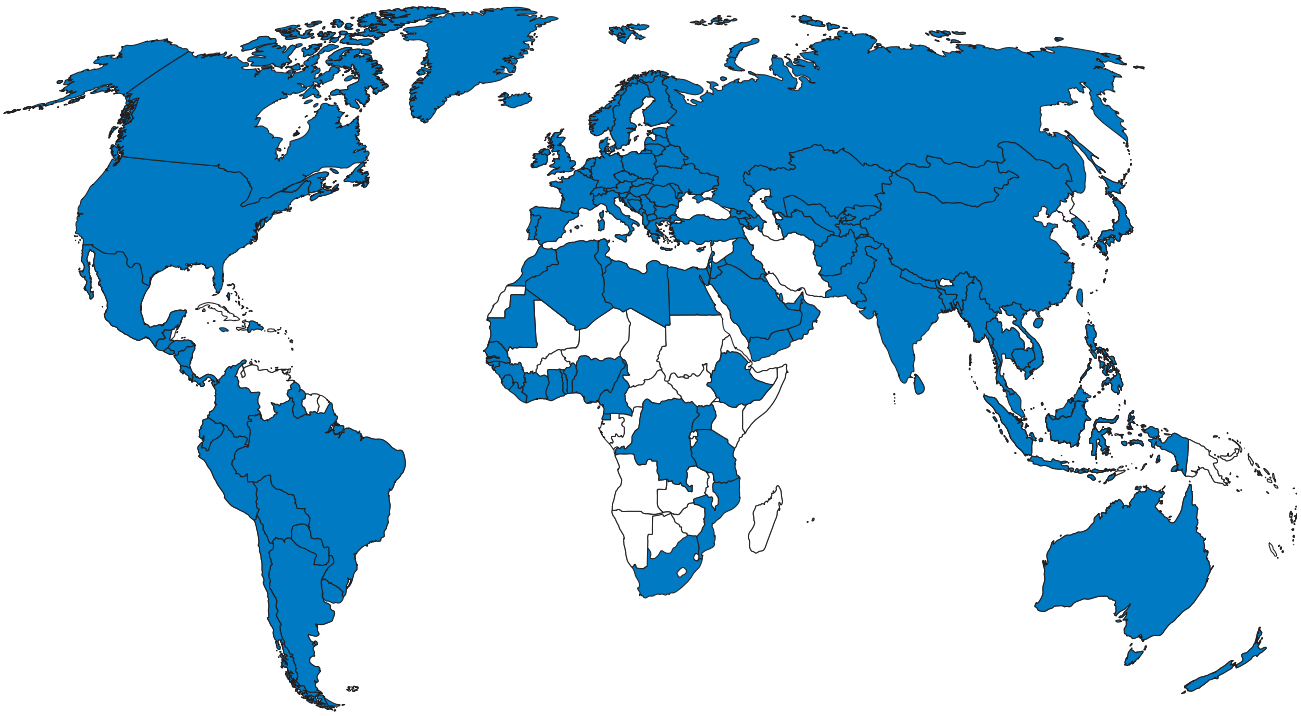
Note. Excluding entities where Gazprom has investments classified as joint operations.

Operations and Marketing Geography

Gazprom Group's operating geography, as at 31 December 2019



Gazprom Group's marketing geography, as at 31 December 2019



Countries	Operations											Marketing							
	Gas distribution	Gas and gas condensate production	Oil production	Gas processing	Oil refining	Gas underground storage in UGSFs owned or co-invested by Gazprom Group	Gas underground storage under UGSFs capacity utilization contracts	Hydrocarbons prospecting and exploration	Production of oil and gas chemical products and certain types of petroleum products	Electricity and heat generation	Gas transportation	Gas sales to end consumers	Trunk pipeline gas sales	Large scale LNG sales	Small scale LNG and CNG sales	Oil and gas condensate sales*	Refined hydrocarbon products sales*	Electricity and heat sales	Oil products retail sales
Russia	■	■	■	■	■	■	–	■	■	■	■	■	■	–	■	■	■	■	■
FSU																			
Azerbaijan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Armenia	■	–	–	–	–	■	–	–	–	■	■	■	■	–	■	–	■	■	–
Belarus	–	–	–	–	■	■	–	–	–	–	■	■	■	–	■	–	■	■	■
Georgia	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	■	–	–
Kazakhstan	–	–	–	–	–	–	–	■	■	–	–	–	■	–	■	■	■	–	■
Kyrgyzstan	■	–	–	–	–	–	–	–	–	–	■	■	■	–	■	–	■	–	■
Latvia	–	–	–	–	–	■	–	–	–	–	–	–	■	–	■	■	■	–	–
Lithuania	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	■	■	–	–
Moldova	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	■	–	–
Tajikistan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	■
Turkmenistan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Uzbekistan	–	■	–	–	–	–	–	■	–	–	–	–	–	–	–	–	■	–	–
Ukraine	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	■	–	–
Estonia	–	–	–	–	–	–	–	–	–	–	–	–	■	–	■	■	■	–	–
South Ossetia	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	–	–	–
Europe																			
Austria	–	–	–	–	–	■	■	–	–	–	–	■	■	–	–	–	■	–	–
Belgium	–	–	–	–	–	–	–	–	–	–	–	■	■	–	–	■	■	–	–
Bulgaria	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	■	–	■
Bosnia and Herzegovina	–	–	■	–	–	–	–	■	–	–	–	–	■	–	–	–	■	■	■
United Kingdom	–	■	–	–	–	–	–	■	–	–	–	■	■	■	–	■	■	■	–
Hungary	–	–	–	–	–	–	■	–	–	–	–	■	■	–	–	–	■	■	–
Germany	–	–	–	–	–	■	–	–	–	–	–	■	■	–	■	■	■	■	–
Greece	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	■	■	–	–
Denmark	–	–	■	–	–	–	–	–	–	–	–	–	■	–	–	■	■	–	–
Ireland	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	–	■	–	–
Spain	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	■	■	–	–
Italy	–	–	–	–	–	–	–	–	■	–	–	–	■	–	–	■	■	–	–
Cyprus	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Malta	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
the Netherlands	–	■	–	–	–	–	■	■	–	–	–	■	■	–	–	■	■	■	–
Norway	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	■	■	–
Poland	–	–	–	–	–	–	–	–	–	–	–	–	■	–	■	■	■	–	–
Portugal	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Romania	–	■	■	–	–	–	–	■	–	–	–	■	■	–	–	■	■	■	■
North Macedonia	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	■	–	–
Serbia	–	■	■	–	■	■	–	■	■	■	–	■	■	–	■	■	■	■	■
Slovakia	–	–	–	–	–	–	■	–	–	–	–	■	■	–	–	–	■	–	–

Countries	Operations											Marketing							
	Gas distribution	Gas and gas condensate production	Oil production	Gas processing	Oil refining	Gas underground storage in UGSFs owned or co-invested by Gazprom Group	Gas underground storage under UGSFs capacity utilization contracts	Hydrocarbons prospecting and exploration	Production of oil and gas chemical products and certain types of petroleum products	Electricity and heat generation	Gas transportation	Gas sales to end consumers	Trunk pipeline gas sales	Large scale LNG sales	Small scale LNG and CNG sales	Oil and gas condensate sales*	Refined hydrocarbon products sales*	Electricity and heat sales	Oil products retail sales
Slovenia	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	■	–	–
Turkey	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	■	■	–	–
Finland	–	–	–	–	–	–	–	–	–	–	–	–	■	–	■	■	■	■	–
France	–	–	–	–	–	–	–	–	–	–	–	■	■	–	–	■	■	■	–
Croatia	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	■	–	–
Montenegro	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Czech Republic	–	–	–	–	–	■	–	–	–	–	–	■	■	–	■	–	■	■	–
Switzerland	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–	–	–	–
Sweden	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	■	–	–
Africa																			
Algeria	–	–	–	–	–	–	–	■	–	–	–	–	–	–	–	–	■	–	–
Angola	–	–	■	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Gazmbia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Guinea-Bissau	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
DRC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Egypt	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Cameroon	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Côte d'Ivoire	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Libya	–	–	■	–	–	–	–	■	–	–	–	–	–	–	–	–	■	–	–
Mauritius	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Mauritania	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Morocco	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Nigeria	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Seychelles	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Senegal	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Togo	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Tunisia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Uganda	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Equatorial Guinea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Ethiopia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
South Africa	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Near and Middle East																			
Afghanistan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Israel	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	■	–	–
Jordan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Iraq	–	–	■	–	–	–	–	■	–	–	–	–	–	–	–	–	■	–	–
Yemen	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Lebanon	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
UAE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Saudi Arabia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–

Countries	Operations											Marketing							
	Gas distribution	Gas and gas condensate production	Oil production	Gas processing	Oil refining	Gas underground storage in UGSFs owned or co-invested by Gazprom Group	Gas underground storage under UGSFs capacity utilization contracts	Hydrocarbons prospecting and exploration	Production of oil and gas chemical products and certain types of petroleum products	Electricity and heat generation	Gas transportation	Gas sales to end consumers	Trunk pipeline gas sales	Large scale LNG sales	Small scale LNG and CNG sales	Oil and gas condensate sales*	Refined hydrocarbon products sales*	Electricity and heat sales	Oil products retail sales
Asia-Pacific																			
Australia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–
Bangladesh	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Vietnam	–	■	–	–	–	–	–	■	–	–	–	–	■	–	–	■	■	–	–
India	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	■	■	–	–
Indonesia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
China	–	–	–	–	–	–	–	–	–	–	–	–	■	■	–	■	■	–	–
Malaysia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	■	–	–
Myanmar	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	■	–	–
Nepal	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
New Zealand	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	–
South Korea	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	■	■	–	–
Singapore	–	–	–	–	–	–	–	–	■	–	–	–	–	–	–	■	■	–	–
Thailand	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	■	–	–
Taiwan (China)	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–	■	–	–
Philippines	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Sri Lanka	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Japan	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	■	■	–	–
North America																			
Bahamas	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Canada	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
United States	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Central and South America																			
Bolivia	–	■	–	–	–	–	–	■	–	–	–	–	–	–	–	–	–	–	–
Brazil	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Guyana	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Colombia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Costa Rica	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Nicaragua	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Paraguay	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Peru	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Uruguay	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Ecuador	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
El Salvador	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Other countries																			
Dominican Republic	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Maldives	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Mongolia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–
Jamaica	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	■	–	–

* Excluding countries, sales volumes to which are insignificant.

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
–	Phenomenon is absent
0.0	Less than 0.05
0.00	Less than 0.005

Calculation of Financial Ratios

Indicator	Description
Adjusted financial statement measures	
Profit for the year attributable to owners of PJSC Gazprom (adjusted)	Profit for the year attributable to the owners of PJSC Gazprom, adjusted for: — foreign exchange gain (loss) included in finance income and expense — foreign exchange differences on operating items — impairment loss (reversal of impairment loss) on fixed assets and construction in progress — impairment loss (reversal of impairment loss) on investments in associates and joint ventures — the difference between the share in profits of associates and joint ventures and proceeds from associates and joint ventures
Adjusted Net Debt	Net debt adjusted for deposits included in other current and non-current assets
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 Depositary Receipt issued for PJSC Gazprom shares
APG	Associated petroleum gas
Asia Pacific	The Asia-Pacific region, which includes countries of mainland Asia, America and Pacific Ocean Area
bcm	Billion cubic meters
boe	Barrel of oil equivalent
Brent	Benchmark grade of crude oil produced in the North Sea
BTU	British thermal unit
Central Asia	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
CGTU	Comprehensive gas treatment unit
CHPP	Combined heat and power plant
CNG	Compressed natural gas
CS	Compressor station
cu m	Cubic metre
cu m of gas	A cubic metre of natural gas measured at 1 Pa pressure and 20°C, with a calorific value of 8,850 kcal per cu m
Daily average production	Indicator value is calculated based on the number of calendar days in a year
DOP plasticizer	Dioctyl phthalate plasticizer
EBITDA (adjusted)	The sum of operating profit, depreciation, impairment loss or reversal of impairment loss on financial assets and non-financial assets, less changes of allowance for expected credit losses on accounts receivable and impairment allowance on advances paid and prepayments
EUR	Euro
European far abroad countries	25 EU countries (excluding Latvia, Lithuania, and Estonia), such non-EU countries as Turkey, Norway, and Switzerland, and the Balkan states of Albania, Bosnia and Herzegovina, North Macedonia, and Serbia
EV	Enterprise value
FAR	Fatal accident rate. Calculation: Fatalities/total hours worked by all employees × 100,000,000
Far abroad countries	Foreign countries other than FSU countries, comprising the geographic segment Europe and other countries as defined in PJSC Gazprom's IFRS consolidated financial statements
FD	Federal district
FSU countries	Former Soviet Union republics, 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
Gazprom Group hydrocarbons production	Production volume of hydrocarbons, defined as the sum of the volume of produced hydrocarbons intended for sale, as well as the volume of produced hydrocarbons spent on own needs
Gazprom Group sales volumes of hydrocarbons and refined/processed products	Volumes of gas, oil, gas condensate and products of their processing/refining, both from own production and purchased from third-party companies, sold to consumers, excluding intra-group sales
Gcal	Gigacalorie
GDC	Gas distribution company
GHG	Greenhouse gases

Terms and abbreviations	Description
GPP	Gas and/or condensate processing plant
GPU	Gas pumping unit
GRES	State district power station
GTS	Gas transportation system
HEPP	Hydroelectric power plant
Hydrocarbon reserves (categories $A+B_1+C_1$)	Explored reserves under Russian classification of reserves with a high degree of geological exploration, which correspond to the previously accepted categories A+B+C1 (for oil, gas and gas condensate reserves there is a recovery factor calculated on the basis of geological and technological factors)
IFRS	International Financial Reporting Standards
kWh	Kilowatt-hour
LNG	Liquefied natural gas
LPG	Liquefied petroleum gas
LSE	London Stock Exchange
LTIFR	Lost-time injury frequency rate. Calculation: Lost time injuries/total hours worked by all employees × 1,000,000
mcm	Thousand cubic meters
mmcm	Million cubic meters
MW	Megawatt
PJSC Gazprom and its major subsidiaries	PJSC Gazprom and its gas production, gas transportation, gas processing and gas 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 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
PRMS	Petroleum Resources Management System, an international standard for hydrocarbon reserve classification and reporting
PSA	Production sharing agreement
R&D	Research and Development
Roubles, RUB	Russian roubles
t c.e.	Ton of coal equivalent. A unit of accounting for the thermal value of fuel used to compare different types of fuel
ton	Metric ton
TPP	Thermal power plant
UGSF	Underground gas storage facility
UGSS	Unified Gas Supply System of Russia
UOHSMS	Unified Occupational Health and Safety Management System
UOHSMS, entities covered	PJSC Gazprom, its main subsidiaries for exploration, production, processing, transportation of gas, underground gas storage and power and heat generation, as well as subsidiaries involved in operation of the UGSS
USD	United States (US) dollars
VAT	Value added tax
WFLH	Wide fraction of light hydrocarbons