

RESOURCE BASE AND PRODUCTION

The key areas in Gazprom Neft's resource base development strategy include organic growth of existing assets, development of oil assets owned by Gazprom PJSC, investigating and bringing non-traditional reserves into commercial development, and proactive geological exploration at new prospecting zones and offshore.

Resource base

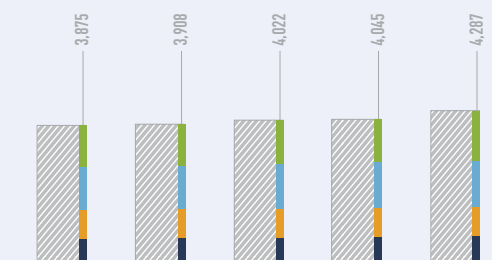


We are successfully developing complex multi-component oil and gas reserves, applying cutting-edge technologies, and using digital models of assets to perform calculations and find the most efficient solutions. Recognition from the industry globally demonstrates that the company remains at the cutting edge of technological development and is ready to tackle the most complex projects.

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for Exploration
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Gazprom Neft Group hydrocarbon reserves¹ under the SPE-PRMS classification², mtoe

Source: company data.



Type of reserves	2015	2016	2017	2018	2019
● Developed	680	726	719	734	763
● Undeveloped	838	788	803	830	820
Proved	1,518	1,514	1,522	1,564	1,583
● Probable	1,181	1,205	1,259	1,277	1,278
Proved + Probable	2,699	2,719	2,781	2,841	2,861
● Possible	1,176	1,189	1,240	1,204	1,426
TOTAL	3,875	3,908	4,022	4,045	4,287

/ 1 / Excluding NIS reserves.

/ 2 / Petroleum Resources Management System: a system developed by the World Petroleum Council and the Society of Petroleum Engineers, in cooperation with the American Association of Petroleum Geologists.

2019 highlights

- Sustained positive growth rate of 2P¹ reserves under PRMS standards.
- Successful licensing programme including access to 32 licence blocks, including joint ventures.
- A 2020 flexible field portfolio management roadmap developed.
- Agreements to expand cooperation in production and field development, development of digital technologies and experience-sharing with major market participants
- Completed development of logistical arrangements for year-round oil shipments and transportation from the Novoportovskoye field
- Long-term risk-operator agreements with Gazprom PJSC, allowing Gazprom Neft to bring into development reserves at oil-rim and Neocomian-Jurassic deposits.
- Start of construction of a full-scale complex of oil and gas infrastructure at the Otdalennaya ('Remote') group of fields (OGF).
- An asset swap transaction (NOVATEK-Yarsaleneftgaz)
- Approval from the Main State Expert Review Board (Glvagosexpertiza) to construct a gas pipeline crossing the Gulf of Ob.
- Laser altimetry and aerial photography became an obligatory stage in the detailed design of seismic field surveys.
- Full-scale deployment of Green Seismic² technology in the KhMAO-Yugra. 100% of field seismic operations in the winter seismic season in the Okrug used this technology.
- Opening of Integrated Field Development Centre (Tyumen), which provides support for major oil-production projects at all stages, from infrastructure design to well drilling and the production process.

The condition of the company's resource base is characterised by the deteriorating structure of its remaining commercial reserves, as the majority of fields are entering their late stage of development. The efficiency of developing these fields is improved through the use of advanced drilling and tertiary³ (enhanced oil recovery) techniques. In addition to this, Gazprom Neft expands its resource base each year through geological exploration and the acquisition of new assets.

The company's reserves are audited in accordance with the SPE-PRMS standards and the more conservative SEC⁴ standards. According to a reserves evaluation by independent consultants DeGolyer and MacNaughton⁵, Gazprom Neft's proved and probable hydrocarbon reserves (including allocations proportional to the company's interests in affiliated companies) under the SPE-PRMS international standards as at 31 December 2019 are estimated at 2,861 mtoe (1,865 mt of oil and 1,241 billion cubic metres

(bcm) of gas), excluding NIS reserves: a year-on-year increase of 0.7%.

Gazprom Neft's reserves-to-production ratio in terms of proved hydrocarbon reserves (SPE-PRMS standards), including the company's interest in joint operations and joint ventures, currently stands at 17 years. Total hydrocarbon production in 2019 was offset by new reserves (including acquisitions) in the order of 120%.

/ 1 / 2P – proved and probable reserves.

/ 2 / Green Seismic is a seismic survey technology that leads to a reduction in tree felling. It uses wireless recording equipment that can be installed using lightweight machinery. This makes it possible to reduce the width of clearings for vehicles from between four and five metres to one metre.

/ 3 / Tertiary recovery techniques are used to enhance oil flow and the oil recovery factor by injecting gas, chemicals, steam or other substances into formations.

/ 4 / An oil reserve classification developed by the US Securities and Exchange Commission, which requires the use of a 12-month average of the first-of-the-month prices in the reporting period.

/ 5 / An oil and gas consultancy.

Replacement of hydrocarbon reserves: key achievements¹, mtoe

Source: company data.

Enterprise	Proved reserves (2018)	Hydrocarbon production	Exploration, development and revision of prior estimates	Asset swap	Proved reserves (2019)
Gazprom Neft	872.96	(58.25)	57.30	50.33	922.34
Tomskneft	72.71	(4.80)	(0.26)	–	67.65
Slavneft	129.84	(7.37)	8.07	–	130.54
Salym Petroleum Development	22.95	(3.25)	3.54	–	23.24
Messoyakhaneftegaz (joint venture)	16.32	(2.81)	2.66	–	16.17
Arcticgas	386.29	(15.22)	29.26	(40.78)	359.56
Northgas	62.95	(3.12)	3.40	–	63.23
TOTAL	1,564.02	(94.82)	103.97	9.55	1,582.73

In 2019, as part of an asset swap deal with NOVATEK, Gazprom Neft obtained a 100% shareholding in NOVATEK-Yarsaleneftegaz, which owns the Malo-Yamalsky licence block in the Yamalo-Nenets Autonomous Okrug. The new asset will be included in the “Yamal Gas” project.

In 2019, Gazprom Neft also secured access to field development at a number of further licence blocks belonging to the Gazprom Group. Gas production at the Bovanenkovskoye

field began several years ago and full-scale development of the Kharasaveyskoye field started in 2019. To date, however, transport infrastructure for liquid hydrocarbons remains missing at both these fields.

Furthermore, in 2019, Gazprom Neft went into two new prospecting areas: the Taymyr Peninsula (in the Dolgano-Nenetsky District in the Krasnoyarsk Krai) and the north of the Tazovsky Peninsula. These two regions are marked by very limited

levels of geological investigation and are relatively remote from transport and oil and gas infrastructure. The company obtained subsoil rights on a declarative basis for geological prospecting at 12 licence blocks in the west of the Taymyr Peninsula, and also won bidding rounds for the Severo-Yamburgsky licence block, which allowed the company to create a new potential opportunity for growth in the north of the Tazovsky Peninsula (YaNAO).

Overall, in 2019, the company secured exploration and production rights

Licences obtained in 2019

Source: company data.

Region	Number of licences	Licence blocks
Krasnoyarsk Krai	13	Zapadno-Taymyrsky blocks 1–12, Omorinsky
Khanty-Mansi Autonomous Okrug-Yugra, Sverdlovsk Oblast	8	Severo-Vaysky, Srednevaysky, Polevoy, Severo-Ingolsky, Vostochno-Kinyaminsky, Vostochno-Shapshinsky 1, Sverdlovsky 4, Yuzhno-Ostrovnoy
Yamalo-Nenets Autonomous Okrug	6	Severo-Stakhanovsky, Novoromanovsky, Pukhutsyayakhsky, Blizhnenovoportovskoye field, Yuzhno-Obsky, Malo-Yamalsky
Orenburg Oblast	4	Nadezhdinsky, Zapadno-Rubezhinsky, Kornavarinsky, Pervomaysky
Tyumen Oblast	1	Yuzhno-Zimny
TOTAL	32	

/ 1/ Excluding NIS reserves.

to 32 new licence blocks in the Yamalo-Nenets and Khanty-Mansi Autonomous Okrugs, and other regions. The total number of licences held by the company in Russia reached 215 (including seven offshore licences). Three new fields were discovered across Gazprom Neft's concessions (in the Orenburg and Tomsk Oblasts) and were recorded in the Russian State Mineral Reserves

Register. The company also confirmed the oil- and gas-bearing potential of 48 new hydrocarbon deposits. This expansion of the company's resource base was facilitated by successful geological prospecting activities at the Alexander Zhagrin field in the Khanty-Mansi Autonomous Okrug, and at assets in the Yamalo-Nenets Autonomous Okrug, Orenburg Oblast, and the Krasnoyarsky Krai.

215

total number of licences held by the company in Russia

Partnerships

In 2019, the company not only actively developed cooperation with existing partners, but also entered into dialogues on a broad agenda with other companies.

By building partnerships, the company seeks to gain a wide range of benefits, including risk and investment sharing, obtaining or jointly developing new technologies, accelerating return on capital, and more. In addition to this, cooperation with other companies enables Gazprom Neft to replicate successes it has had in its other projects.

Developing exploration cluster in the Gydan Peninsula

In June 2019, Gazprom Neft and Royal Dutch Shell signed an agreement confirming their intention to create a joint venture to develop the Leskinsky and Pukhutsyayakhsy licence blocks. The transaction is expected to be concluded in 3Q 2020 once all necessary corporate and regulatory approvals have been obtained, and all legal preconditions met. As a result, Gazprom Neft and Shell will each have a 50% interest in the joint venture. Establishing this joint venture is intended to bring both parties' resources and skills together in developing an under-researched exploration cluster in the north-east of the Gydan Peninsula.

The company is currently working on these and a number of other deals, on which significant progress was made in 2019. In addition to focusing on current projects, in 2020 the company will continue to develop its portfolio of joint projects with existing and potential partners.