

## REFINING AND MANUFACTURING

Gazprom Neft continues the wide-ranging technological and environmental modernisation of its refining facilities directed at achieving the company's strategic goals in the refining segment, which include – among other things – increasing the conversion rate to 99% by 2025.

### 2019 highlights

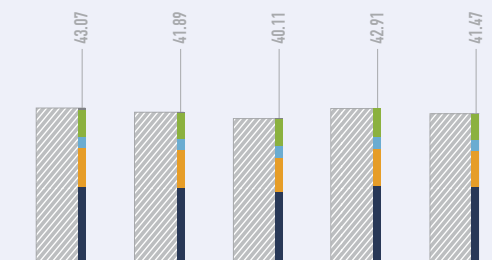
- Construction of Russia's first modern oil-refining catalyst production facility began in Omsk.
- Together with SIBUR the company consolidated 100% of the charter capital in the Poliom LLC polypropylene plant in Omsk.
- The first solar power plant in the region went into operation at the Omsk Refinery, and the first-phase construction of its innovative "Biosphere" treatment facility was also completed there.
- An automated system for loading and dispatching fuel brought into operation and preparations for pre-commissioning of a new Euro+ combined oil refining unit began at the Moscow Refinery.
- The NIS Pančevo Refinery is preparing for the launch of a deep conversion complex involving delayed coking technology.

In 2019, Gazprom Neft continued to develop its downstream business in line with the company's strategic goals approved by the Board of Directors. In accordance with Strategy 2030, the company intends to become an industry benchmark in terms of safety, efficiency and technological advancement. In the face of constantly changing market conditions, the Gazprom Neft business demonstrates resilience by maintaining its market-leading position in the refining and sales of oil products.

The ongoing large-scale modernisation of Gazprom Neft's refining assets will enable the company to reduce production of heavy petroleum products, increase the output of diesel and aviation fuels, as well as to process residual volumes of heavy petroleum products into high-margin quality products. Total investment in the development of the company's Omsk and Moscow refineries to 2025 exceeds \$550 billion, with \$99 billion invested in 2019.

### Refining throughput, million tonnes

Source: company data



Enterprise	2015	2016	2017	2018	2019
● Omsk Refinery	20.90	20.48	19.58	21.00	20.72
● Moscow Refinery	11.00	10.71	9.37	10.50	10.08
● NIS <sup>1</sup>	2.94	3.10	3.34	3.55	3.14
● Slavneft-YANOS <sup>2</sup>	7.63	7.47	7.74	7.86	7.53
● Mozyr Refinery	0.60	0.13	0.08	0.00	0.00
<b>TOTAL REFINING THROUGHPUT ACROSS THE GAZPROM NEFT GROUP</b>	<b>43.07</b>	<b>41.89</b>	<b>40.11</b>	<b>42.91</b>	<b>41.47</b>

/ 1 / Gazprom Neft has a 56.15% shareholding in NIS (Serbia), which operates two refineries (in Pančevo and Novi Sad), as well as upstream projects in the Balkans.

/ 2 / Gazprom Neft's share.

**2019 events. A pilot project in renewable energy launched.**

2019 events. A pilot project in renewable energy launched. A solar power plant is built and commissioned at the Omsk Refinery in record time. By introducing renewable energy technologies, the refinery will improve its energy efficiency and environmental performance.

Refining volumes were down 3.4% to 41.5 mt in 2019 due to planned refurbishment at all Gazprom Neft refineries and at those refineries in which Gazprom Neft has a share in refining. This maintenance, however, will enable uninterrupted operation of equipment and improve the performance of these facilities. Year-end results showed the conversion rate at the company refineries reaching 82.7%, and light product yield 64.4%.

At the Omsk Refinery, construction is underway of a crude oil distillation unit, a deep conversion facility, a delayed coking unit, a diesel-fuel hydrotreatment/dewaxing unit, and a Biosphere treatment facility. The Biosphere complex will deliver

almost complete closed-loop water consumption, reducing the burden on municipal wastewater facilities and increasing efficiency in wastewater treatment to 99.9%. Construction of the Biosphere is expected to be complete by 2021.

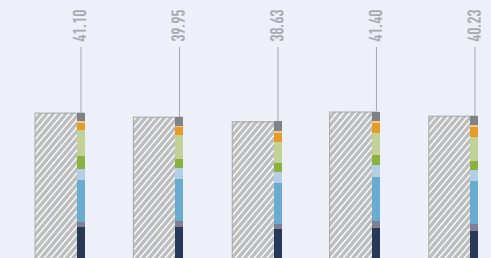
Production of low-sulphur bunker fuel with sulphur content of less than 0.5% was also started at the Omsk Refinery. This fuel meets the requirements of the International Convention for the Prevention of Pollution from Ships (MARPOL 2020) (see the case study 'Producing and selling bunker fuel compliant with the MARPOL 2020 requirements').

« The unique Biosphere water treatment complex comprehensively addresses the issues of reducing the environmental impact of production. In introducing new-generation, environmentally friendly technologies we are conserving resources as well as achieving significant economic benefits. The Biosphere sets new standards in environmental safety and contributes to technological advancement, enabling the company to match industry leaders.

**Oleg Belyavsky**  
General Director  
of the Gazprom Neft  
Omsk Refinery

**Breakdown of petroleum-products production, million tonnes**

Source: company data



Metric	2015	2016	2017	2018	2019
● Motor gasoline	9.08	9.18	8.60	8.86	8.02
● Naphtha	1.45	1.56	1.38	1.95	2.01
● Diesel fuel	11.87	12.02	11.45	12.32	11.87
● Jet fuel	3.00	3.04	3.04	3.47	3.34
● Marine fuel	3.67	2.41	2.67	2.58	2.49
● Fuel oil	7.20	6.72	5.70	6.20	6.45
● Bitumen and coke	2.02	2.19	2.73	3.07	2.95
● Oils	0.40	0.42	0.48	0.49	0.54
● Other	2.41	2.41	2.58	2.46	2.56
<b>TOTAL PETROLEUM-PRODUCTS PRODUCTION</b>	<b>41.10</b>	<b>39.95</b>	<b>38.63</b>	<b>41.40</b>	<b>40.23</b>

**82.7%**

**conversion rate at the company refineries in 2019**

**64.4%**

**light-product yield in 2019**



The Moscow Refinery is now completing the construction of the Euro+ oil refining complex comprising primary distillation and reforming units, a hydrotreatment facility for diesel fuels and a number of ancillary facilities. This new complex will allow the company to decommission five units built in the 1950–1960s, and to increase the yield of light oil products to 60%. The facility is expected to be brought into operation in the first half of 2020. Commissioning the Euro+ complex will increase production of motor and aviation fuels, as well as stepping up the output of diesel-fuel.

### Other assets

A sulphuric acid production unit was commissioned at the Slavneft-YANOS refinery; it will enable the company to improve the environmental safety of its production process. The refinery continues to implement a number of technical development and performance improvement projects, including the construction of a deep conversion facility.

At the NIS Pančevo Refinery, construction of a new deep conversion complex is nearing completion. This facility will process tar using delayed coking technology; this will enable the refinery to stop producing fuel oil. The refinery also launched a project to revamp its cat-cracking unit. Cutting-edge technologies that are planned to be used during the renovation will help to maximise propylene output using existing feedstock. Investment in the project will total over €72 million, and the work is scheduled to be completed in 2024.

**up to 99.9%**

**The «Biosphere» project improves efficiency in wastewater treatment**