

Mitigation of environmental impacts

“Preservation of the unique Arctic habitats is our key task. Hence, all our production facilities are designed, built and operated in such a way as to ensure compliance with the highest environmental standards.”

Alexander Dyukov
Chairman of the Management Board and CEO at Gazprom Neft

Environmental responsibility is one of the key values included in Gazprom Neft’s Corporate Code of Conduct. In planning and managing its ongoing operations, the Company is guided by the Goal – Zero objective, seeking to reduce environmental harm to zero. Gazprom Neft takes a consistent approach to minimising its environmental impact, implementing cutting-edge environmental technologies, employing rational use of resources and best management practices, and developing the best-in-class safety culture and environmental training system for employees.

Gazprom Neft uses a risk-focused approach embedded in all of its business processes to ensure environmental safety. Environmental impacts are measured at all stages of production activities and used as a mandatory input to buttress management and investment decision-making.

An ISO 14001 compliant environmental management system is the Company’s key tool in the realm of environmental protection. In 2018, an independent auditor confirmed that Gazprom Neft’s system fully meets the ISO 14001:2015 requirements. Certificates of compliance were also issued to Gazpromneft-Sakhalin, Gazpromneft – Moscow Refinery, Gazpromneft – Omsk Refinery, Gazpromneft – Ryazan Bitumen Binders Plant, Omsk Lubricants Plant (subsidiary of Gazpromneft-Lubricants), Gazpromneft Moscow Lubricants Plant, Gazpromneft Shipping, and Gazprom Neft Procurement.

The Company runs a comprehensive set of environmental initiatives, as well as dedicated programmes and projects focusing on ongoing ecological issues. In 2018, environmental investments totalled ₹ 19 bn¹.



More details
on environmental
management policies
on the Company’s website

¹ Capital environmental investments were down due to the completion of large-scale construction projects at the Company’s refineries in 2017.

Key environmental programmes of Gazprom Neft

Focus area	Key programmes
Air pollution management	<ul style="list-style-type: none"> > target gas programme; > refinery upgrades using best available technologies; > installation of recovery and purification systems for emissions from petroleum product facilities.
Water resources management	<ul style="list-style-type: none"> > construction of advanced biological treatment facilities as part of the refinery upgrade exercise; > wastewater quality control.
Land and vegetation pollution management	<ul style="list-style-type: none"> > Clean Territory project (corrosion diagnostics and monitoring, pipeline reconstruction and replacement); > reclamation of oil-contaminated lands; > reclamation of disturbed lands hosting production waste facilities; > pilot testing of technologies to reclaim saline soils.
Production waste management	<ul style="list-style-type: none"> > disposal / neutralisation of oil-bearing wastes; > ongoing disposal of drilling waste.
Biodiversity preservation	<ul style="list-style-type: none"> > preservation of biodiversity within the Company's footprint; > preservation of biodiversity in the marine ecosystems of the Russian Arctic.

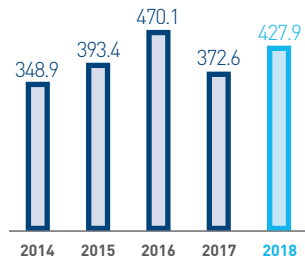
As part of its environmental strategy, the Company seeks to maximise engagement with stakeholders. When planning new projects, Gazprom Neft companies assess potential environmental impacts and hold public hearings to discuss relevant issues.

The Company engages the expert community to develop and put in place its environmental programmes, while also promoting experience exchanges with partners and counterparties.

² Green Seismic is a technology to save trees from cutting at seismic exploration sites.

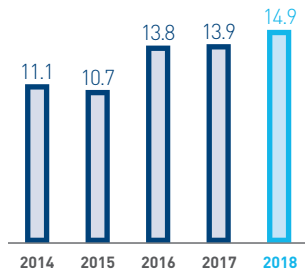
Gross emissions (kt)

Source: Company data



Greenhouse gas emissions (mt of CO₂ equivalent)

Source: Company data



AIR POLLUTION MANAGEMENT

Reduction of air pollutant emissions is one of the Company's top environmental priorities, with Gazprom Neft putting in place a large-scale programme to upgrade and retrofit its refining facilities while also running a broad range of environmental initiatives covering the entire production chain.

The 2018 increase in gross emissions was due to the active development of new exploration and production projects. That said, specific emissions remained flat y-o-y at 3.21 kg/t of fuel equivalent in produced hydrocarbons and 0.7 kg/t of fuel equivalent in processed hydrocarbons, in no small part thanks to the production upgrade and APG utilisation programmes.



More details on air pollution management on the Company's website

GREENHOUSE GAS EMISSIONS ACCOUNTING

Gazprom Neft supports implementation of the Paris Agreement on Climate Change¹ and the Russian Government's concept for putting in place a greenhouse gas emissions monitoring and measurement system. The Company fully complies with the national laws on reduction of greenhouse gas emissions² and the guidelines on measurement of such emissions³.

Gazprom Neft is building a dedicated system to manage hydrocarbon regulation risks and assess and monitor greenhouse gas emissions. On top of that, the Company is implementing a programme to increase APG utilisation rates across its production assets. The programme is designed to reduce emissions while also improving the efficiency of production operations.



Unique APG utilisation project at Messoyakha fields

¹ An agreement signed on 22 April 2016 as part of the United Nations Framework Convention on Climate Change (UNFCCC) to regulate carbon dioxide emissions starting from 2020.

² Orders of the Russian Ministry of Natural Resources and Environment No. 300 dated 30 June 2015 and No. 330 dated 29 June 2017.

³ Guidelines on Indirect Greenhouse Gas Emissions Volume Measurements approved by Decree of the Russian Ministry of Natural Resources and Environment No. 20-r dated 30 June 2017.

In line with the targets approved by the Board of Directors, the Company will be working to bring the APG utilisation rate up to at least 95% by 2020 at its assets with a well-developed gas infrastructure and by 2022 group-wide (including new assets) amid the growing production volumes. In the reporting year, the APG utilisation rate was up 2.2 pp y-o-y to 78.4%, having reached 92–99% at mature assets with a well-developed gas infrastructure since 2016.

An increase in APG flaring rates since 2016 was driven by the development of new projects, with the Company working to complete the construction of APG utilisation infrastructure at these assets. In particular, the construction is reaching its final stages at the Archniskaya group of fields, Novoportovskoye field and the southern part of the Priobskoye field where production growth translated into higher APG flaring rates in the reporting year.

WATER RESOURCES MANAGEMENT

While developing its production and refining business, the Company also seeks to reduce water consumption, cut waste water discharges, and improve environmental properties of water bodies and adjacent territories. Gazprom Neft's key projects in this area include construction of Biosphere treatment facilities at its Moscow (completed in 2017) and Omsk (scheduled for commissioning in 2020) refineries.

The technologies used at these facilities increase wastewater treatment efficiency to 99.9% and reduce water consumption by 2.5 times.

Gazprom Neft performs ongoing analysis and control of water resources and water protection zones in the regions of its operation.

Special attention is paid to offshore projects. At the Pirazlomnaya platform, the Company engaged a team of scientists to launch a comprehensive research of water habitats and monitor key hydrological and hydrochemical metrics.

WASTE MANAGEMENT

Gazprom Neft's production waste management system is designed to ensure environmentally safe waste treatment, optimise waste flows, and mitigate associated environmental risks and costs. The Company strives to maximise waste recycling in order to reduce its environmental impact.

In 2018, waste generation totalled 1,040.16 kt.



More details on water resources management on the Company's website



More details
on the Clean Territory
project on the Company's
website

LAND AND VEGETATION PROTECTION

Gazprom Neft reclaims disturbed and contaminated lands and plots and mud pits¹ by implementing cutting-edge pipeline monitoring and diagnostics technologies and land rehabilitation solutions based on prevalent land and climatic conditions. Ongoing control of equipment reliability and introduction of new technologies help the Company minimise the risk of soil contamination with oil or petroleum products.

In 2014, Gazprom Neft launched Clean Territory, a project aiming to boost reliability of oilfield pipelines. As part of the project, the Company performs corrosion diagnostics and monitoring, and reconstructs pipelines in an attempt to bring down the number of pipeline failures and reduce contamination areas. Annually, Gazprom Neft replaces 400 km of pipelines.

BIODIVERSITY PRESERVATION

Biodiversity preservation programmes have been rolled out across the Company's Russian assets. In Russia's Arctic, Gazprom Neft runs a biodiversity preservation programme using some of the animal and plant species that are endemic to the Arctic marine ecosystems as indicators of their sustainability. Developed jointly with the leading Russian and global experts, this programme seeks to meet the requirements of major national and international biodiversity preservation regulations, agreements and conventions.

To evaluate its impact on the Arctic ecosystems, the Company maintains an ongoing environmental monitoring within its footprint. The research conducted in 2018, including toxicological and genetic analysis of biological samples, did not reveal any major changes in the ecosystems.

Narwhal research programme

In 2018, Gazprom Neft launched a programme to get insights into the life of narwhals, a rare Arctic species featuring on the IUCN Red List. Up to now, there has been no comprehensive research on this animal.



Mysteries of the narwhal

¹ Mud pits are facilities designed for centralised collection, treatment and disposal of drilling waste.