



GHG emissions

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 has in place a corporate standard on GHG emissions control, which was drafted based on the principles contained in applicable Russian laws and international guidelines.

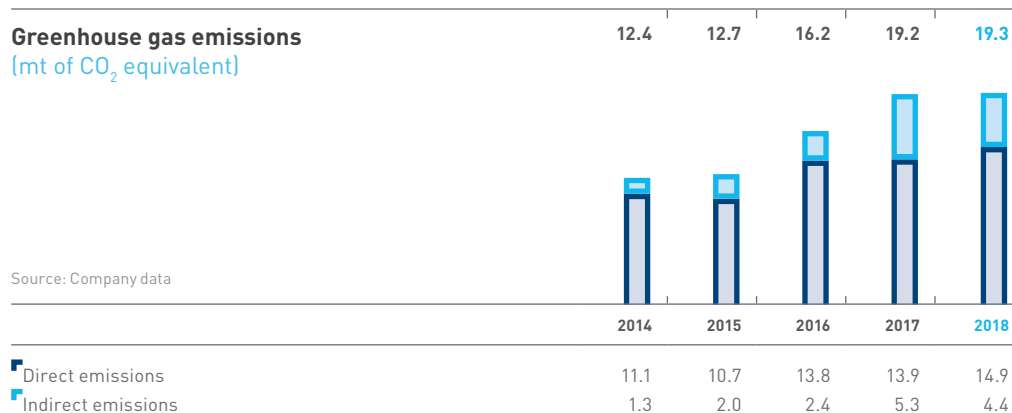
The standard is fully in line with the GHG Protocol Corporate Accounting and Reporting Standard developed by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI), as well as GOST R ISO 14064-1-2007, which are recognised worldwide and do not contradict Russian laws. The standard also incorporates additional

recommendations of the IPIECA, API and OGP Petroleum industry guidelines for reporting greenhouse gas emissions and the G4 Sustainability Reporting Guidelines.

Gazprom Neft is building a dedicated system to manage hydrocarbon regulation risks, with GHG emissions assessment as its key element. The Company measures:

- > direct GHG emissions from burning of hydrocarbon fuels and substances, facilities operation, and technological losses;
- > indirect emissions from consumption of electricity, heat, steam or cooling.

11,284
MCM
OF APG UTILISED

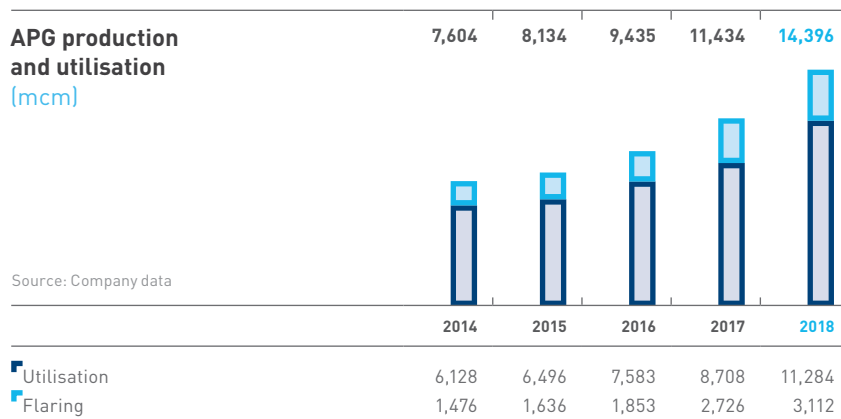


¹ An agreement signed on 22 April 2016 as part of the United Nations Framework Convention on Climate Change (UNFCCC) to regulate carbon dioxide emissions starting from 2020.

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.

APG production and utilisation (mcm)



The growth of direct GHG emissions in 2018 was due to an increase in APG flaring and oil refining volumes. The increase in APG volumes came as a result of growing intensity of oil exploration and production.

Gazprom Neft is implementing a programme to increase APG utilisation rates across all of its production assets. The Board of Directors set a goal to reach a 95% APG utilisation rate at the fields with developed gas infrastructure by 2020, and across all of the Company's assets (including the newly acquired ones) – by 2022.

In 2018, the APG utilisation rate across the Company's subsidiaries operating in Russia stood at 78.4%, while for mature fields with developed gas infrastructure this indicator was at 92–99% since 2016.

92–99%

APG UTILISATION RATE SINCE 2016

at mature fields with developed gas infrastructure

Underground storage for APG utilisation

At Messoyakhaneftegaz, the Company is going to set up APG storage in the gas cap of a neighbouring oil and gas condensate field. This is an unprecedented project for the oil and gas industry, and to carry it out the Company will build a compressor station with a capacity of 1.5 bcm of gas per annum at the Vostochno-Messoyakhskoye field and two multi-well pads with nine reinjection wells at the Zapadno-Messoyakhskoye field. The fields will be connected through an interfield pipeline for transporting compressed gas.

This initiative will maximise the efficiency of APG utilisation at Messoyakhaneftegaz. Currently, the APG accumulated as part of crude oil production at Messoyakha fields is

used for process needs as fuel for oil heating furnaces and boilers. Transportation of the APG from the Vostochno-Messoyakhskoye field and its injection into the gas cap of the Zapadno-Messoyakhskoye field will make it possible to use the stored gas in the future. This project cannot be implemented at the Vostochno-Messoyakhskoye field, where active oil production takes place, because of its geological structure: the field does not have deposits with properties and space suitable for mass storage. The Company is planning to build the infrastructure using Russian equipment. The construction is scheduled to complete in 2.5 years.

The rise in APG flaring volumes since 2016 was attributable to new projects where the utilisation infrastructure is at the construction stage, which is almost completed at the Archniskaya group of fields, as well as the Southern block of the Priobskoye field and the Novoportovskoye field. The production growth at these fields was the main driver of the increase in APG flaring in 2018.

In total, in 2018 the APG utilisation rate across the Company's subsidiaries operating in Russia increased by 29.6% y-o-y, which was achieved thanks to:

- > Ensuring high utilisation of gas processing equipment;
- > Maintaining high APG utilisation at the fields with developed gas infrastructure;
- > Launching commercial operation of stage 2 of the comprehensive gas treatment unit (CGTU) at the Novoportovskoye field run by Gazpromneft-Yamal and of the compressor station of the 4th production train at the Eastern block of the Orenburgskoye oil and gas condensate field run by Gazpromneft-Orenburg.

Climate projects of NIS

NIS is a Serbia-based company that took active part in implementing the European Union's initiative to incorporate an EU directive on climate into the country's legislation.

In particular, NIS participated in the meetings held between the Serbian government and the European Commission on monitoring and reporting GHG emissions. The company has a department responsible for monitoring the EU's policies and regulations, including those in the area of climate change and energy efficiency.

The company's low carbon strategy will be defined in line with the National Climate Strategy of Serbia, which is currently under development. Still, NIS is already taking a number of steps to monitor and reduce emissions based on the corporate environmental standards and goals.

First, the company plans to assess the impact of climate

change on NIS a.d. Novi Sad's operations, determining the GHG management procedures in accordance with the EU directives and regulations and the volumes of CO₂ emissions. The next scheduled step is for NIS to work out the arrangements necessary for the free allocation of CO₂ emission allowances for the company's installations that will be participating in the EU ETS¹. The company made a preliminary assessment of direct CO₂ emissions as well as drafts of monitoring plans for these installations.

NIS runs projects on APG utilisation and renewable energy development². The company constructed amine³ drive for gas refinement in Elemir, which removes CO₂ from natural gas. This CO₂ is then transported to the Rusanda field and used to raise reservoir pressure and enhance oil yield. NIS has 17 cogeneration power stations that produce electricity and heat using APG.

¹ EU Emissions Trading System.

² For more information on renewable energy projects, see the Energy Efficiency and Conservation section.

³ Amine gas treatment is used to prepare natural gas and APG for removing liquid components from hydrocarbons. During processing, they are absorbed by solutions of amines (ammonia derivatives), followed by regeneration of the solution and production of a stream of concentrated hydrogen sulphide.