

# PROTECTING THE ATMOSPHERE

One of the Company's primary environmental objectives is to reduce air pollutant emissions. In an effort to meet this objective, Gazprom Neft is carrying out an ambitious programme to modernise and rebuild its oil refining assets by making them safer and more environmentally friendly.

## KEY ATMOSPHERE PROTECTION PROJECTS IN 2016 INCLUDED

### The Moscow Oil Refinery:

- > rebuilding the sulphur production unit and supplementing it with a tail gas clean-up unit. The project has minimised sulphur dioxide emissions and completely eliminated hydrogen sulphide emissions;
- > introducing an automated system for hermetically sealing bitumen into tanks, which reduced pollutant emissions from the operation of the bitumen plant;
- > launching construction on a Euro+ oil refining unit. High-tech equipment and a large degree of automation will improve oil refining efficiency by 19% and reduce emissions per tonne of raw materials by 11%;
- > continuing to build the 'Biosphera' treatment plants, which will cut emissions by 95%.

### Omsk Oil Refinery:

- > drafting and approving design documentation for the construction of new treatment plants;
- > modernising certain process units that significantly affect the level of emissions. Overall, the Omsk Oil Refinery has reduced the total volume of pollutants by 36% while simultaneously increasing oil refining volumes by 30% over the five years that it has been rebuilding equipment.

The growth in gross air pollutant emissions in 2016 compared with 2015 is related to an increase in oil production volume, including at subsidiaries with mature assets.



The current projects being implemented at the Moscow Oil Refinery are essentially projects of the future. This is a huge plus both for the region and for the refinery itself in terms of competitiveness

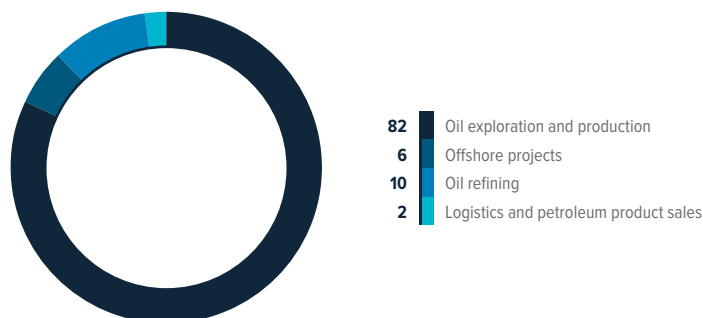
### Sergey Donskoy

Russian Minister of Natural Resources and the Environment

The oil refining assets modernisation programme has enabled Gazprom Neft to proceed with the production of a full range of high-octane petrol and diesel fuel that meet **Euro-5 emission standards**. The transition by consumers to fuel of this higher emission standard significantly reduces emissions when used in motor vehicle engines.

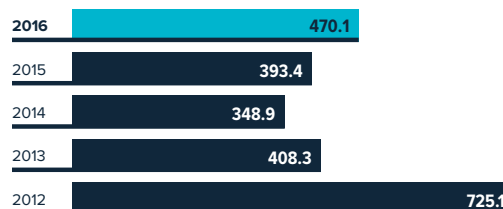
## SHARE OF COMPANY'S BUSINESSES IN TOTAL POLLUTANT EMISSIONS IN 2016 (%)

Source: Company data



## GROSS AIR POLLUTANT EMISSIONS (1,000 t)

Source: Company data



## STRUCTURE OF GROSS AIR POLLUTANT EMISSIONS (1,000 t)

Indicator	2012	2013	2014	2015	2016
Solids	55.2	20.9	13.5	13.8	18.4
Hydrocarbons (without VOCs)	120.7	79.1	57.6	55.8	46.2
Carbon monoxide (CO)	411.6	177.1	125.9	143.7	173.6
Nitrogen oxides (NO <sub>x</sub> )	11.0	9.5	13.2	10.5	18.0
Sulphur dioxide (SO <sub>2</sub> )	21.9	30.2	46.8	96.0	124.8
Volatile organic compounds (VOCs)	104.2	91.1	91.5	72.6	88.4
Other gaseous and liquid substances	0.5	0.4	0.4	1.0	0.7

## STRUCTURE OF GROSS AIR POLLUTANT EMISSIONS BY THE COMPANY'S BUSINESSES IN 2016 (1,000 t)

Indicator	Oil exploration and production	Offshore projects	Oil refining	Logistics and sales
Solids	13.9	2.8	1.6	0.1
Hydrocarbons (without VOCs)	39.8	2.6	0.1	3.7
Carbon monoxide (CO)	148.7	22.3	2.2	0.4
Nitrogen oxides (NO <sub>x</sub> )	11.0	2.2	4.3	0.5
Sulphur dioxide (SO <sub>2</sub> )	112.5	0.2	11.6	0.5
Volatile organic compounds (VOCs)	57.9	0.3	20.7	9.5
Other gaseous and liquid substances	0.1	0.1	0.1	0.4

## SPECIFIC INDICATORS OF AIR POLLUTANT EMISSION IN 2016

Indicator	Measurement unit	2015	2016
Specific gross air pollutant emissions	kg/t of extracted hydrocarbons (TOE)	0.0046	0.0048
	kg/t of processed hydrocarbons (TOE)	0.0001	0.0007