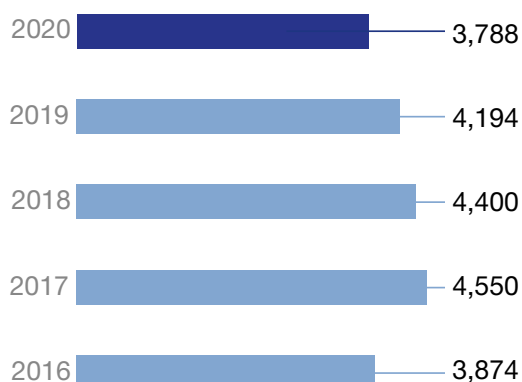


Atmospheric emissions

Air emissions from marine vessels account for 5 to 10% of global emissions from the transport sector.

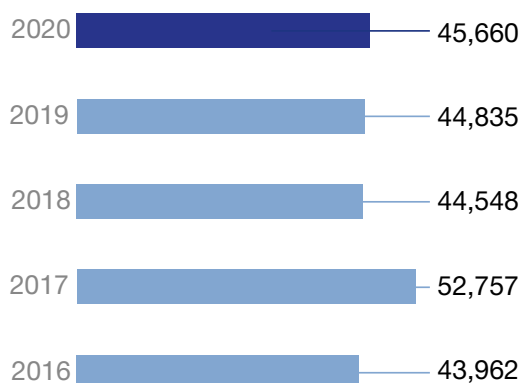
The basic components of atmospheric emissions are carbon, sulphur and nitrogen oxides formed during the combustion of fuel in ship engines.

Dynamics of carbon dioxide (CO₂) emission, 2016-2020, ('000 tonnes)



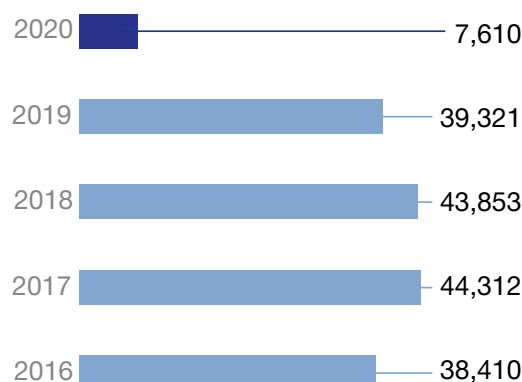
The decrease in CO₂ emissions is due to the increase in the use of LNG fuel in 2020 to 16% of the total fuel consumption of the fleet, which generally boosts the energy efficiency of ships.

Dynamics of nitrogen oxides (NOx) emission, 2016-2020, (tonnes)



Although the share of LNG fuel in the total fuel consumption of the fleet increased in 2020, this did not lead to a reduction in nitrogen oxides emissions because their amount largely depends on the engines' running time and operating load.

Dynamics of sulphur oxides (SOx) emission, 2016-2020, (tonnes)



The significant reduction in sulphur oxides emissions in 2020 is a result of activities carried out in 2019 on all the Group's ships to prepare for the switch to low-sulphur marine fuel with a sulphur content not exceeding 0.5% from 1 January 2020.

The Group is constantly supplementing the fleet with energy efficient and environmentally sustainable, new generation vessels which incorporate innovative technologies, developing a Ship Energy Efficiency Management Plan (SEEMP) for each ship in order to control emissions of hazardous substances from exhaust fumes, and fulfilling EU Council Directive 2012/33/EU on the sulphur content of certain marine fuels, using ship fuel with a reduced sulphur content.

EEOI index

Energy Efficiency Operational Index (EEOI) is calculated as the total CO₂ emissions (in grammes) produced on a voyage per total tonne-miles generated (tonnes carried multiplied by distance travelled).

The table below shows the EEOI calculation for different types of Sovcomflot Group's vessels operating on voyage (spot) contracts. In this case, fuel for the vessels is procured by the ship owner or fleet operator. A decrease in the

EEOI index means a decrease in carbon oxides emissions and, accordingly, in fuel consumption per tonne-mile, which characterises an improvement in the operational performance of the Company's fleet.

EEOI index of Sovcomflot Group's ships in 2020, (grammes/tonne-mile)

Type of vessel	Standard	Actual 2020	Actual 2019
Suezmax tankers	≤ 12	8.138	8.346
Aframax tankers	≤ 15	5.668	10.118
LR II product carriers	≤ 15	8.122	11.053
LR I product carriers	≤ 16	14.553	13.294
MR product carriers	≤ 25	17.207	19.617
Handy product carriers	≤ 25	20.575	24.809
Panamax bulkers	≤ 12	10.307	7.580

22%

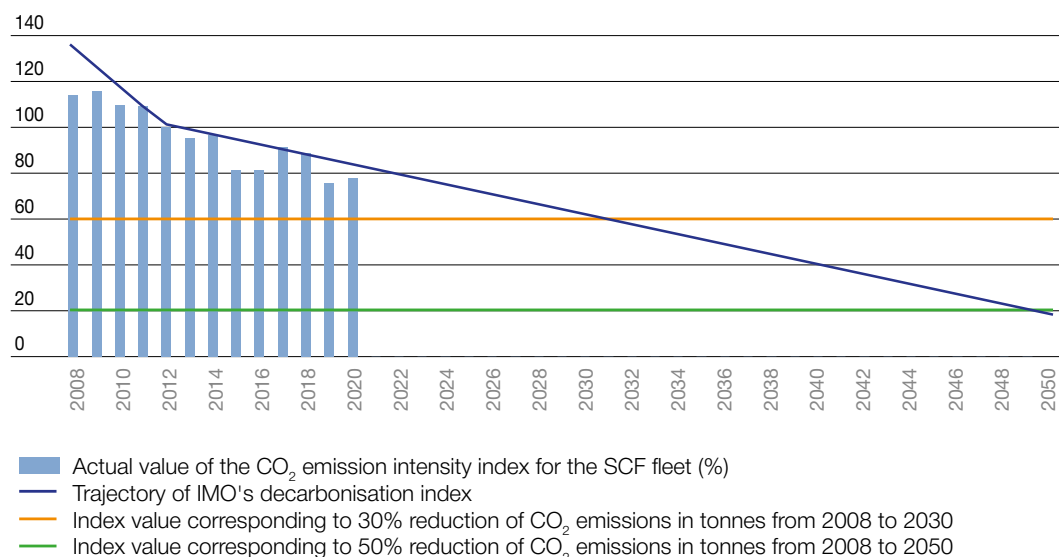
reduction in the CO₂ emission intensity index for the SCF fleet between 2012 and 2020

Decarbonisation index

The carbon intensity targets under SCF Group's 'Green Charter' are based on the vision of the International Maritime Organization (IMO). In 2018 the IMO adopted a decarbonisation strategy, which defines CO₂ emission reduction targets. The IMO expects global carbon dioxide emissions to be reduced by at least 50%

by 2050 compared to 2008 and CO₂ emissions per transport work (CO₂ emission intensity index) to be reduced by at least 40% by 2030 and 70% by 2050 compared to 2008 levels.

Dynamics of the CO₂ emission intensity index for the SCF Group fleet



Results of the use of LNG as a fuel for Aframax tankers

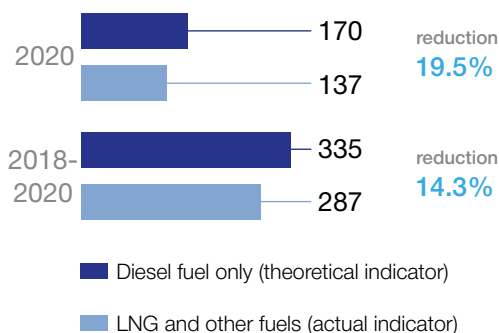
The commissioning of a series of SCF's new generation vessels, the world's first Aframax tankers specially designed to run on LNG, has significantly contributed to environmental protection. The tankers of this series have dual-fuel main and auxiliary engines and boilers. These vessels are fitted with Selective Catalytic Reduction technology, which enables compliance with Tier III

regulations governing NOx emissions (Annex VI to the International Convention for the Prevention of Pollution from Ships) even when running on diesel fuel.

The first vessel of the series was put into operation in 2018. By the end of 2019 the number of Aframax tankers in the SCF fleet capable of running on LNG increased to six. An analysis of data obtained from ship operations during 2018-2020 confirms the theoretical calculations that Sovcomflot relied on when assessing the prospects of this technology.

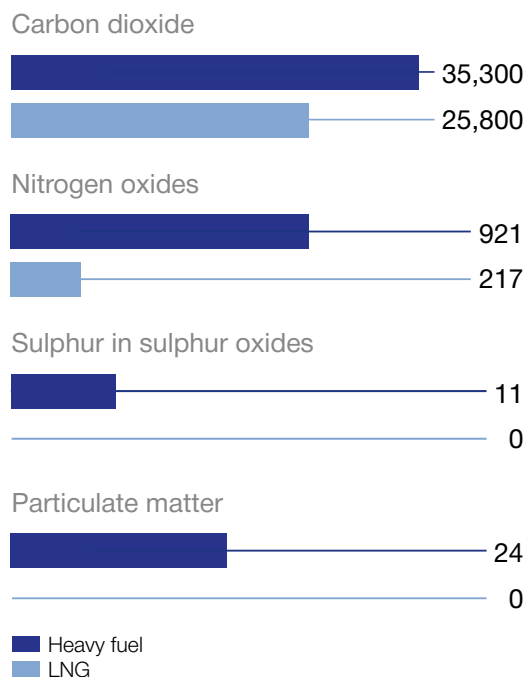
The diagram below shows the amount of carbon dioxide emissions from SCF Group's Aframax tankers that use LNG along with other marine fuels compared with similar tankers running on diesel fuel.

Reduction in carbon dioxide emission when using LNG as a fuel for Aframax tankers, ('000 tonnes per year)¹



Provided that an Aframax tanker runs exclusively on LNG, the reduction of sulphur oxides and soot emissions reaches 100%, nitrogen oxides emissions decrease by at least 76%, and the reduction of carbon dioxide emissions can reach 30% as compared with power plants running on conventional heavy fuel.

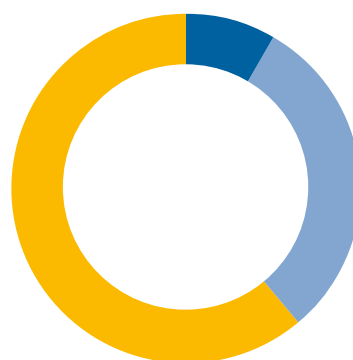
Potential for reducing atmospheric emissions from ship power plants through the use of LNG, (tonnes per year)



Wastewater and waste management

A key focus of the Sovcomflot Group's environmental protection activities is reducing the amount of wastewater and waste that gets into the World ocean during ship operations. These activities are carried out pursuant to the internal procedures of the Group, which encompass the requirements of both international and domestic legislation.

Amount of different types of garbage disposed of in 2020, (cubic metres)



¹ The amount of fuel of different types consumed by vessels during operations which was used for calculating these indicators is verified by IMO Data Collection System reports and by the classification society ABS.

443 ■ Discharged into the sea in accordance with the MARPOL 73/78 Convention
1,600 ■ Incinerated on board
3,176 ■ Delivered to on-shore reception facilities