

# MANAGING ENVIRONMENTAL IMPACT

Protecting the environment and minimising negative environmental impacts from the Company's operations are among FPC's highest priorities.

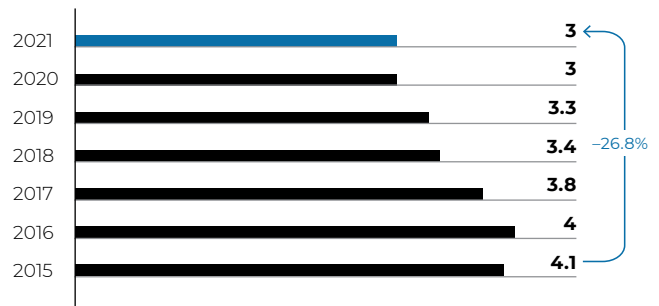
## REGULATORY AND ENVIRONMENTAL ASPECTS

Goals	Initiatives
Minimising negative environmental impacts from the Company's operations	Equipping carriages with environmentally friendly facilities
	Purchasing carriages with a central power supply
	Installing high-voltage heating points at the turnaround and originating stations
Caring for human health and the environment	Revamping treatment facilities
	Retrofitting water recirculation systems to carriage washing facilities
	Converting boilers from liquid fuel to gas
	Upgrading water and sewer networks

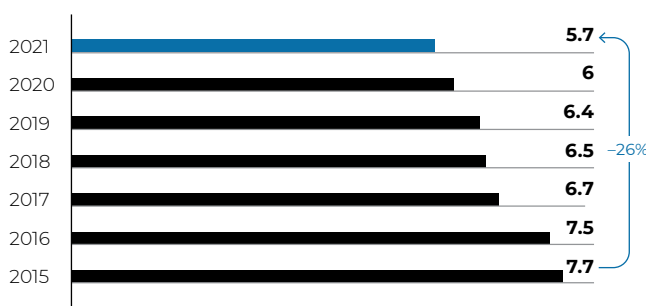
Waste generation '000 tonnes



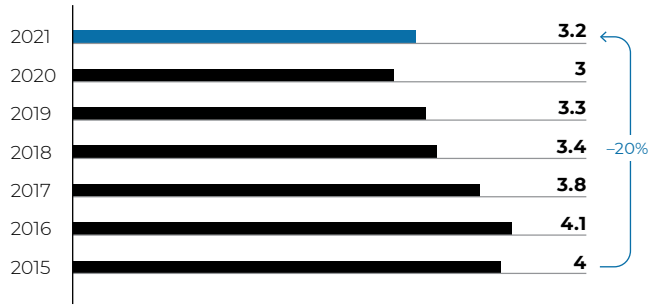
Air pollutant emissions '000 tonnes



Water use million m<sup>3</sup>



Used water discharge million m<sup>3</sup>



In its environmental activities, FPC complies with Russian environmental laws, the Environmental Strategies of the Parent Company, and the Company's standard 1.16.001–2016 FPC Environmental Management System.

FPC involves investment, CAPEX, and operational initiatives in pursuit of its environmental safety goals.

Overall, since the start of its operations, FPC has consistently reduced its environmental impacts:

- Production and consumption waste generation decreased from 105,000 tonnes to 85,300 tonnes
- Total used water discharge was down from 5.5 million m<sup>3</sup> to 3 million m<sup>3</sup>
- Water use by structural units decreased from 9.4 million m<sup>3</sup> to 5.7 million m<sup>3</sup>
- Air pollutant emissions were reduced from 4,000 tonnes to 3,000 tonnes

These results were achieved by optimising operations and processes across the Company's branches, adopting new technology, and maintaining consistent supervision.

In 2021, a slight increase in waste generation is attributable to an increase in passenger traffic following an improvement in the epidemiological situation.

To reduce the anthropogenic impact of passenger services, FPC upgraded its rolling stock and facilities across its branches.

The Company keeps railway tracks from contamination while maintaining an adequate level of sanitation at rail infrastructure facilities by only acquiring carriages equipped with environmentally friendly toilet facilities. Also, existing carriages are retrofitted with environmentally friendly toilet facilities during overhauls.

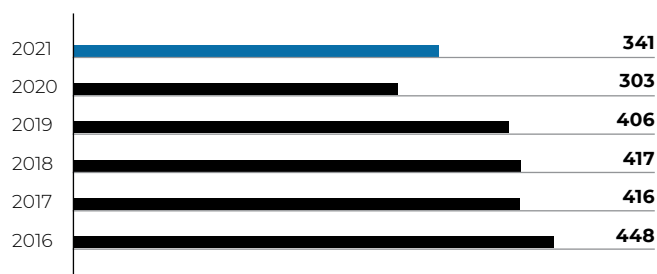
In total, over 80% of fleet carriages were equipped with environmentally friendly toilet facilities by the end of 2021. At the current rate of replacement and upgrade, over 95% of rolling stock will be equipped with environmentally friendly toilet facilities by 2025.

## AIR QUALITY IMPROVEMENT

To reduce pollutant emissions into the air, the Company took the following measures:

- Converting boiler to heating with environment friendly fuel, construction of high-voltage points for heating of passenger carriages at the turnaround and originating stations
- Purchasing carriages with a central power supply (totally, 1,372 carriages feature this option)
- Installing high-voltage heating points at the turnaround and originating stations (the costs made up RUB 130.079 million), including the high-voltage points at Imeretinsky Resort station, Anapa (construction and installation), Yoshkar-Ola, Cheboksary stations (grid connection and commissioning).

### Greenhouse gas emissions '000 tonnes CO<sub>2</sub>



## SUSTAINABLE WATER USE

Used water discharge		million m <sup>3</sup>	
Indicators	2020	2021	
Total	2.999	3.212	
Wastewater meeting regulatory clean-up levels (surface runoff)	0.191	0.211	
Contaminated runoff (manual carriage washing)	0.041	0.045	
Sent for treatment (sewage)	2.954	2.956	

In order to reduce discharge negatively affecting the environment and centralised water disposal systems, the Company implements annual programmes to upgrade its water treatment and carriage washing facilities through furnishing them with water recirculation systems and on-site water treatment facilities:

In particular, the following works are carried out:

- Retrofitting carriage washing facilities featuring water recirculation systems
- Upgrading water supply and sewer networks

## PRODUCTION AND CONSUMPTION WASTE MANAGEMENT

A total of 85,300 tonnes of waste was generated by the Company's operations in 2021. This entire volume was transferred to other organisations under respective contracts, including:

- 23,700 tonnes — for recycling/utilisation
- 2,900 tonnes — for neutralisation
- 58,700 tonnes — for landfills

Total waste mass by hazard class		'000 tonnes	
Indicators	2020	2021	
<b>TOTAL</b>	<b>81.0</b>	<b>85.3</b>	
Hazard Class 1	0.02	0.02	
Hazard Class 2	0.1	0.1	
Hazard Class 3	2.0	2.1	
Hazard Class 4	54.7	56.3	
Hazard Class 5	24.18	26.8	

Total waste mass by disposal method		'000 tonnes	
Indicators	2020	2021	
Disposal at the Company's sites (Hazard Class 5)	0.031	0.025	
Transferred to contractors	79.0	85.3	
Including:			
for neutralisation	3.1	2.9	
for recycling	20.2	23.7	
for landfilling	55.7	58.7	