## Environmental Impact Management

## **Environmental protection**

Environmental protection and negative impact mitigation are among FPC's priorities. In its environmental activities, the Company is guided by the applicable laws of the Russian Federation and the Environmental Strategy of Russian Railways until 2017 and, for the longer term, until 2030.

To reduce the man-made impact of passenger services, the Company took efforts to upgrade its rolling stock and facilities across its branches.

Aiming to prevent tracks from being polluted and maintain an adequate level of sanitation at infrastructure facilities, the Company acquires only carriages equipped with environmentally friendly toilet facilities. In addition, old carriages are being fitted out with environmentally friendly toilet facilities during overhauls.

In an effort to reduce air pollution, the Company is installing boilers fired with environmentally friendly fuels, switching its carriages to electricity, and purchasing carriages with central power supply. In 2016, discharge of polluted waste water decreased by 2.3% year-on-year, to 13.45 thousand cubic metres. Air emissions were reduced by 8.3% in 2016.

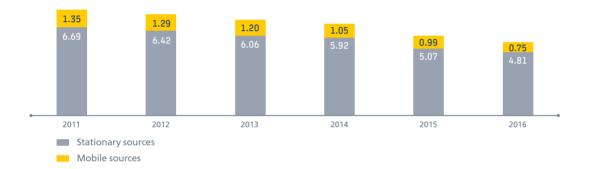
Aiming to reduce the sources of discharge negatively affecting the centralised water discharge systems and the environment, the Company implements annual programmes involving modernisation of water treatment and carriage-washing facilities, including the installation of water recirculation systems and on-site water treatment facilities.

Waste water discharge to the environment, thousand cubic meters





## Air emissions, thousand tonnes



In 2016, FPC developed its Environmental Management System standard (FPC 1.16.001-2016 Company Standard).

## **Energy consumption**

In 2016, fuel savings achieved under FPC's **Energy Conservation and Energy Efficiency** Improvement Programme were 5,744.4 t c.e. against the actual 2015 baseline vs planned 4,402.4 t c.e., which amounts to RUB 46.4 million in monetary terms. By type of fuel and energy resources (excluding water and heat), savings were as follows:

- ocoal 3,652.4 tonnes against the planned 2,533.5 tonnes, or RUB 1.0 million;
- fuel oil 474.5 tonnes against the planned 411.4 tonnes, or RUB 4.5 million;
- gasoline 75.9 tonnes against the planned 64.2 tonnes, or RUB 2.9 million;
- diesel fuel 190.8 tonnes against

- the planned 154.6 tonnes, or RUB 6.0 million;
- natural gas 612.4 thousand cubic meters against the planned 294.5 thousand cubic meters, or RUB 2.9 million;
- electricity 4,015.3 thousand kWh against the planned 3,995.4 thousand kWh, or RUB 20.1 million.

