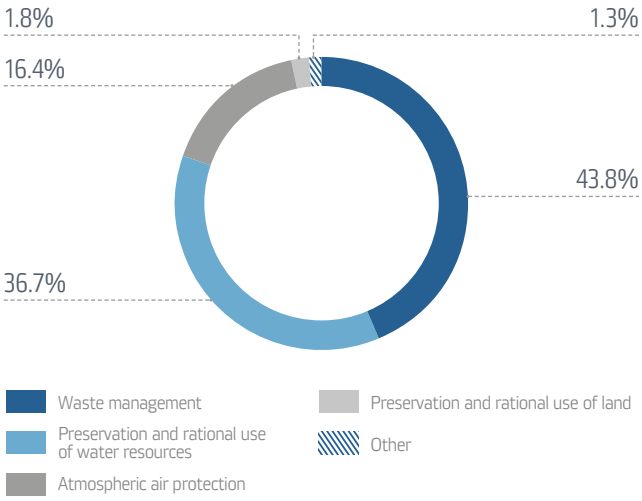
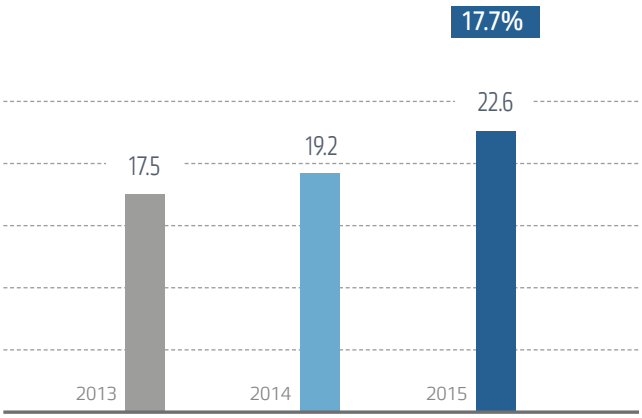
ENVIRONMENTAL SAFETY

Structure of environment protection activities costs in 2015, RUB mln[1]



Cost of environment protection activities, RUB mln



In the reporting period, IDGC of Centre's environment protection activities were performed in accordance with IDGC of Centre's Environmental Policy Programme of the 2015–2018 period, approved by the resolution of the Board of Directors (Minutes dated 30.01.2015 No. 01/15).

The Company's environmental spending in 2015 increased to RUB 22.6 mln by 17.7%. This spending increase is attributable to the growth of the number of environment protection activities implemented by IDGC of Centre's branches.

ATMOSPHERIC AIR PROTECTION

Atmospheric air protection efforts taken by the Company focus on controlling the toxicity of vehicle exhaust gas. The following measures are implemented:

- Instrumental monitoring of compliance with the maximum allowable emission limits;
- Adjustment or replacement of vehicle fuel injection equipment;
- Quarterly inspections of vehicle CO and CH exhaust gas testing logs;
- Instrumental measurements in sanitary and protection zones, landscaping and site improvement.

Gross atmospheric emissions of pollutants in 2015

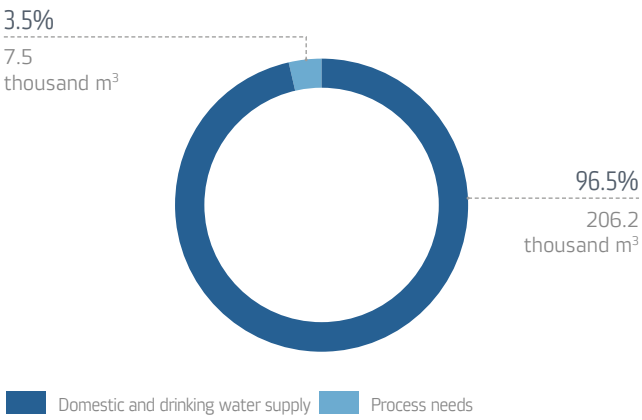
Contaminants	in thousands of m^3
Total	162.6
including:	
Solid particles	13.7
Sulfur dioxide	0.5
Carbon oxide	78.2
Nitrogen oxide (equivalent to NO2)	6.8
Hydrocarbons (without volatile organic compounds)	0.3
Volatile organic compounds	62.9
Benzapyrene	0.05

[1] *The expenditures for technical activities were not allocated in the Environmental Policy Programme and were included in the Investment Programme budget.*

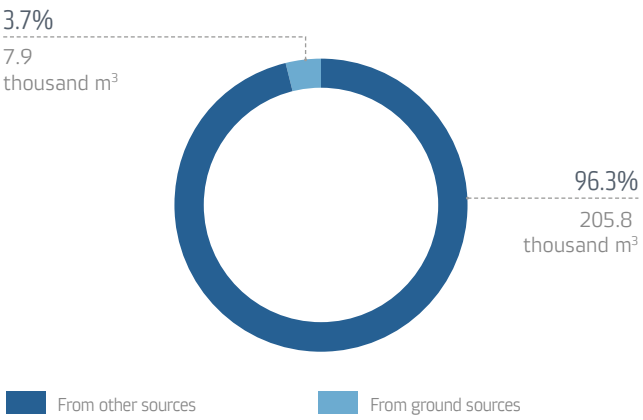
PRESERVATION AND RATIONAL USE OF WATER RESOURCES

The Company performs a laboratory analysis of the microbiological, radiological and chemical parameters of ground and discharged wastewater, and a comprehensive treatment of sewage wells and systems. The allowable concentrations of harmful impurities in discharge wastes are monitored. Samples are regularly taken from water wells for quality evaluation.

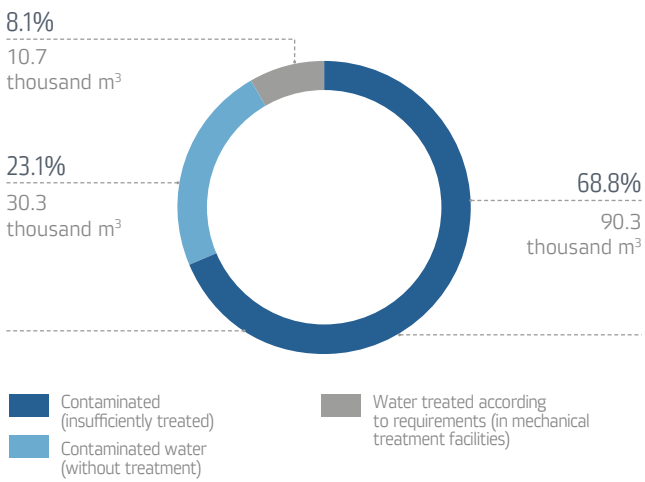
Water intake in 2015



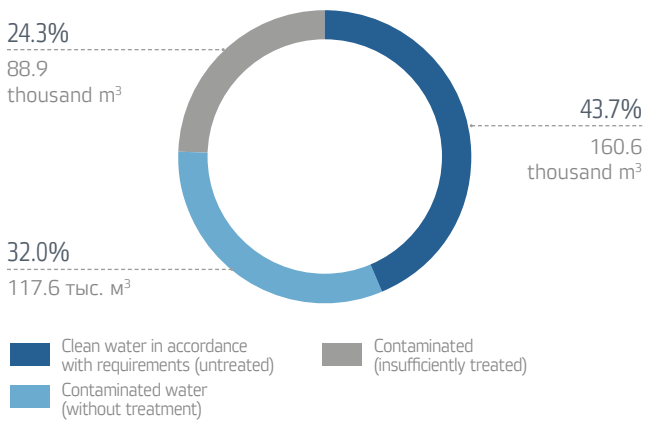
Water usage in 2015



Water disposal into the surface water bodies in 2015



Land water disposal in 2015



PRESERVATION AND RATIONAL USE OF LAND

In order to reduce harmful impact on soil and ground, the Company has set up of sites for the accumulation of oil-containing equipment, used oil, scrap metal and wood poles.

WASTE MANAGEMENT

In order to manage waste, the Company has set up sites for waste accumulation; it also segregates hazardous waste into different classes and marks containers appropriately. Special attention is paid to monitoring the accumulation of used mercury lamps. Compliance with the established maximum emissions allowed and their discharge is regularly monitored in waste accumulation areas. For the processing, disposal and burial of waste produced, the Company signs respective agreements with specialized organisations.

UPGRADING OF OPERATIONAL FACILITIES

In 2015, the Company continued to replace oil circuit breakers with gas-insulated and vacuum circuit breakers. Such circuit breakers have a high reliability rate; they are fire safe and environmentally safe, unlike the oil ones. Additionally, the Company performed an overhaul of oil circuit breakers, repairing the oil receivers of transformers and drainage devices, replacing oil-filled bushings with solid insulation bushings. Old vehicles were written off and new vehicles with reduced fuel consumption and an environmental safety class of Euro-2 and higher were purchased.

In order to protect birds from the impact of electrical currents, 1,168 bird guard devices were installed on the 35-110 kV overhead lines. Another efficient method for protecting birds from contact with power transmission lines is the application of a self-supporting insulated wire, covered by a special polymer shell that does not require any additional devices for ensuring its safety. Overall, the length of such lines increased almost by 3,500 km in 2015.

For the further reduction of a negative environment impact, the Company also commissioned indoor substations with gas-insulated mono-blocks and dry 6-10/0.4 kV transformers including TSN 10-35 kV.

1,168
scaring devices were installed to protect birds from electric shock on 35-110 kV overhead lines

by 3.5 thousand km
the length of lines for additional protection of birds was increased