

Occupational safety

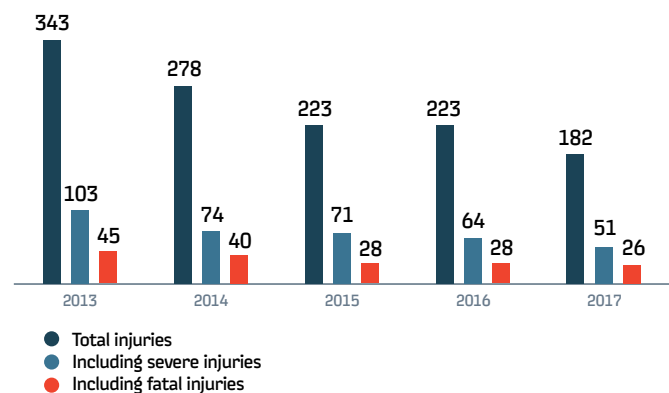
Russian Railways has put in place an effective and continuously evolving occupational safety management system. Through sustained efforts aimed at its improvement in 2003–2017, the Company secured a 6.2x decrease in the number of workplace injuries bringing it down to 182 in 2017. In the same period, the number of fatalities saw a 5.6x drop and totalled 26.

According to the data of the Russian Ministry of Labour and Social Protection for 2016, the workplace injury frequency rate at Russian Railways was 4.3 times lower than the Russian average (0.3 vs 1.3), whereas the Company's fatal injury frequency rate outperformed the national average by a factor of 1.6 (0.038 vs 0.062). In 2017, the number of Russian Railways' employees who suffered workplace injuries decreased by 19% y-o-y, while the number of workers with severe and fatal injuries went down by 21% and 8%, respectively. The workplace injury frequency rate dropped by 16.7% to 0.25 and the fatal injury frequency rate – by 5% to 0.036.

In 2017, the Company spent a total of RUB 20.1 bn on occupational health and safety improvement initiatives. As at 31 December 2017, Russian Railways had 344,000 jobs on its payroll, including 88,000 (26%) positions with hazardous working conditions. In 2017,

the Company implemented a work environment improvement project targeting 37,000 positions and reduced the number of jobs with hazardous working conditions by 7,000.

Evolution of workplace injury metrics at Russian Railways in 2013–2017, FTE



Environmental protection

2017 was a Year of the Environment in Russia. In the reporting year, Russian Railways focused on the reduction of its environmental impact, introduction of advanced technologies, elimination of accumulated environmental damage, raising of environmental awareness, and preservation of specially protected natural areas. In 2017, the Company spent RUB 5 bn on environmental protection initiatives.

Russian Railways Group promotes recycling of paper, cardboard, plastic and glass. In 2017, over 1.5 kt of waste paper, 32 t of glass, 27 t of plastic and 150 kg of batteries were collected and sent for treatment and recycling in 73 regions of the Russian Federation, with the overall economic effect exceeding RUB 6.3 m.

In 2017, the Group also reduced emissions of harmful substances by 4.5% to 63.8 kt, and cut wastewater discharges into surface water bodies by 6.5% to 6.36 million m³. Waste utilisation in internal processes across the Company's facilities amounted to 247.243 kt in 2017 – a 2.7x decrease y-o-y. Over the year, some 8.453 kt of waste were processed at the Company's facilities.



Resource and energy efficiency

Russian Railways maintains leadership in energy efficiency and environmental friendliness among global freight and passenger railway companies. Russia ranks first globally in terms of energy efficiency in rail freight transportation outperforming all of the European railways combined, as well as railways in China, Japan, India and the USA. As regards energy efficiency in passenger transportation, Russia comes in fourth after India, China, and Japan¹.

As part of the Resource Efficiency Programme, 1,700 pieces of resource and energy saving equipment were installed in 2017 for a total amount of RUB 2.3 bn.

[In 2017, the Company won the 13th All-Russia Environmental Leader Award in the Environmental Responsibility category.](#)

In 2017, total energy and fuel savings amounted to 6,983 TJ, or RUB 4.703 bn. With the target exceeded by 28.1%, this was one of the Company's best energy saving results since 2010.

Overall, improvements in transportation efficiency in 2017 brought about savings of 4,050.3 TJ (or RUB 3,437.6 m), while streamlined energy use in stationary power generation and other nontraction segments saved another 2,932.7 TJ (or RUB 1,265.9 m).



No. 1

in energy efficiency of freight transportation

No. 4

in energy efficiency of passenger transportation

¹ According to the UIC-IEA Railway Handbook on Energy Consumption and CO₂.