

Environmental review

Key objective

As our business grows and develops, so does our environmental impact. Taking a responsible approach to our impact on the environment is key for X5's successful and sustainable long-term development.

Policy highlights

- We strive to fully comply with Russian legislative requirements and the highest international environmental protection standards wherever possible. We believe that environmental care is not just a part of a large company's social responsibility, it also provides ample opportunities to improve business efficiency and reduce costs, and in some cases, even to generate additional income
- We regularly monitor our environmental performance at the senior management and Board level
- We endeavour to minimise any negative impact on the environment arising from our waste generation and emissions:
 - Each of our formats is responsible for implementation of its environmental policy and compliance with Russian Federation regulatory norms regarding waste disposal and emissions
 - At the Corporate Centre level, we set Group-wide strategic priorities that impact our environmental footprint
 - We implement programmes aimed at minimising emissions and waste from the Corporate Centre
 - We aim to reuse and recycle all materials
 - We endeavour to minimise the risks of violation of sanitary norms and rules during the collection, storage and disposal of waste
- We aim to minimise our energy consumption by installing efficient technologies at our stores, DCs and offices
- We preserve the environment and conserve resources
- We encourage dialogue and stakeholder participation in our approach to managing our impact on the environment

System highlights

- The Company's management team is responsible for implementing the policy: it sets goals and objectives, engages in planning and funding relevant initiatives.
- Each of our retail formats, as well as our logistics and transport operations, is independently responsible for adhering to Russian legislation and X5 Retail Group environmental policies.
- To ensure the participation of every manager and employee in our environmental actions, the Company has developed special training and courses.
- Our DCs and logistics facilities follow pest control and de-infestation procedures.
- Waste generated by our stores is transferred to third parties either for burial at landfill sites or for further recycling. We have established a list of recyclable waste to be disposed of by third parties, significantly reducing the quantities to be discarded and, as a result, the negative environmental impact from landfills.
- In 2017, Pyaterochka launched a project to reduce the cost of garbage collection for every site. The project's main goals are:
 - Development and implementation of waste generation standards, monitoring of waste removal in accordance with standards
 - Making changes to normative legal acts (Federal Law No. 89 and Federal Law No. 29) to simplify the process of dealing with food waste
 - Repurposing food waste for farming purposes
 - Repurposing waste through recycling or for generation of energy or other materials
 - The Company is expecting to save RUB 43 million in 2018 as a result of these initiatives.
- In 2017, we launched our Energy Consumption Accounting System project. The goal of the project is to buy electricity at favourable rates for Pyaterochka stores. For this, Pyaterochka is taking the following steps:
 - Equipping the entire network with an automatic data collection system to measure electricity consumption
 - Building a global processing system that will analyse the data flow and calculate optimal tariffs and then transfer the data to marketing companies
- Internal audits allow us to evaluate the efficiency of our actions and to set new environmental goals for the Company.

X5 is conscious of the environmental impact of its operations, and goals and targets are in place within the retail formats with respect to food and biological waste, cleaning and disinfection, and waste-water management. Distinct KPIs relating to CO₂ emissions, waste disposal, recycling or energy efficiency are currently being considered at the Group level and will be reflected in next year's Annual Report.

Format	Goals and targets
Pyaterochka	Management of accounts receivable for municipal services, management of retail format property Management of budget for removal of food and biological waste
Perekrestok	Management of budget for pest control, cleaning and disinfection agents
Karousel	Reducing fines for discharges of waste water from Karousel hypermarkets

Our key activities in 2017

	Recycling	Reuse	Energy efficiency
Pyaterochka	<ul style="list-style-type: none"> In 2017, the Company started a new project called "Portal for recycling containers for suppliers". The portal allows our suppliers to pick up recycled waste depending on the capacity of our DCs. In 2017, we completed the process of collecting and consolidating secondary raw materials from our stores. The purpose of this process change is to get a better price by selling bigger lots. In 2017, we sold 200,000 tonnes of wastepaper and exceeded the plan of sales of secondary raw materials by 7%. 	<ul style="list-style-type: none"> In 2017, a project was launched to calculate trolley needs at every store. The goal of the project was to reduce the purchase cost of trolleys. 	<ul style="list-style-type: none"> In 2017, the system for monitoring refrigeration equipment at every site was improved. Remote monitoring enabled control and maintenance of refrigeration equipment and reduced the consumption of energy by 0.3%. In 2018, the main development will be remote control of refrigeration temperatures. We provided our stores with refrigerators that make it possible to maintain the correct temperature in the store and to save on energy consumption. This project will enable savings of RUB 600 million every year.
Perekrestok	<ul style="list-style-type: none"> Perekrestok recycles different types of packaging: packing carton and polyethylene, plastic boxes, polystyrene, trolleys, wooden containers. With the help of the new NQ accounting and recycling control system, the sales of raw materials increased by 61%. We provided every store with refrigerators for the temporary collection of food and biological waste. This made it possible to follow the proper procedures for collection in accordance with veterinary rules. 	<ul style="list-style-type: none"> Perekrestok sends back to DCs all reusable containers, pallets and plastic boxes. 	<ul style="list-style-type: none"> Every Perekrestok store uses LED lighting.
Karousel	<ul style="list-style-type: none"> New entities are equipped with bio-compactors for processing and pressing organic waste. Karousel recycles different types of packaging: carton, plastic boxes, used vegetable oil, metal, pallet scraps. 		<ul style="list-style-type: none"> 7 Karousel sites are fully on LED lighting. LED lights replaced neon signs at 16 sites.

Income from the sale of recyclable waste, RUB mln

Format	2017	2016	Change, %
Pyaterochka	1,386	913	52
Perekrestok	172	107	61
Karousel	139	126	10
Total	1,697	1,146	48

Each of our formats is responsible for its environmental performance, and implements a variety of programmes aimed at reducing waste and increasing efficiency.

Our environmental initiatives

Logistics

We manage environmental risks separately for our distribution centres and transport divisions. Our distribution centres transfer plastic shrink-wrap, cardboard and packing materials, as well as domestic solid waste, for recycling. The transportation division disposes of car tyres and tubes, batteries, ferrous and non-ferrous metals, car oil and other materials as required by Russian legislation.

Distribution centres

Pyaterochka is implementing eco-development principles for its logistics network. The main goals of these principles are to reduce the consumption of energy and materials, while also increasing the quality of buildings and reducing operating costs. As a result of this initiative, we expect to reduce the impact of DC construction on the environment.

Transport

Our most significant environmental impact comes from our transport unit, where we use various approaches to minimise the damage caused by transport from our distribution centres to stores. Our fleet covered 74% of our transport needs in 2017, and it is newer than the fleets of most of our external contractors. Contractors are responsible for compliance with environmental requirements, and our transport service agreements stipulate that trucks must meet all legislative requirements, including environmental requirements.

We use certified service stations to provide regular maintenance for our trucks in line with legislation and the norms established by truck manufacturers based on either the number of kilometres on the odometer or the vehicle's working life. Daily monitoring of the condition of our vehicles, including their exhaust systems, is part of our mechanics' and drivers' responsibilities. If serious failures are detected in a vehicle, it is withdrawn from use and sent for repair.

In addition, we do not purchase used or outdated vehicles, nor do we use vehicles that have reached the end of their service life in accordance with the manufacturer's recommendations. By the end of 2017, the average age of our fleet was two years, compared to an average age of three years at the end of 2016.

A full 100% of our transportation fleet meets Euro 3, Euro 4 or Euro 5 standards. Since 2014, we have been purchasing only Euro 4 or higher-class vehicles, and we have been using only high-quality fuel from leading producers.