Sustainability Report 2021

X5 for the future



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X5 Group is a leading Russian food retailer that manages the retail chains Pyaterochka, Perekrestok and Karusel alongside other assets. With our ambitious '30x30' sustainability targets for the year 2030, the Group works closely with a variety of stakeholders and organisations to have the greatest possible impact. Cooperation is the key to reducing our impact on the environment, promoting healthy lifestyles, and helping those in need.

Chairman's statement

[102-14] [102-15] [102-31]

Dear stakeholders.

I would like to begin by thanking you all for the engagement and support that you showed to X5 Group's sustainable development initiatives last year.

Sustainable development is an integral part of X5's strategy. The Company continues to fulfil all its economic, social and environmental obligations, understanding the importance of this work to its employees, partners and society. Following the principles of sustainable development takes on all the more significance in difficult circumstances, proving the real value of the work we have performed to improve working conditions and safety, and to support those in need.

Last year, the X5 team worked tirelessly to achieve its strategic goals: we introduced new environmental initiatives, developed our The Supervisory Board constantly stresses the importance of dialogue with all our stakeholders, and of adapting our policies to the current needs of society. We are certain of the importance of listening to clients, local communities, employees, investors and the authorities, and are committed to further developing our feedback mechanisms.

X5 Group is, first and foremost, grateful to its employees for ensuring its sustainability, who every day make the Company's uninterrupted work possible. The Supervisory Board attaches great importance to its programmes to improve working conditions, create new opportunities for growth and develop inclusive and equal opportunities for self-fulfilment.

Moving forward, the Company will have to adjust its strategic goals for sustainable development given new restrictions and opportunities. But our commitment to the principles of sustainable long-term business strategy, remains the same.

community projects and improved our approach development, and the role they play as a basis for our towards management. At the end of 2021, we set up a Sustainable Development and Innovation Committee as part of the Supervisory Board We are proud of the progress X5 has made to strengthen our work in all key areas. in sustainable development. Together, we can The Committee advises the management team achieve even more! on matters regarding sustainable development, the Company's digital strategy, innovation Peter Demchenkov and technology1. Given the composition of the Supervisory Board following recent events, the duties and responsibilities of the Sustainable Development and Innovation Committee is included under the remit of the full Supervisory Board as of 16 March 2022.





President's statement

[102-14] [102-15]

Dear stakeholders,

I am delighted to present our second Annual Sustainability Report, which details the work we achieved in 2021.

We made significant progress towards achieving our targets on the sustainable use of resources – namely, the reduction of greenhouse gas emissions, the use of renewable energy in operations and the reduction of waste. We worked tirelessly with our supply chain and drew up recommendations for our suppliers on sustainable packaging. A range of eco-projects in our retail chains enabled us to engage millions of customers. And we paid particular attention to raising awareness of sustainable development among our employees through training programmes and online interactive courses.

We continued to scale up our Basket of Kindness programme: in 2021, the volume of food products donated increased by 33% relative to 2020, with 184,000 people receiving assistance.

Overall, we were able to improve the results of all our charitable and community programmes and launched new forms of assistance together with our partners. In the current uncertain environment, our food assistance programmes have proved particularly relevant, and we plan to strengthen our work to support local communities by increasing in-house deliveries, organising additional charitable collections and engaging volunteers. Of all the important pilot

programmes we launched last year, I would like to draw particular attention to our food-sharing programme.

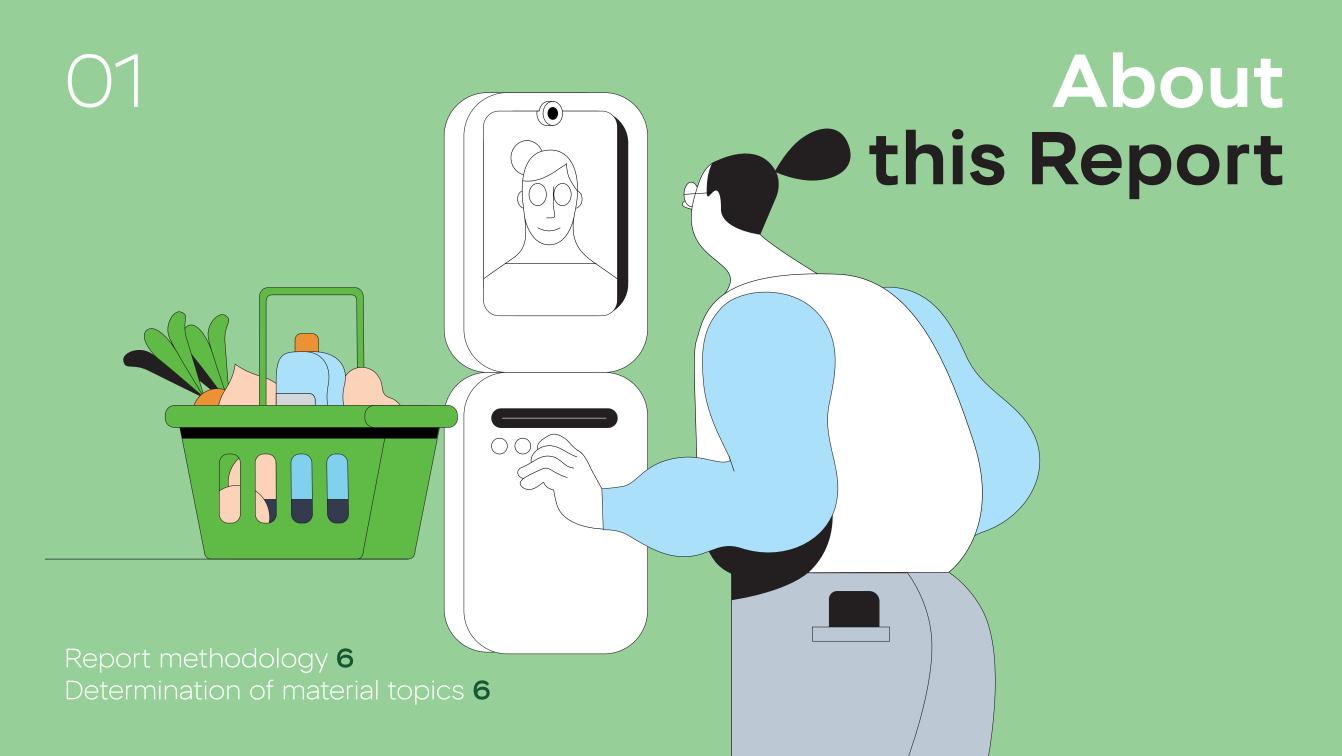
One of the most important factors in maintaining the sustainability of our business has been our strict observance of high product safety and quality standards. In this, our regular internal audits and the responsible approach of our suppliers, who have been ready to implement best practices, have been essential. We are always improving our policies and processes in this area, an approach we intend to preserve to maintain the highest quality for our customers.

We have overcome the consequences of the pandemic and are now faced with new challenges. But we continue to ensure the affordability of our products, to create new opportunities for employment and growth, and to contribute to the achievement of global and national sustainable development goals.

Ekaterina Lobacheva

PRESIDENT





Report methodology [102-32] [102-46] [102-50] [102-51] [102-52] [102-54]

X5 Group ("X5" or the "Company") confirms that this Report has been prepared in accordance with the GRI Standards' core option. The Report discloses information on the Company's progress in sustainable development and its economic, environmental and social results. Following on from 2020, the 2021 Report is the second to be prepared in accordance with GRI Standards. The Company plans to continue releasing such reports on an annual basis.

The information published in this Report covers the activities of the publicly traded limited liability company X5 Group N.V. and its subsidiaries. The reporting period is from 1 January to 31 December 2021. Quantitative data is presented as of the end of the year.

The Report was reviewed and approved by the Supervisory Board. The Report has been published on the Company's website.

Determination of material topics [102-40] [102-44] [102-44] [102-46] [102-47] [103-1]

Identifying material topics is an integral part of determining the Report's content. Material topics should reflect the Company's contribution to various aspects of sustainable development and should take into consideration the views of its shareholders.

The Company determined material topics in several stages.

In the first stage, the Company identified a wide range of material topics based on an analysis of the practices of companies in the industry and an assessment of essential business processes, while also taking into account its current strategic priorities in the area of sustainable development and the views of its stakeholders.

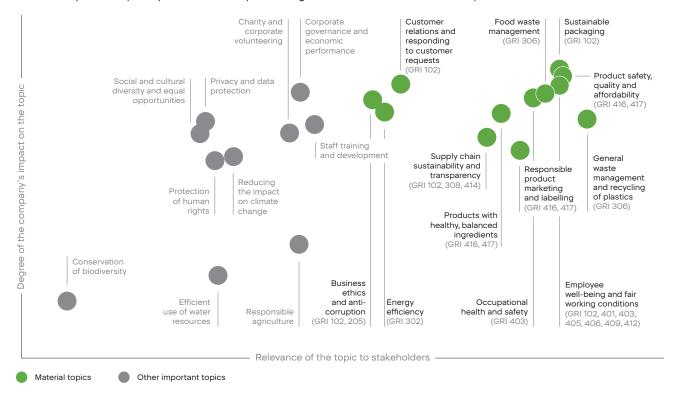
Then, in the second stage, this list was refined based on an analysis of regular feedback received from clients and customers. This step helped to determine a list of 22 important topics.

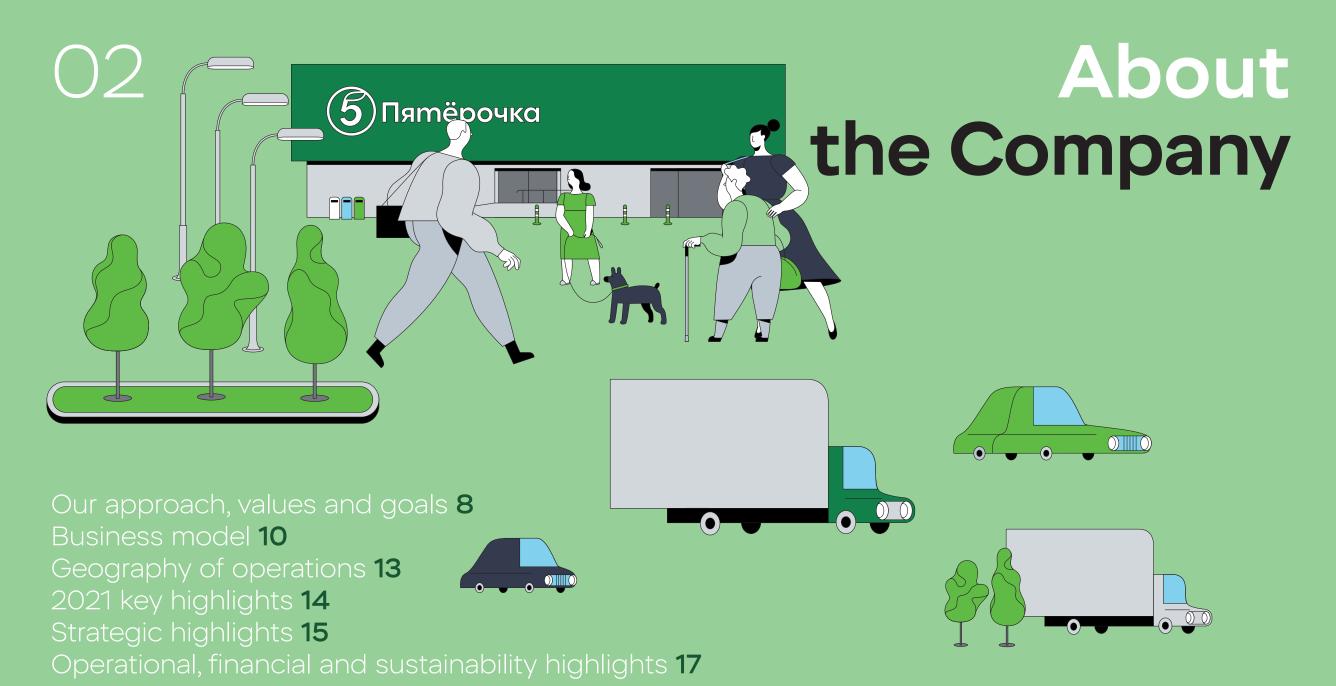
In the third and final stage of analysis, the Company conducted a stakeholder survey to rank the topics within the revised list.

A total of 3,469 respondents took part in the survey, including:

Stakeholder group	Number of respondents
Employees	3,125
Suppliers and contractors	283
Business partners	9
Government officials	36
Investors	9
Representatives of the expert community	2
NGO representatives	5
Total	3,469

The results of the survey were analysed in order to prioritise topics. As a result, 12 of the 22 topics were identified as material; these were placed at priority level 1. These topics were given the most attention in the Report.







Our approach, values and goals

[102-16] [102-2]

Approach

Our mission is to develop X5 Group as a profitable, sustainable business that provides high-quality products and modern food-retail services in convenient online and offline formats to the Russian population, meeting the demands of our customers.

We strive to identify, design and implement innovative technologies to power digital services, such as express delivery and our Vprok.ru Perekrestok online hypermarket, and to develop our operations to make X5 more efficient and profitable.

The geographical expansion of our affordable goods discounter Chizhik is an important area of focus, which will allow a greater number of people to have access to high-quality food.

Since 2019, we have integrated sustainability into our business strategy, directing our business processes towards the achievement of the UN SDGs that we believe are the most relevant to our activities: Zero Hunger, Good Health and Well-being, Decent Work and Economic Growth, as well as Responsible Consumption and Production.

Values

X5's corporate culture is based on values and aims to help every employee do their part in achieving strategic goals.

Customer-oriented

- Our business decisions are dictated by our customers' needs.
- We aim to use technology to improve our understanding of our customers and to enhance the quality and efficiency of our services.
- We strive to develop and adapt our business to meet our customers' changing needs and expectations.

Trust

- Trust is an essential part of our customer value proposition. We aim to be the most trusted food retailer in the Russian market.
- We strive to earn the trust of local communities by implementing social and environmental development programmes in the areas we operate in.
- We hold ourselves to the highest standards of integrity and honesty in relations with our business partners and stakeholders.

Respect and honesty

- We respect the opinions, interests and emotions of our stakeholders in all our dealings together.
- We have a zero-tolerance policy on corruption.
 This is regulated strictly and covers all aspects of our business and our supply chains.
- We constantly work to improve the accuracy and completeness of the information we provide about our goods and our business.

Commitment to excellence

- We are not satisfied with being Russia's top food retailer. We want to become a leader in the food market more broadly.
- We constantly set ourselves ambitious goals and update those we have already achieved.
- Our employees are rewarded for their achievements and are encouraged to find new solutions that could further improve our business.



Our approach, values and goals

[102-16] [102-2]

Sustainability goals

X5's sustainability policy uses the United Nations Sustainable Development Goals as a framework to identify and prioritise the ESG issues that are most relevant to our business.

The SDGs that we can have the greatest impact on are: Zero Hunger, Good Health and Well-being, Decent Work and Economic Growth, and Responsible Consumption and Production.

Through its day-to-day activities, our business also contributes to the following goals: Gender Equality, Affordable and Clean Energy, Reduced Inequality, Sustainable Cities and Communities, Climate Action, Life Below Water, and Life On Land.

Information on relevant UN SDG targets is provided in the "UN SDGs content index" Annex.



7 AFFORDABLE AND CLEAN ENERGY





























Primary goals: indicated by solid colours

☐ Secondary goals: indicated with a white background

Based on these focus areas, we have developed a detailed set of targets for 2023 along with the necessary business processes for their fulfilment. We have also identified ambitious 30x30 targets that we aim to achieve by 2030.

Planet

30%

Reduction in GHG emissions (Scope 1 + Scope 2) intensity per sqm of selling space compared with 2019

30%

Share of renewable energy used in X5 operations

30%

Reduction in ratio of waste generated to retail sales compared with 2019

Communities

30%

Increase in the number of families receiving Basket of Kindness support per year

Health

Promotion of responsible programmes and principles across the supply chain

Expansion of healthy lifestyle assortment¹

Employees

/1

Employer in ranking of Russian food retailers

Organisation of a safe, healthy workplace for all employees

The healthy lifestyle assortment includes products in the following categories: gluten-free, no added sugar, organic, fresh from the farm, natural ingredients, high-protein, low-calorie and vegan.



Business model

[102-2] [102-4] [102-6]

Our business model aims to create value for stakeholders at every step, from our cooperation with suppliers to the Corporate Centre and on to our online and offline business operations. In today's highly competitive environment, it is essential to ensure the efficiency and effectiveness of every part of our business model, and to maintain a constant focus on delivering the best for our customers.

The management and operations of our offline and digital businesses are decentralised to enable the greatest possible degree of flexibility to respond to customer needs, while also leveraging our advantages of scale in terms of purchasing power, IT and digitalisation, and also in logistics.

While marketing and loyalty programmes are highly independent between businesses, we use a unified ID system (X5.ID), as well as shared big data and IT infrastructure. All operations are run based on SAP ERP.

We handle our logistics in-house, with the level of centralised deliveries to stores from Companyoperated distribution centres at 96% in 2021.

Suppliers

7,083

30%

Suppliers

Share of top 30 suppliers in revenue

During 2021, we continued to develop X5's supplier portal, which helps to centralise all communications, transactions and paperwork. We also share our big data capabilities with suppliers, enabling them to access insights about sales and promo efficiency.

Corporate Centre

X5 Group's Corporate Centre manages shared business infrastructure like IT systems, innovation and big data functions, logistics management, as well as business support functions, corporate finance, strategy, communications, risk management and reporting.

Media platform

Food.ru provides consumers with inspiration and information as they discover and plan their food shopping and cooking. With recipes and advice, as well as integration into X5 services like Vprok.ru Perekrestok and express delivery, Food.ru is often the entry point for customers of X5 Group's offline and digital businesses.

Supply chain infrastructure

4

47

direct import hubs

distribution centres to support offline stores

4,654

36

Company-owned trucks

dark stores to support digital businesses

Efficient and reliable logistics operations are critical to delivering the quality products and assortment that our customers expect across our operations, both in offline and digital. We are improving operations with advanced route planning technologies and driver awareness monitoring systems, while also leveraging our extensive infrastructure to build new businesses like 5Post, a last-mile parcel delivery service.

Business model

[102-2] [102-4] [102-6]

Offline businesses

We are constantly developing the CVPs of our offline businesses to meet changing customer needs and address new segments of the market. While we are refurbishing Pyaterochka and Perekrestok stores in line with new concepts, we have also begun the full rollout of the Chizhik hard discounter format.

17,972

Pyaterochka proximity stores in 67 regions

990

Perekrestok supermarkets in 46 regions

72

Chizhik hard discounter stores in four regions

33

Karusel hypermarkets





Business model

[102-2] [102-4] [102-6]

Digital businesses



Express delivery

50 _____

regions

30

dark stores

As of 31 December 2021, express delivery service was available from 1,611 stores (923 Pyaterochka stores, 30 Pyaterochka dark stores, 655 Perekrestok supermarkets and 3 Karusel hypermarkets) in 50 regions, compared with 992 stores and 13 regions a year earlier. In Q4 2021, the number of orders for express delivery was 69.8 thousand per day, with a delivery time of c. 60 minutes and an average ticket of RUB 1,527 at Pyaterochka and RUB 1,775 at Perekrestok, up 4% and 1% year-onyear, respectively. The daily number of fulfilled orders during Q4 2021 peaked in December at 114 thousand on the busiest days.



5Post

66

regions

16.9

ths pickup points and 5.7 ths parcel lockers

27.0

mln orders fulfilled

In Q4 2021, 5Post's e-commerce delivery service revenue increased threefold year-on-year. Orders fulfilled by 5Post reached 12.2 million in Q4 2021, with over 16.9 thousand pickup points and 5.7 thousand multi-parcel lockers in operation. Parcel lockers and pickup points in stores generate additional LFL traffic of up to 2%–3%.



Mnogo Lososya

50

dark kitchens

The Mnogo Lososya ready-to-eat digital service, which became part of X5 Group in late March 2021, continued to expand. As of the end of December, it was operating 50 dark kitchens (including two franchisees), compared with 42 dark kitchens at the end of September. In Q4 2021, Mnogo Lososya's net sales reached RUB 397 million, up 31.9% quarter-on-quarter with an average ticket of RUB 1,728 in Q4 2021.



Vprok.ru Perekrestok

74 _____

regions



dark stores

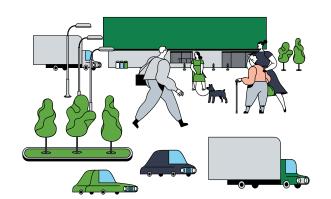
835 _____

light trucks

3.3 _____

mln MAUs

In Q4 2021, Vprok.ru Perekrestok's revenue increased by 23.1% year-on-year. The total number of Vprok. ru Perekrestok orders increased by 14% year-on-year and reached 1.5 million in Q4 2021. The average number of daily orders in Q4 2021 reached 16.1 thousand. The average Vprok.ru Perekrestok basket in Q4 2021 increased by 8.1% year-on-year, reflecting further expansion in the assortment to 72 thousand SKUs.





Geography of operations

[102-4] [102-6]

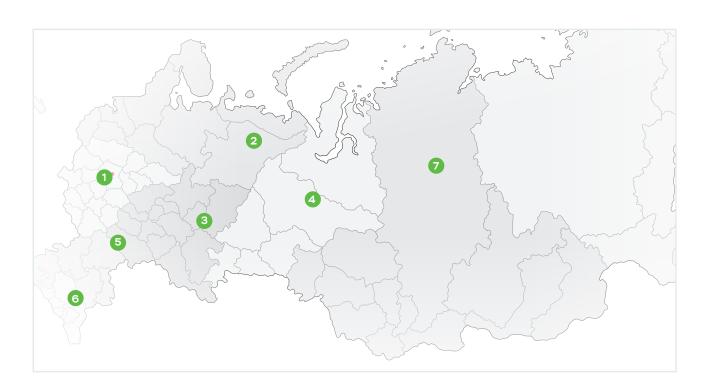


As we move towards the future of retail, the breadth and depth of our operations will play key roles in enabling X5 Group to remain the leader in Russia's food market, delivering profitable and efficient growth, both offline and online, while constantly improving existing operations.

At the end of 2021, X5 was operating 19,121 retail stores, five large dark stores, 31 small dark stores and 47 distribution centres in 67 regions across seven of the eight federal districts in Russia.

Digital business continues to be a priority for our future strategic development. X5 Group leverages a robust IT infrastructure and extensive retail operations to deliver agile services without losing our focus on the bottom line.

As of 31 December 2021, express delivery service was available from 1,611 stores (923 Pyaterochka stores, 30 Pyaterochka dark stores, 655 Perekrestok supermarkets and 3 Karusel hypermarkets) in 50 Russian regions, compared with 992 stores and 13 regions a year earlier. Our last-mile e-commerce delivery service 5Post had 22.6 thousand pickup points in operation, including 5.7 thousand multi-parcel lockers at the end of 2021, as well as 50 Mnogo Lososya dark kitchens.



Number of stores by federal district (FD)

5 7 6 Central FD North-Volga FD Ural FD Southern North Siberian FD Total Western FD FD Caucasus FD 2021 7,191 1,998 4,895 1,672 1,951 388 1,036 19,121 1.535 2020 6.703 1.910 4.621 1.718 334 886 17,707 2019 6.301 1.836 4.306 1.358 1.501 293 702 16.297 2018 5,822 1,668 3,820 1,168 1,222 252 479 14,431 2017 5.198 1.416 3.169 999 874 277 12,121 4.077 2.468 137 2016 1.095 764 606 40 9.187

Additional information regarding our business model is provided in the "Our Formats" section of the 2021 Annual Report.

2021 key highlights

We successfully navigated a changing market landscape in 2021 by strengthening our existing business.

Emerging from the challenges posed by the COVID-19 pandemic, X5 Group continues to thrive even as competition intensifies from digital platforms, niche players and new formats like hard discounters. The robust business processes and entrepreneurial spirit that underpin all of the Company's operations, from management to store employees, ensured that X5 Group remained agile and responsive to new challenges from the market, all the while delivering on our financial, operating and sustainability targets.

One key highlight of 2021 that underscores X5's willingness to adapt to new market conditions was the official launch of the Chizhik hard discounter, which was announced in 2020. The Chizhik CVP will address the needs of rational shoppers in difficult macroeconomic conditions while providing the promise of reliable quality that customers trust X5 Group to deliver.

We have also continued to grow our digital businesses and expand our presence at every stage of the customer journey. In 2021, we launched the Food.ru media platform and acquired Mnogo Lososya dark kitchens.

We remain focused on implementing our strategy while adapting to a changing market in order to deliver value for our shareholders and all of X5 Group's stakeholders.

2021 financial and operating highlights



RUB 2,205 BLN

Revenue, +11.5% y-o-y



73%

EBITDA margin pre-IFRS 16



RUB 479 BI N

Digital business sales, +140% y-o-y



+51% Y-O-Y

Like-for-like sales



1.67X

Net debt/EBITDA pre-IFRS 16 as of 31 December 2021



270 MI N

Parcels delivered by 5Post, 4x growth y-o-y



26.8 MI N

Digital services, MAUs, +78% y-o-y



Strategic highlights



Leadership in the food market

We confidently maintained our leadership position in Russia's food market, despite a wave of consolidation by other large players and the growing role of niche players and digital ecosystems. X5 Group's overall share of food retail revenue in 2021 was 12.7% (12.6% in 2020), thanks to 11.5% year-onyear growth in our total revenue and 140.0% year-on-year growth in digital business net sales.

Growth in the top line was supported by both a 7.3% expansion in selling space and a 5.1% increase in like-for-like (LFL) sales. Our 62.6 million active users of loyalty cards, which are a key element of our ability to offer each customer a more personalised experience tailored to their needs, accounted for 86% of net retail sales in 2021, and we also increased sales densities to RUB 271.5 ths/sqm, a rise of 3.5% year-on-year.

Our leadership is largely a function of our ability to successfully serve our customers and create value for them every time they visit an X5 Group store or use an X5 Group online service, and this is reflected in customer feedback: X5 brands are among Russia's top brands, with Pyaterochka in first place according to a Romir¹ and BCG survey conducted in 2021.

Our suppliers are another key stakeholder group that contribute to our success, and for whom we seek to create value as business partners. According to a supplier survey by the market research agency Advantage, Perekrestok was ranked the best partner among the top 15 food retailers for the second year running. Pyaterochka improved its position in this survey vs 2020 and is now in second place.



Leadership in digitalisation

Digitalisation is one of the central elements of our efforts to continuously strengthen our existing business by helping us achieve greater efficiency and become even better at putting our customers at the centre of our decision-making. Digitalisation continues to benefit our bottom line and had a RUB 18 billion positive effect on X5 Group's EBITDA pre-IFRS 16 of RUB 161.0 billion in FY 2021.

As we build out our consumer-facing digital businesses and the Food.ru media platform, we continue to attract more existing and potential guests whose customer journey often starts online: X5 Group's MAUs rose to 26.8 million in 2021, a 78% increase year-on-year.



Commitment to shareholders

As we continue to invest in our offline and digital businesses, we are delivering value for shareholders: X5 Group's adjusted ROIC pre-IFRS 16 for 2021 was 17.1%; we maintained an EBITDA margin pre-IFRS 16 of 7.3%.



¹ The largest private research holding specializing in marketing, media and socio-economic research

Strategic highlights

[102-10] [102-15]



Innovations in transportation

Our common digital platform, X5.Transport, continues to develop as we expand its range of services, planning and control of Companyowned and hired transportation, and to improve the efficiency of our network through AI and big data.

In 2021, we also made a breakthrough in electronic document workflow for transportation:

- Switched to electronic waybills for internal transportation by Company-owned vehicles (more than 60% of the total volume moved).
- Made mutial payments through the Electronic Data Interchange (EDI) for retail for spare parts, expendable goods and services.
- Piloted a system of electronic document exchange with fuel companies, including real time refuelling data.
- Developed an electronic vehicle insurance service.
- Introduced personal accounts for drivers.



ESG leadership

After approving our ESG strategy in 2019, we conducted a comprehensive review of business practices in 2020. We established a detailed set of sustainability goals for 2023, as well as ambitious targets for 2030. In 2021, we continued to improve our ESG disclosures, publishing biannual strategy implementation reports and an ESG databook. Up-to-date information is published on the ESG section of our site.

In 2021, X5 Group improved its Carbon Disclosure Project (CDP) rating from D to C (on a scale of A to F, with A being the highest). The CDP analyses a company based on three metrics: its impact on the climate, on forests and on the conservation of water resources. As a large-scale annual evaluation of a company's climate action, the rating's data is often used by investors. X5 also received B from the CDP for supplier engagement. The supplier engagement rating reflects the attitude of our suppliers who answered the CDP's questionnaire. This additional rating is based on a) the level of detail and completeness of responses, and b) the content of the responses themselves (the company's awareness of problems of climate change, management methods and progress in measures taken to reduce carbon emissions).

In 2021, the international agency MSCI ESG Research raised X5 Group's sustainability rating from BB to BBB. The agency assigns ratings to global public companies on a scale from CCC to AAA, evaluating a company's robustness towards long-term industry, environmental, social and management risks. MSCI separately praised X5's detailed anti-corruption policy, its training of staff on ethical standards, the Company's plan to reduce its carbon footprint and measures taken to protect the rights of minority shareholders.

Sustainalytics is a company that evaluates the sustainability of listed companies on the basis of their environmental, social and corporate governance (ESG) performance. X5 Group was rated Medium Risk (22.8), an assessment that improves with each year.

Bloomberg ESG Disclosure assigned X5 a rating of 49.2 in 2021, an improvement on the previous year's rating of 41.7.

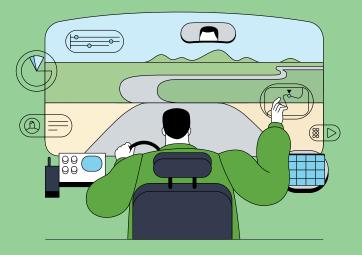
X5 also featured in RAEX-Europe's ESG Ranking of Russian Companies 2021. The Company was ranked first among food retailers, and 31st out of 155 companies in the general rating.



Geographical expansion

Our international transportation network continues to develop, both by the volume of goods (which has grown more than fivefold) and by geographical extent. This supports the continued development of X5's own import capabilities.

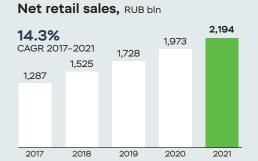
To support the development of our regional network, we opened cross-docking in Murmansk, Irkutsk, Salekhard and Izhevsk.

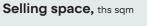


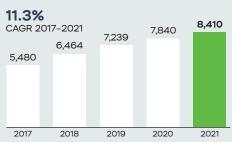


Operational, financial and sustainability highlights

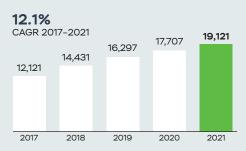
Operational highlights



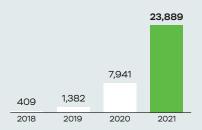




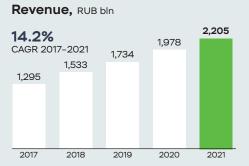
Number of stores



Number of orders in online businesses1



Financial highlights (pre-IFRS 16)



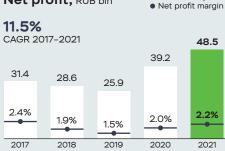
EBITDA, RUB bln 13.7%



EBITDA

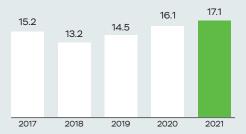
EBITDA margin

Net profit, RUB bln

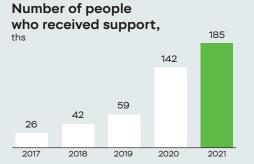


Net profit

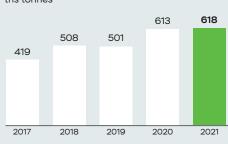
Adjusted ROIC², %



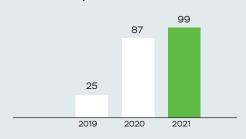
Sustainability highlights1



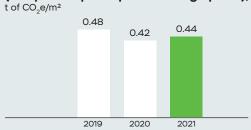
Amount of recyclable waste sold, ths tonnes



Amount of non-expired food waste sold. ths tonnes



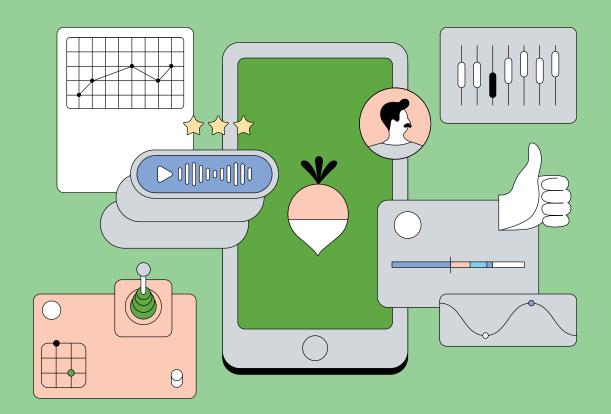
Total GHG emissions intensity (Scope 1+2 per sam of selling space).



Data has been revised since the publication of the 2020 Sustainability Report following changes to the data collection process.

² ROIC = NOPAT / average (equity + net debt, including short-term financial investment), adjusted for impact from Karusel transformation, tax on investments and tax accrual related to X5's reorganisation in previous periods

03



Sustainable development and the Company's business

Sustainable development governance model 19
Sustainable development strategy 20
COVID-19 response 24
Stakeholder engagement 25

X5

Sustainable development governance model

[102-20] [102-26] [102-29] [102-31] [102-32]

Supervisory Board

Executive Board

Corporate Communication Director

Sustainable Development Department

Sustainable Development Director

Coordinators within business units responsible for the execution of the sustainable development strategy

Business process owners

Supervisory Board

Responsibilities

- Overseeing integration of ESG into broader business strategy and risk management
- Overseeing ESG goal-setting
- Identifying relevant metrics to measure, manage and communicate progress
- Overseeing ESG communications and reporting

In 2021, sustainability-related reviews were conducted semi-annually.

At the end of 2021, the Supervisory Board established a Sustainable Development and Innovation Committee to provide recommendations to the Board on sustainable development, digital strategy, innovation and technology¹.

Executive Board

Responsibilities

- Monitoring sustainability risks and opportunities
- Approving strategy and policies
- Setting goals
- Monitoring results

Sustainability-related aspects are reviewed four times per year.

Corporate Communication Director

Responsibilities

- Managing the Sustainability team
- Implementing programmes
- Reporting results

Reports to

CEO

Sustainable Development Director/Heads of formats

Responsibilities

- Developing strategy and policies
- Implementing programmes
- Reporting results
- Day-to-day monitoring of ESG principles
- Achieving KPIs

See more details on our approach to corporate governance in the "Corporate Governance" section of our 2021 Annual Report.



Given the composition of the Supervisory Board following recent events, the duties and responsibilities of the Sustainable Development and Innovation Committee is included under the remit of the full Supervisory Board as of 16 March 2022.

Sustainable development strategy

[102-12] [102-13] [102-15] [103-2] [103-3] [404-2]

X5 Group developed and approved a long-term sustainable development strategy in December 2019 based on the 17 Sustainable Development Goals that the UN adopted in 2015.

In addition to setting long-term targets to 2030, the Company has also developed detailed plans and metrics for those targets to 2023 and integrated them into its business strategy. Work on programmes aimed at achieving these goals will enable X5 to contribute to the implementation of Russia's National Development Goals to 2030: preservation of the population; human health and well-being; decent, productive work and successful business; and a comfortable and safe living environment.

For each ESG area, processes, documents and metrics have been identified for measuring our progress. Programmes, investments in different areas and metrics are closely integrated into the Company's overall strategy, and its sustainability goals are considered to be key measures of performance in addition to financial and operating goals.

The Supervisory Board approved strategic goals to 2023 and long-term targets to 2030.

30X30

Our long-term targets to 2030

30%

Increase in the number of families receiving Basket of Kindness support per year

30%

Reduction in ratio of waste generated to retail sales compared with 2019

30%

Share of renewable energy used in X5 operations

30%

Reduction in GHG emissions (Scope 1 + Scope 2) intensity per sqm of selling space compared with 2019

#1

Employer in ranking of Russian food retailers



Organisation of a safe, healthy workplace for all employees



Expansion of healthy lifestyle assortment¹



Promotion of responsible programmes and principles across the supply chain

¹ The healthy lifestyle assortment includes includes products in the following categories: gluten-free, sugar-free, organic, fresh from the farm, natural ingredients, high-protein, low-calorie and vegan.

X5

Sustainable development strategy

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Key achievements in 2021

Long-term targets to 2030¹

Primary



 Food drive initiatives at X5 stores and at korzinadobroty.rf (корзинадоброты.рф) brought in over 355.7 tonnes of food products, an increase of almost 100 tonnes from 2020

- 3,769 stores and approximately 9,000 volunteers took part in the project in 2021
- 184,900 people were given Baskets of Kindness (or around 96,700 families)
- Store employees and volunteers helped 1,370 lost people, including 68 children, return home through our Safety Zone programme
- Opened and expanded the discounter store Chizhik, which will allow a greater number of people to have access to affordable, high-quality food

Double the number of families receiving food aid through the Basket of Kindness project Increase the annual growth rate in the number of families receiving

• Develop community care programmes

Our goals to 20231

compared with 2019

- Develop partnership programmes with small and medium-sized businesses, farmers and local producers
- Engage all stores in Help for Lost People programme

 Increase the annual growth rate in the number of families receiving assistance through the Basket of Kindness programme up to 30% per year

Primary



- Updated the agreement on quality audits for private label goods between our three formats: Pvaterochka, Perekrestok and Karusel
- Developed a set of rules and regulations that encompass the entire supply chain from production to consumption for Pyaterochka
- Pyaterochka continued to expand its set of healthy living signs and developed a new classification system for healthy living goods
- Pyaterochka and Perekrestok achieved a share of fresh produce, fruits and vegetables of 46% and 54%, respectively
- The composition of the Basket of Kindness set was adjusted in accordance with Rostrebnadzor's and the Scientific Research Institute of Nutrition's Recommendations on Healthy Nutrition
- Launched Food.ru website on healthy eating habits and healthy living

- Increase the share of fresh produce, fruits and vegetables in our assortment to 44% at Pvaterochka and to 50% at Perekrestok
- Increase the share of customers who believe that X5's retail chains help them lead a healthy lifestyle
- Expand the range of products for a healthy lifestyle
- Continue to develop the product quality control system

- Expand our range of products for a healthy lifestyle
- Develop principles and practices for monitoring suppliers' responsible sourcing of goods





Sustainable development strategy

[102-12] [102-13] [102-15] [103-2] [103-3] [404-2]

UN SDGs Primary

Secondary





Key achievements in 2021

- Staff turnover decreased to 36% in 2021 from 38%
- Advanced a flexible digital HR management system based Become the leading food retailer in rankings on big data, electronic services, continuous feedback from employees and the creation of flexible HR tools
- Employee engagement rate was 82.5%, compared to 77.7% in the last period, a growth of 4.8 p.p.

Our goals to 20231

- Achieve an employee engagement rate
- of Russian employers
- Create a safe, healthy workspace for all employees

Long-term targets to 20301

- Maintain our #1 position among food retailers in rankings of Russian employers
- Ensure the introduction of an appropriate standard for a safe, healthy workspace for all employees

Primary



Secondary









- In 2021, the online hypermarket Vprok.ru Perekrestok continued to collect bags from our customers' doorsteps to be recycled
- Mnogo Lososya replaced plastic packaging with cardboard for deliveries from suppliers that is recycled after use
- The Company supported its customers in replacing single-use plastic bags: 5.7 million reusable shopping bags and over 369,000 reusable bags for fruits and vegetables were sold
- The Company's retail chains continued to collect recyclable plastic packaging through already installed reverse vending machines
- The Company continued to collect batteries from its customers for recycling: over 15.9 tonnes were collected through the initiative
- A Perekrestok initiative saw 177,000 people refuse paper receipts. The number of customers taking part in the initiative is increasing steadily: around 4.4 million receipts were not printed
- Published detailed sustainable packaging recommendations for suppliers in March 2021
- Reduced transportation distances by optimising logistics

- Reduce GHG emissions (Scope 1 and Scope Reduce GHG emissions (Scope 2) intensity per sqm of selling space by 10% compared with 2019
- Increase the use of renewable energy in our operations
- Reduce the ratio of waste generated to retail sales by up to 10% compared with 2019
- Increase the share of recyclable solid waste generated by our retail chains that is sent for recycling to up to 95%
- Increase the share of non-expired food waste² sent for reprocessing to up to 40%
- Develop principles and practices for tracing suppliers' responsible sourcing of goods
- Increase the percentage of suppliers that promote sustainable packaging to at least
- Increase the share of private label goods in environmentally friendly packaging to 50% or more

- 1 and Scope 2) intensity per sam of selling space by 30% compared with 2019
- Increase share of renewable energy used in our operations
- Reduce the ratio of waste generated to retail sales by 30% compared with 2019

As part of its sustainable development targets, X5 Group enacted the following policies:

- Sustainable Development Policy
- Waste Minimisation Policy
- Occupational Health and Safety Policy
- Equal Opportunities Policy
- Policy on the Promotion of Healthy Lifestyles and Healthy Eating Habits
- Energy Efficiency and Climate Change Policy
- Responsible Marketing Policy
- Policy on Relations with Suppliers for Nonby sustainable development principles)
- Policy on Working with Suppliers of Goods by sustainable development principles)

In the spring of 2020, X5 Group became the first Russian retailer to join the United Nations Global Compact, an international business initiative for corporate social responsibility and sustainable development. In December 2020, the Company also joined the international Science Based Targets initiative: X5 committed to setting scientifically based greenhouse gas reduction targets in line with the Paris Agreement.

The future stability of the Russian economy, as well as the results of the Group's operations, are largely dependent upon the continued impact of COVID-19 and the impact of sanctions imposed in response to events following the reporting date. Given new restrictions and opportunities, the Company will consider the need to adjust its strategic goals for sustainable development, while remaining committed to the principles of sustainability and the role they play as a basis for our long-term business strategy.

^{1.} The base year is 2018 for employee engagement and 2019 for other targets.

² Food products that cannot be sold before their sell-by date because of their appearance.



Sustainable development strategy

[102-12] [102-13] [102-15] [103-2] [103-3] [404-2]

Education and awareness [404-2]

ESG is a team effort: our progress depends on X5 employees understanding our key sustainability concepts and being aware of what X5 is doing to reach our goals.

X5 deploys three educational strategies: creating awareness, providing training and encouraging informal engagement.

As such, X5 held online sustainable development training, consisting of 45-minute interactive lessons, for all new employees of the Company's retail stores and offices. X5 has also developed dashboards for each of our networks and business units to track progress towards our sustainability targets, using this information to promote internal engagement on the issue.

X5's Group's ESG conference

On 16 June 2021, X5 Group organised its first conference on sustainable development in retail: "Sustainable together: choosing the future". The event's hybrid format enabled more than 1,000 experts, government officials, partners, suppliers and top managers to come together to discuss sustainable development initiatives.

The conference's most important result was the understanding that the business is open to collaborating to protect the environment.





COVID-19 response

[203-1] [403-6] [413-1]

X5 Group has adapted its work processes to COVID-19. Short-term measures introduced in response to the pandemic have expanded into a complex system of health and well-being support. The Company observes COVID-19 prevention legislation, continuing measures to protect and support customers, such as contactless delivery, minimal price increases on essential goods, charitable and volunteer initiatives and so on. Special attention has been paid to protecting the health of our employees.

Through a detailed health monitoring process, the Company has access to up-to-date information on the infection status of its employees, including from 2021 vaccination data.

Thanks to a large-scale campaign, more and more X5 employees are getting vaccinated. In 2021, the Company conducted vaccinations in the workplace.

The active measures the Company has taken to protect the health of its team, including placing informational material in warehouses, dark stores, distribution centres and stores, has ensured that infection rates among employees have remained lower than the national average.

See more details on staff engagement during the pandemic in the "Employees" section of this Report.





[102-40] [102-42] [102-43] [102-44]

We interact with a wide range of stakeholders as part of our day-to-day business. Maintaining a regular dialogue enables us to create value and grow our business in a sustainable and profitable way.

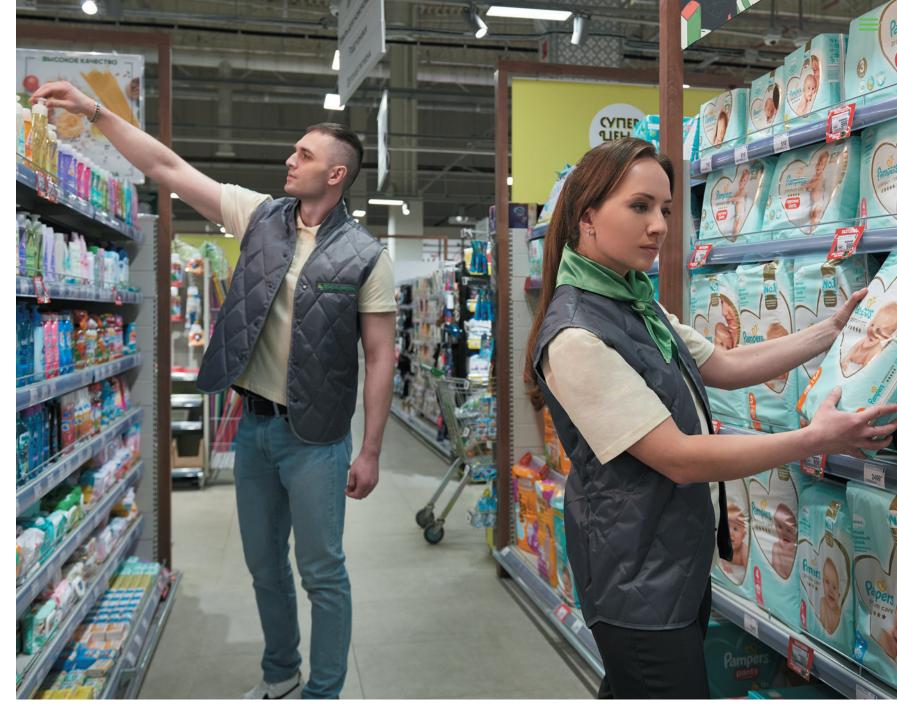
For the convenience of our stakeholders, we launched a separate sustainability website: esg.x5.ru.

The new website is fully dedicated to X5's sustainable development strategy and provides information about the Company's sustainability goals, programmes and progress. Corporate sustainability policies, reports and news on ESG-related topics are also published on the website.

We have identified six groups of key stakeholders:

- customers
- employees
- shareholders and investors
- suppliers and business partners
- society and local communities
- regulators and government officials

Stakeholders were identified based on both the extent to which our activities affect each group and the extent to which their opinions influence our decision-making. Below is a description of our key interactions with each group and highlights of our stakeholder engagement activities.





[102-40] [102-42] [102-43] [102-44]

Stakeholders

Why we interact

Customers



- To ensure customers are aware of the value propositions of our
- To differentiate ourselves from other food retailers
- To encourage the use of loyalty programmes and CVM (customer value management) to offer a more individualised experience
- To facilitate customer feedback, which helps us improve our assortment and business processes
- To answer customers' questions and address their complaints
- To stay ahead of the curve in responding to changing consumer trends and emerging demand
- To encourage more sustainable shopping practices, such as reusable and recycled bags, plastic bag collection and reverse vending machines for recycling

How we interact

- We maintain over 20 channels for interaction with customers, ranging from chatbots in messenger apps to social media and a telephone hotline • Pyaterochka and Perekrestok NPS scores improved year-on-year
- We integrate feedback and rating tools into our apps and website to enable collection and analysis of customer preferences
- We measure customer satisfaction by conducting a country-wide Net Promoter Score (NPS) assessment
- We use big data analytics of customer transactions to help X5 and our suppliers make more informed decisions about customer demand

2021 performance highlights

- Over 5.7 billion customer visits in 2021
 - by 7 and 4 points, respectively
- Perekrestok was 3rd by NPS for its healthy lifestyle offering, according to IPSOS research
- Continued to develop express delivery services, which are available from 1.611 stores in 50 regions
- Continued development of CVM tools to provide more individualised offers based on automated, big data-powered tools
- Further refined the CVPs of our store formats, including making in-store safety for staff and customers a key element of our offering during the COVID-19 pandemic
- Continued rollout of big data analytics products to automate assortment and pricing, enabling us to meet demand more accurately and efficiently, and share the benefits with our customers
- Launched Food.ru, an educational and entertainment website whose content helps to implement the most popular client scenarios related
- Developed a variety of joint pilots in all our formats to promote sustainability principles, including sustainable consumption courses for customers and lectures on healthy lifestyles
- Opened and expanded the discounter store Chizhik, which will allow a greater number of people to have access to affordable, high-quality food

Employees



- To facilitate the professional growth and well-being of employees
- To prepare our employees for the future of retail by enhancing their understanding of and ability to contribute to our digital and omnichannel businesses
- To develop a corporate culture that helps us achieve our strategic
- To further improve occupational health and safety across our operations
- To provide training and other tools to encourage employee engagement in our sustainability initiatives
- To ensure that employee ideas that will further improve our operations are heard and can be acted upon
- To retain and develop a workforce of skilled and motivated
- To further improve our reputation as an attractive employer for current and potential employees
- To educate employees about X5's sustainable development strategy and goals and about how they impact our business

- We provide meaningful career opportunities in addition to competitive, fair and transparent salaries and motivation schemes
- We have added and improved employee feedback mechanisms, enabling us to better shape the agenda in areas like working conditions, compensation, management and corporate culture
- We have increased the use of digital tools to link training, skills assessment and overall career growth
- We offer the X5 Digital Academy and other professional learning programmes to help our employees grow and develop in line with our strategic priorities
- We uphold our human rights policy and ensure that employees can enjoy all the freedoms they are entitled to
- We implement strict occupational health and safety policies, including in response to the COVID-19 pandemic, and inform employees about workplace health and safety requirements
- We support employees in need in cases of long-term illness or accidents, bereavement or loss of property
- We recognise significant contributions to the Company's performance
- We create opportunities to engage with the corporate social responsibility agenda and make a positive social impact

- Adapted workplace practices in response to COVID-19, providing enhanced protective procedures for store staff and enabling most office staff to work from home
- Hired 161,190 new employees who were integrated into the team through our highly developed onboarding programme, tailored to each department and even role
- X5 Technology launched an open training programme called Mentoring School that. It enables employees to develop flexible skills required for mentors and to exchange expertise within society
- More than 38,000 employees of our retail chains undertook training that used VR headsets
- Employee engagement increased by 4.8 p.p. year-on-year to 82.5%
- Launched a pilot programme to promote and reward entrepreneurial leadership among directors of Pyaterochka and Perekrestok stores. The development of our entrepreneurial approach unites our store directors' potential and interests with X5 Group's development goals



[102-40] [102-42] [102-43] [102-44]

Stakeholders

Why we interact

Shareholders and investors



• To inform investors about X5's business and sustainability goals, current financial and operating performance and other significant • We upgrade our ESG disclosure practices to align them with globally

- To explain how we plan to increase the value of our business
- To engage in a dialogue to receive feedback that may help us further improve our business
- To ensure investor support for X5's capital markets activities
- To support growth in market capitalisation over the long term

How we interact

- We disclose information on updates and shifts in our strategic priorities
- recognised best practices
- We explain our view of the food market and competitive environment, and how it will develop
- We implement corporate governance systems that are in line with global
- We regularly publish timely, accurate and relevant information about Company performance via our investor website along with annual reports, • Held 3 roadshows and participated in 15 investor conferences financial statements, press releases and presentations
- We hold virtual and in-person roadshows
- We participate in virtual and in-person investor conferences
- We hold conference calls
- We conduct group meetings with analysts and investors

2021 performance highlights

- Launched a website on the Company's sustainable development and environmental initiatives, esg.x5.ru
- Adapted investor relations practices to COVID-19 restrictions, ensuring access to management for investors even when in-person meetings were not possible
- Held frequent phone calls, video calls and meetings with investors
- Continued to publish ESG databook on corporate website
- Held a Capital Markets Day
- Published 33 press releases via a regulatory information service
- Published X5's first sustainability report under GRI Standards
- Disclosed a semi-annual sustainability performance report and a regularly updated ESG databook that is available on the corporate website

Suppliers and business partners



- To ensure the reliable and timely supply of high-quality goods
- To facilitate access to X5's network of stores for local producers across the regions where we operate
- To help suppliers better understand consumer demand and offer more efficient promos
- To implement systems to ensure the health and safety of the products we sell
- To work with suppliers to enhance the sustainability of packaging
- To continuously improve the efficiency of our supply chain

- We use big data-powered tools to provide suppliers with access to better analytics about customer demand and preferences
- We uphold high standards of business relations based on trust
- We provide information and training for regional producers to increase the share of local goods offered across our formats
- We work with suppliers to develop responses to customer ratings and complaints
- We train suppliers on how to work efficiently with X5's logistics infrastructure
- We enable access for both large nationwide and smaller local suppliers to our transport and logistics infrastructure
- We are developing the Dialogue X5 events into a virtual platform for suppliers to communicate with X5 and access information that will help them to better understand consumer needs
- We conduct regular surveys and other activities to collect and analyse supplier feedback

- Continued to develop the Dialogue X5 virtual platform, which offers suppliers access to key tools to manage supplies and promo for X5 customers, and to publish information on certification, packaging materials and the health benefits of products
- Worked across the whole value chain together with suppliers and other stakeholders to develop recommendations on sustainable packaging for our suppliers
- Developed detailed informational materials to guide our suppliers on our new recommendations
- Incorporated our packaging recommendations and recommended certifications into our purchasing policies for suppliers
- Perekrestok was ranked the best partner among the top 15 food retailers for the second year running. Pyaterochka improved its position in this survey vs 2020 and is now in second place



[102-40] [102-42] [102-43] [102-44]

Stakeholders

Why we interact

Society and local communities



 To secure our licence to operate from society by ensuring that we contribute to the development and well-being of local

 To conduct surveys and other activities to enhance our understanding of local communities' priorities and concerns

• To support the health and well-being of the communities we operate in

• To continuously monitor and strengthen the reputation of our brands

• To use a variety of channels to communicate with local communities, from in stores to local and national media and social

• We work with municipal, regional and federal governments to facilitate media

How we interact

- We continue to expand initiatives such as the Basket of Kindness food bank and Liza Alert search-and-rescue operations, adapting them to the COVID-19 pandemic where needed
- We implement programmes that empower our customers to donate to good causes together with X5
- We identify and execute events that are priorities for local communities like tree planting, green-up days, Victory Day celebrations and others
- We ensure that our operations comply with environmental regulations
- We report about our environmental performance, including measures to reduce emissions, consumption and waste generated by our activities
- initiatives aimed at supporting disadvantaged groups such as pensioners

2021 performance highlights

- Paid over RUB 122 billion in local, regional and federal taxes
- Provided convenient, modern and reliable food retail services to people in 66 regions in 7 federal districts in Russia
- Collected 356 tonnes of food that were delivered to over 184 thousand people in need as part of food drives organised by Basket of Kindness
- Organised other chartable social programmes: Preventing Social Orphanhood, Safety Zone, Urban Environment, and many others
- Through Pyaterochka's social partnership programme, approximately RUB 70 million was collected to support charitable causes

Regulators and government officials



- To engage in regular dialogue with local authorities
- To ensure that we are informed about local policies or regulatory changes that could impact our business
- To engage in a dialogue and provide constructive input regarding regulations and legislation that may impact our business
- To ensure that regulators understand the priorities of X5 and our industry
- To inform government officials about X5's contribution to Russia's social and economic development, and how we create value for stakeholders in the country
- To ensure that management is informed about current and planned regulatory or legislative initiatives that may impact our business

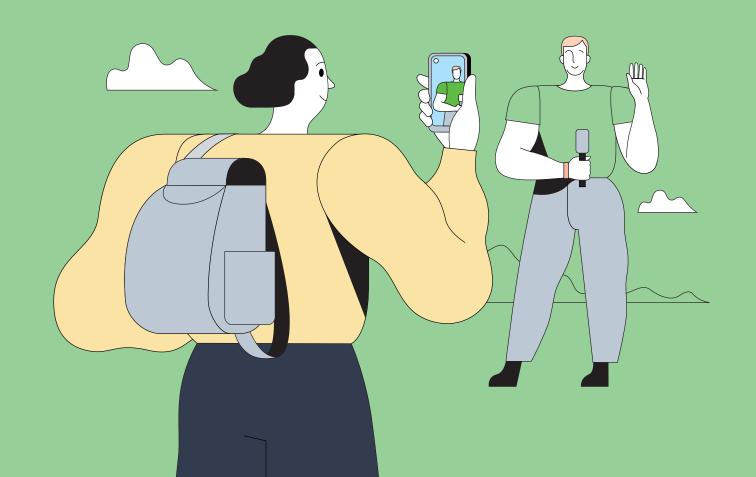
- We support and play an active role in industry associations that represent
 Successfully cooperated with various government bodies to ensure the interests of retailers with regard to regulation and legislation
- We engage with relevant government officials at key events such as DC openings in order to show how X5 is creating jobs and supporting local
- We engage in working groups on issues relevant to X5 Group at the federal and regional levels
- We facilitate testing of technological changes such as labelling for various categories of goods, electronic document exchange and electronic signatures
- We maintain an open dialogue with the industry association AKORT and provide X5's position on matters that are important for retailers, such as environmental and sanitary legislation, charity, etc.
- We sign cooperation agreements on socially oriented projects with top national companies and institutions at the #1 public economic event (The St. Petersburg International Economic Forum) attended by key government officials

- the smooth operations, of food retail and avoid potential disruptions in the supply chain and other operations
- Maintained all necessary permits and licences for X5 operations across our entire value chain
- Regulations barring food retailers from selling medical masks and gloves were rescinded, helping make these items more accessible during the pandemic
- Aligned remote work governance with the need for greater flexibility for office employees to work from home
- Facilitated various initiatives to ensure efficiency and continuity in import operations from various geographies
- Contributed to increasing affordability and accessibility of medicines by liberalizing the regulations on online drug sales

04

Responsible business conduct

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Risk management

[102-11] [102-15] [102-30] [103-1] [103-2] [103-3] [201-2]

X5's risk management activities seek to identify and appropriately address any significant threat to the achievement of the Company's strategy and business objectives, its reputation and the continuity of its operations. X5's risk management system enables management to identify, assess, prioritise and manage risks on a continuous and systematic basis, and covers all businesses and corporate functions within X5 Group. Ongoing identification and assessment of risks, including new risks arising through an early-warning system of key risk indicators, are part of X5's planning, performance and risk management cycles.

Throughout the year, the Risk Management team reviews X5's risks and performance of risk mitigation actions. This information is reported at various management levels up to the Supervisory board.

X5 applies a "three lines of defence" model to ensure the effectiveness and completeness of the Company's risk management and internal control system:

First line	Second line	Third line	
Business unit / risk owners	Risk Management, Internal Control and Compliance	Internal Audit	
Manages risks on a daily basis and provides assurance regarding the effectiveness of controls	Steers, monitors and supports line management in (1) managing risks and (2) developing and maintaining an adequate framework for control and compliance	Conducts audits and tests the internal control and compliance framework for to assure the effectiveness of control	

A key element of our risk management framework is monitoring and assurance. The Internal Audit Department (IAD) is mandated to perform reviews of key processes, projects and systems across the Group, based on X5's strategic

priorities and most significant risk areas. The IAD provides independent, objective assurance and value-adding advisory services that assist the Company in achieving business objectives and improving its operations.

In addition, the Company recognises that ethics and integrity are key components in the fulfilment of X5's sustainable health and long-term value creation. Our Code of Business Conduct and Ethics reflects our values and principles, which, together with underlying policies and procedures, are promoted and implemented across the Group through learning and training programmes.

A detailed overview of X5 Group's risk management activities can be found on pages 150–158 of the **2021 Annual Report**.

The Company's principal risks

X5's principal risks – those that may impede the achievement of X5's objectives on strategy, operations, compliance and reporting – are identified below. It should be noted that there are additional risks which management considers immaterial or common to companies in the same industry. The Company has identified the following principal risks:

- Market and macroeconomics
- Competitive environment
- Business development investments
- Retail and customer service
- Supply chain
- Human resources
- IT

- Cybersecurity
- Fraud and corruption
- Legislation and litigation
- · Data privacy and security
- Financial risks
- Risk of sanctions and credit rating downgrades

Climate change

X5 acknowledges the urgency of acting on climate change, especially in light of COP26 and the latest IPCC report findings. Cognisant of the fact that the climate agenda will only become more important over time, X5 closely monitors changes in international and local climate regulation and stakeholder engagement.

X5 Group's management and Executive Board are responsible for effectively monitoring and managing the risks and opportunities associated with climate change. Thus, in 2021 a climate risk and opportunity assessment was conducted following TCFD recommendations to test the Group's resilience and business strategy regarding the consequences of climate change.

We recognise that as the world moves towards a low-carbon economy, we need to take some steps to reduce emissions and improve X5's global sustainability profile. In 2021, X5 developed a decarbonisation plan and road map for all stages of its value chain. The Company continues to work to achieve its 30x30 targets of reducing GHG emissions intensity by 30% and increasing the share of renewable energy used in its operations by 30%, by 2030, with the ultimate goal of carbon neutrality by 2050.

More detailed information on X5's sustainable development targets and strategy is presented on pages 20–23 of this Report.



[102-16] [102-17] [102-18] [102-20] [102-25] [205-2] [412-2]

Corporate governance

The Company has a two-tier board structure, consisting of a Management Board and a Supervisory Board, which are independent of one another and are accountable to the General Meeting of Shareholders.

The Management Board oversees all corporate governance activities and has ultimate responsibility for the overall management of the Company. The Management Board's responsibilities include compliance with all relevant laws and regulations, management of risks associated with the Companies activities, financing and external communication.

The Supervisory Board is responsible for advising the Management Board and for supervising the general course of affairs for X5 and its businesses. The Supervisory Board considers the relevant interests of the Company's stakeholders and all appropriate interests associated with the Company. Major business decisions require the approval of the Supervisory Board.

While retaining overall responsibility, the Supervisory Board assigns certain tasks to three committees: the Audit and Risk Committee, the Nomination and Remuneration Committee, and the Sustainable Development and Innovation Committee.¹

Responsibilities Committee Audit and Risk Committee The Audit and Risk Committee assists the Supervisory Board in overseeing the integrity of X5's financial statements, system of internal business controls and risk management, financing and financerelated strategies, tax planning, the Company's compliance with legal and regulatory requirements, as well as the qualifications, performance and independence of the external auditor and the performance of the internal audit function. Nomination and Remuneration The Nomination and Remuneration Committee recommends Committee the remuneration policy for the Management Board to be adopted by the General Meeting of Shareholders, prepares proposals for the Supervisory Board on remuneration of the individual members of the Management Board in line with the remuneration policy and advises the Management Board on the level and structure of compensation for other senior personnel. The Nomination and Remuneration Committee also advises in respect of the selection and appointment of members of the Supervisory

Sustainable Development and The Sustainable Innovation Committee¹ for advising the Common of the Sustainable Development and The Sustainable Development and The Sustainable Development and The Sustainable Development and Sus

The Sustainable Development and Innovation Committee is responsible for advising the Supervisory Board on issues relating to ESG, the Company's digital strategy, innovation and technology.

Board, the Management Board and the Executive Committee. At least

the size and composition of the Supervisory Board and the Management

Board, as well as the functioning of the individual members, and reports

annually, the Nomination and Remuneration Committee evaluates

the results of such evaluations to the Supervisory Board.

Principal documents

Code of Business Conduct and Ethics

Declaration on Human Rights Protection

Inside Information and Dealing Code

Code of Interaction with Business Partners

Compliance Policy

Policy on Countering Misconduct Including Fraud and Corruption

X5 is committed to fostering a corporate culture of shared ethical values, mutual respect and compliance with applicable laws and regulations in all its activities

X5's core values and principles are detailed in the Company's Code of Business Conduct and Ethics (the "Code") and its underlying policies. These documents have been developed to help employees act in compliance with the law and in accordance with X5's ethical principles in all working activities. The documents have been posted on our website and/or intranet and are freely accessible to all employees and business partners. The Code and its underlying policies are reviewed and updated regularly in accordance with changes in legislation and Company processes.

in accordance with the most recent Russian legislation regarding the prevention of insider tradinant market manipulation.

Given the composition of the Supervisory Board following recent events, the duties and responsibilities of the Sustainable Development and Innovation Committee is included under the remit of the full Supervisory Board as of 16 March 2022.



[102-16] [102-17] [102-18] [102-20] [102-25] [205-2] [412-2]

Policy highlights

Code of Business Conduct and Ethics

The Code of Business Conduct and Ethics sets standards of conduct that employees are expected to strictly observe in relations with customers, suppliers and other employees, as well as a set of basic principles that guide our business practices.

The Code covers areas such as fair competition, fighting bribery and corruption, care for the environment, protection of personal data and Company assets, avoiding conflicts of interest, equal opportunities for employees and safe working conditions, and how to deal with customers, suppliers and competitors. Furthermore, the Code includes provisions on mechanisms for reporting violations of the Code.

The provisions of the Code apply to all employees regardless of their position or function, who undertake regular training programmes with a focus on practical, case-based learning.

Throughout the Code, one of the key approaches is "when in doubt, ask". If employees have a question concerning the Code or any ethical issue that they encounter in their work at X5 Group, they are obliged to contact their immediate supervisor or local management, report to the Compliance Officer or call the X5 hotline.

A special email for reporting to the Compliance Officer is available: compliance@x5.ru. While we recommend that employees use the X5 ethics hotline only to report cases of violations, anyone contacting the hotline for advice will receive an answer.

Practical guidance on specific topics outlined in the Code is given in the additional documents described below.

Declaration on Human Rights Protection

[412-2]

X5's Declaration on Human Rights Protection defines principles and rules in respect of compliance with and promotion of high international standards for the protection of human rights at every level of the Company's operations:

- Prohibition of discrimination and forced labour
- Prohibition of harassment
- Respect for cultural diversity and values
- Respect for the right to freedom of assembly and association
- Occupational health and safety

As a complement to the Code of Business Conduct and Ethics, the Declaration on Human Rights Protection is a binding document for all X5 employees. Training on human rights is a part of corporate business ethics training, which is mandatory for all employees.



[102-16] [102-17] [102-18] [102-20] [102-25] [205-2] [412-2]

Policy highlights

Inside Information and Dealing Code

X5's Inside Information and Dealing Code aims to ensure that X5 employees do not abuse, and do not place themselves under suspicion of abusing, inside information and that they comply with their obligations under the applicable rules on inside information and securities trading.

Code of Interaction with Business Partners

As an industry leader, we are aware of our responsibility to the government, society, our shareholders and business partners, and we aim to fully comply with legal and ethical standards, as well as best corporate practices, in order to serve as an example for other market participants.

The Code of Interaction with Business Partners contains provisions regarding compliance with trade and competition laws, anti-corruption and fraud legislation, legislation on the quality of products and services, legislation in the field of environmental protection, laws in the field of labour relations and occupational health and safety, communication standards, information protection, prevention of conflicts of interest, etc. Violations of the Code of Interaction with Business Partners are handled by X5's Conciliation Commission.

Compliance Policy

In order to ensure compliance with the requirements of regulators and stakeholders, as well as internal standards and rules on business conduct and ethics, X5 has adopted a Compliance Policy in accordance with ISO standards for GRC and management systems.

Policy on Countering Misconduct Including Fraud and Corruption

X5 and its brands are committed to conducting business in an ethically responsible manner and to complying with all applicable laws and regulations. This commitment specifically includes compliance with laws relating to anti-corruption and bribery.

In addition to the Code of Business Conduct and Ethics, X5's Policy on Countering Misconduct Including Fraud and Corruption (the "Anti-Corruption Policy") prohibits any form of corruption or bribery, including facilitation payments. It aims to create a culture of honesty and zero tolerance for illegal behaviour among staff, and also to eliminate any risks of involving the Company in corrupt activities. Our anti-corruption system includes a set of mechanisms, procedures and tools aimed at preventing, uncovering, investigating and responding to all possible cases of misconduct. Furthermore, it establishes roles and responsibilities for departments and management bodies within the anti-corruption system. Our aim is to conduct business only with those partners that share X5 Group's principles of zero tolerance for corruption and fraud, and relevant provisions are included in the agreements with our suppliers and other business partners.





[102-16] [102-17] [102-18] [102-20] [102-25] [205-2] [412-2]

Compliance and ethics systems

Ethics Committee

[102-20]

The Ethics Committee is responsible for:

- Objective review of disputes related to alleged violations of the Code of Business Conduct and Ethics and anti-corruption policies
- Resolving conflicts of interest
- Approving anti-fraud and anti-corruption measures

The Ethics Committee includes the Chief Executive Officer (Chairman of the Committee), the Director for Legal Affairs and Government Relations, the Security Director, the Business Support Director and the Director for Human Resources and Organisational Development. The Committee's decisions are binding on all Company employees.

Conflicts of interest

[102-25]

X5's internal procedure for declaring, monitoring and resolving conflicts of interest enables managers and employees to disclose situations where the personal interests of an employee at any level affect or could affect the rights and interests of the Company and establishes procedures for the purpose of resolving such situations.

The Compliance Department is responsible for the effectiveness of the procedure for reporting on and resolving conflicts of interest.

Additional information regarding X5's corporate governance systems and mechanisms for managing conflicts of interests is provided on page 141–176 of the "Corporate Governance" section in the 2021 Annual Report.

Reporting violations and whistle-blowing

Employees are encouraged to report any actual or suspected violations of the Code of Business Conduct and Ethics or labour laws. We operate an ethics hotline for this very purpose, though employees and other whistle-blowers can also report violations by email and through the Company website and intranet portals.

Responsible staff are required to review all reports and follow up in accordance with internal procedures. Reports via the ethics hotline can be made anonymously; moreover, an employee acting in good faith will not face any form of penalty even if a violation cannot be proven to have taken place. The Company guarantees confidentiality of any report made.

In 2021, there were no substantiated reports of significant financial reporting, accounting, fraud or ethical violations.

In addition to the whistle-blowing channels for employees, the Company operates a reporting channel for business partners and other third parties. Violations of the Code of Interaction with Business Partners are handled by X5's Conciliation Commission, which serves as a corporate arbitrator in disputes with business partners. Violations can be reported through the Company's website.





[102-16] [102-17] [102-18] [102-20] [102-25] [205-2] [412-2]

Compliance and ethics systems

Grievance mechanisms

	2020	2021
Total number of reports received through the ethics hotline, by category	8,069	9,135
Related to HR issues, incl.	6,094	7,457
Confirmed and resolved reports related to HR issues	1,329	2,557
Related to issues concerning the Code of Business Conduct and Ethics, incl.	1,975	1,678
Confirmed and resolved reports related to issues concerning the Code of Business Conduct and Ethics	491	463

Training

[205-2]

In addition to the fact that all Company employees are required to familiarise themselves with the Code of Business Conduct and Ethics, the Company conducts regular training on the Code and related policies, during which employees are required to take part in sessions covering the practical application of these documents.

The Compliance Department is responsible for the development of our compliance and ethics training programme.

In 2021, 52% of new employees completed training on the Code of Business Conduct and Ethics, which includes anti-corruption policies and procedures.

The Company also updated its ethics training programme: "X5's ethical principles: a corruption-free business". In 2022, X5 plans to launch a new programme.





Responsible supply chain

[102-9] [102-10] [102-43] [102-44]



In order to achieve the goals set out in our sustainability strategy, we must work with our partners in order to become more sustainable together. Since adopting our sustainability strategy in December 2019, we have taken the first steps towards creating a responsible supply chain and increasing the share of goods on our shelves that are produced and packaged in a responsible way.



Sustainability recommendations

We engage in active dialogue with our suppliers on issues of certification and packaging, and we work together to develop sustainability programmes. In June 2020, we published sustainability recommendations for suppliers and X5 employees. The document covers commercial procurement of core branded items, non-commercial procurement and production of private label items.

These recommendations focus on sustainable consumption and production, one of the four UN SDGs that X5 has identified as a primary sustainability objective. Our recommendations are based on the results of a survey of X5's 30 largest suppliers and were developed with the support of WWF Russia, Greenpeace, Deloitte CIS and many other stakeholders.

The recommendations reflect X5's vision for sustainable and responsible production and packaging practices.

The Company informed suppliers and partners of relevant updates to its procurement policies and published its recommendations on its website. Although the recommendations are not mandatory, suppliers whose products and practices are in line with our recommendations will be viewed favourably when a decision on partnership is made.

In line with this approach, we plan to develop principles and practices that will enable us to monitor suppliers' responsible sourcing of goods by 2023.



Sustainable packaging recommendations

In 2021, we introduced detailed recommendations on sustainable packaging for 13 different categories of products. The recommendations were finalised after discussions with the suppliers of all 13 product categories and with input from the expert community, including industry non-profits, packaging manufacturers and waste management companies. In total, we received feedback from 23 suppliers and 16 experts. We also held a public discussion attended by over 100 stakeholder representatives.

Our sustainable packaging recommendations contain detailed information covering three aspects of packaging – design, materials, and information (including labelling and customer and employee education). Our recommendations consider existing legislation and the technology and infrastructure available in Russia.

X5 sent this document, which is available on the Company's website, to its partners and suppliers. X5 also updated its training course for X5 suppliers and employees in the Company's procurement departments. The recommendations are not mandatory, but X5 will support and promote the technology and products of vendors who choose to implement them.

We are committed to ensuring that at least 20% of our suppliers use sustainable packaging and to increasing the share of private label goods in environmentally friendly packaging to 50% or more by 2023.



Responsible supply chain

[102-9] [102-10] [102-43] [102-44]



Selection of suppliers and contractors

The Company welcomes the voluntary certification of products supplied to X5 Group for compliance with environmental and social standards. We do not require specific certifications, leaving our supplier with the right to choose any applicable standards, including those on our list of recommended options. All potential suppliers undergo an audit before an agreement with X5 is signed. Some existing suppliers are also periodically subject to audit.

We have begun collecting information on our suppliers' certifications; our suppliers will be ranked based on the number of certificates they have obtained. We are also collecting information on our suppliers' intent to receive certification and the time frame they expect to achieve this in. On the basis of this information, certification may become a requirement for partnership with X5 in the future.

Detailed information on how we audit suppliers is provided in the "Product quality and safety assurance" section on pages 43–47.

External contractors sometimes work on X5 premises, and we are committed to ensuring that they understand our requirements for maintaining a safe and healthy workplace. The main goals of OHS management in relations with external contractors are to provide direction, coordinate efforts and achieve consistent results based on trust, while systematically monitoring the implementation of OHS requirements on the part of the contractor's personnel. All employees of contractors working on X5 property must take part in a mandatory briefing on occupational health and safety for third-party organisations.

The rules and policies governing our interactions with suppliers are described in the "Compliance and business ethics" section on page 31–35.



Supplier portal and education

We have launched a supplier portal, Dialogue X5, on our website. This web portal contains relevant policies and educational resources for our suppliers. In turn, suppliers may add information regarding products that are sold in X5's retail chains. We continued to develop this portal in 2021, enabling suppliers to add information about product certification, packaging materials and health benefits. Additionally, suppliers can sign up for our training webinars through the portal. The ready availability of relevant information will make the process of tracking our goals easier and more efficient.

The development of Dialogue X5 is an important achievement that enables X5 to improve communication between the Company and its suppliers. The portal contains two sections – a supplier portal and an employer portal – and acts as a unified platform for X5's services. The portal uses authentication and authorisation technologies, allowing access to the Company's targeting, logistics and insights services, among others. The portal also contains a unified and intuitive design system that allows users to move seamlessly between the platform's products.

In 2021, X5 developed a customer feedback system and added greater detail to responses on topics where feedback was left. X5 also added to the portal a page on returning packaging, a page on private label goods and a system for familiarising suppliers with X5's anti-corruption policies that tracks the date and time of its completion. This builds upon the sustainability training course for suppliers that X5 developed in 2020, which was made publicly available on the Company's website.

In 2021, many of our suppliers faced transportation shortages. X5 has been helping its partners with this problem and is developing a collection and commercial delivery service for suppliers. These services increased by approximately 30% compared with 2020.



Direct imports

Direct import hubs are an important part of X5's supply chain. The Direct Import business unit allows us to monitor and control import operations across the entire supply chain, enabling greater control over the selection of responsible suppliers, improved quality control throughout the supply chain and better responsiveness as we adapt our assortment and CVP to customer needs.

In 2021, the organisation of import quality assurance remained a priority. As the Company continues to enlarge its geographical presence, expanding its network of local counterparties, X5 reviewed and renewed its methods of quality control abroad. Last year, X5 conducted its first audits of Chinese enterprises and operated a mobile team of the Direct Import business unit experts for quality control in Turkey. In the future, an expansion of the Direct Import business unit expert teams is planned for Egypt and Serbia.

X5 continued to upgrade its logistics systems within Russia, building on both new and existing platforms. The Company tripled its sorting capabilities at the Ural direct import hub and set up systems of quality control for six new third-party logistics suppliers. In addition, the Company developed a method of handling fruits and vegetables at Pyaterochka and Perekrestok distribution centres.

The Company continues to standardise its import procedures in accordance with international standards. In 2021, X5 introduced a single reporting standard for inspecting distributed goods and set up a Single Window Situation Centre to handle all issues emerging from X5's trade network.



Care for our customers



Customer feedback is strategically important for our business's success. We aim to put our customers at the centre of every decision we make, and the more informed we are about their needs, the more targeted our decisions will be.

Over 5.7 billion

purchases were made in our stores in 2021.

In addition to analysing these purchases to better understand demand, we encourage customers to leave ratings of products purchased via our formats' websites and mobile apps.

We also use external suppliers of Net Promoter Score (NPS) data to help us to understand the level of customer satisfaction at our stores and formats. NPS is a key measure of customer satisfaction that is used across the retail industry, and NPS performance is included in management KPIs.

According to a 2021 report on social media feedback and attitudes towards X5 Group's activities, there were 910,415 messages referencing X5 Group and its formats. Sustainability was a key topic: its occurrence increased significantly, by approximately 50%.

In total, Pyaterochka and Perekrestok have over 20 different feedback channels, ranging from a call centre to chatbots and the mobile app. In 2021, new posters about our ethics hotline were placed in Pyaterochka and Perekrestok stores; the hotline is also publicised through a banner on the Company's internal portal. As such, customers are made aware of available feedback mechanisms; their responses are analysed and considered when making business decisions.

Perekrestok operates the Client's Voice programme, which helps the company receive feedback from its customers and improve its service and assortment. Product ratings are assigned based on the scores customers leave through their personal account on the application, which are used by the Company and its partners to decide whether to promote, develop, or remove a product from the assortment.

Vprok.ru Perekrestok has set a goal of increasing the affordability of its products for its customers, with 94.17% of its products this year rated as affordable, and it also plans increase the share of local producers in its assortment.

Karusel is also monitoring its pricing and the affordability of its products. Almost all the goods of suppliers represented in X5's other formats are also sold at Karusel, and so special attention is paid to making sure essential goods are priced to the market.

Mnogo Lososya supports its customer feedback service via a call centre, messenger services and our partner delivery services.

Our in-house logistics network provides efficient delivery solutions from producers to the Company's customers. Our transport hub, X5 Transport, operates 4,654 vehicles, which carried approximately 70% of all the Company's deliveries this year.

We have reviewed our strategy for our in-house and rented fleet to ensure high-quality service and reliable delivery. As part of our expansion and renovation of our current fleet, we have purchased 745 new vehicles. We have also reviewed our rules for working with hauliers to guarantee the reliability of our deliveries and transportation.



Our plans



Over the past five years, changes to the market and the Company's strategy as well as the transformation of the Company's management structure mean that it is time for the Code of Business Conduct and Ethics to be updated: X5 plans to review the Code in 2022. The Company also plans to update a number of documents detailing the application of the Code and top-level policies on the acceptance and giving of gifts and invitations and the evaluation of ethical risks.

X5 continues to automate its compliance processes and procedures. In 2022, we plan to complete the following IT projects:

- Automating the insider list and notification about being added to or removed from the list.
- Improving the efficiency of our services for related parties.
- Developing a feedback form on our site for complaints to the Conciliation Commission.

We are planning a large-scale launch of our updated "X5's ethical principles: a corruption-free business" training programme, which will be adapted for employees of our stores. Colleagues working on the ethics hotline will also receive training on its principles and working processes.

In 2022, we plan to improve customer feedback in Pyaterochka:

- We are launching a pilot in Moscow, "Rate our employees' friendliness".
 Our customers will rate the work of our retail employees after every purchase. Directors will use the data gathered in stores to improve service and search for new growth points. The pilot was implemented over a year ago in the Ural FD and has shown good results. After we have implemented improvements to the system, we will review its performance in Moscow and begin to scale it up from 3Q 2022.
- We are already changing the assortment based on customer reviews
 left through the mobile application after purchases, by improving recipes
 with our producers, changing prices or removing from the assortment. In
 2022 we will launch the Automated Category Manager Workspace, which
 will allow category managers to work more systematically with feedback
 and to react operatively to a lowering rating.
- We are reviewing and improving the process of response to customer feedback in order to reduce response time.

In 2022, we plan to develop the Dialogue X5 supplier portal by:

- Enhancing the quality and processing of the interface to improve the speed of communication between X5 and its suppliers, and by adding new functions. We plan to make the portal the only platform for communication between X5 and suppliers.
- Working on the efficiency of our communications and improving the transparency of our processes so our suppliers understand where and how to receive a response from the Company. We will soon publish a road map for suppliers on the steps between our receipt of a commercial offer and their first sales.

In 2022, we also plan to further develop the quality control system for the Direct Import business unit:

- To maintain our reputation among international suppliers and to bring our by-laws on product quality and safety in line with international standards.
- To shift the emphasis in working with losses from compensation towards prevention.
- To develop the Arm Surveyor project, which involves the Company's surveyor on the ground with the supplier inputting information quickly and accurately into the application, which the Direct Import business unit employees will then promptly review and respond to. This all takes place within one system, optimising the distribution process and enabling the supplier to send goods on shorter hauls to a different hub.

05

Healthy lifestyles

Our approach and 2021 highlights **41**Product quality and safety assurance **43**Promoting healthy lifestyles **48**Our plans **50**

Our approach and 2021 highlights

[102-13] [103-1] [103-2] [103-3]



Maintaining high standards of product safety and quality is a key element of the sustainability of our businesses. Our customers depend on us to ensure that every store we operate offers fresh and high-quality goods that are safe for consumption. As a committee member of the Collaboration for Healthier Lives Coalition (Consumer Goods Forum) and various industry associations, we collaborate with consumer goods producers and other retailers to ensure that we adhere to best practices to offer quality and healthy products.

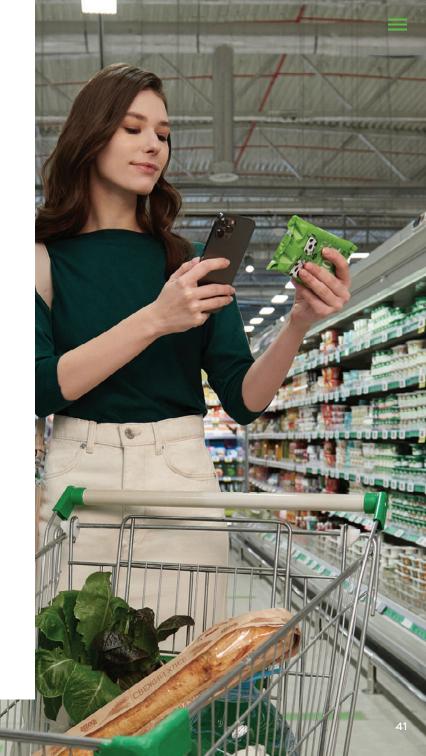
Our actions to promote product quality and safety and healthy lifestyles are guided by our Policy on Promoting Healthy Living and a Healthy Diet, which is available in English and Russian on our website. The policy outlines our priorities for product safety and quality and enables us to ensure that food contains wholesome and healthy ingredients, to promote physical and mental health, and to encourage suppliers to certify their products and engage in dialogue with the Company on matters of healthy living.

We constantly review and improve our systems and policies in this area in order to implement best practices and to comply with changes to relevant legislation. Our ultimate goal is to be able to track goods "from farm to fork" to ensure that they meet our high standards for quality and safety. This will also enable us to analyse the social and environmental impact of their production and to quarantee the security of our supply chain.

Suppliers are regularly audited by independent, accredited international organisations. We continue to work on the preparation of quality specifications for food products, our private labels and packaging materials.

As part of our multi-format operating model, each retail format has its own Quality Department that, together with the Commercial Department and the Category Management Department, oversees all stages of the product life cycle.

We also seek to promote healthy lifestyles by expanding the assortment of healthy foods we offer in our stores and by promoting their availability with special signs and labelling. Enhancing our healthy lifestyle assortment is in line with UN SDG 3 (Good Health and Wellbeing) and responds to the growing demand of Russian customers who are placing increasing importance on the role of healthy food in their overall well-being.





Our approach and 2021 highlights

[102-13] [103-1] [103-2] [103-3]

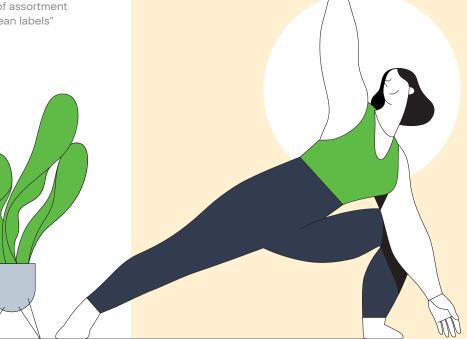
2021 highlights

- "Healthy living" corners and shelves continued to operate in Perekrestok and Pyaterochka stores
- Perekrestok
 - Expanded the Green Line assortment of products that help customers lead a healthy lifestyle, such as gluten-free bread, alternatives to meat and others
 - Implemented a healthy desserts project in a majority of stores and launched a range of pilot projects promoting a gluten-free bakery and desserts assortment
 - Promoted healthy lifestyle awareness programmes, organising the Healthy Lifestyle Festival and introducing customers to a variety of products that promote a healthy lifestyle
- Pvaterochka
 - Implemented a function for fresh fruit and vegetables, and developed methods to analyse the number of audits conducted, the time spent on them, and of supplier/ producer data
 - Updated the Basket of Kindness with more useful and environmentally friendly products in February 2021

- Mnogo Lososya introduced breakfast options into its menu, including a keto breakfast option, which is in high demand and ranks in Mnogo Lososya's top 10 most popular meals
- Launched the Food.ru website, which hosts gastronomy news and articles, tips and lifehacks, masterclasses, a food encyclopaedia and, of course, recipes. The site also shares information on the environment and how to use natural resources more efficiently. Information on environmental initiatives and practices from around the world can also be found on the site
- Introduced a function to flag healthy lifestyle goods on the Dialogue X5 supplier portal
- X5 Group was selected as one of top 20 companies in Russia for best practices for the elderly. The survey was conducted by National Priorities, an autonomous nonprofit organisation, as part of its demographics project. The project's goal is to develop the concept of active old age across Russia's regions and to improve quality of life for the elderly by replicating best practices

· Chizhik:

- Applied quality requirements on suppliers regarding the production of private label aoods
- Began collection of information on suppliers' GFSI-accredited certifications
- Developed and launched a strategy for product quality to avoid the degradation of ingredients, falsification of assortment ingredients and achieve "clean labels" or "simple ingredients"





Product quality and safety assurance

[102-10] [102-12] [102-13] [404-2] [416-1] [417-1]



Pyaterochka

Pyaterochka's head office has a Quality Department that is responsible for, among other things, ensuring that internal regulations adhere to qualityrelated legislative requirements. The Quality Department also provides expert assessments of draft laws to facilitate our constructive participation in the legislative process and, together with the Government Relations Department, interacts with oversight and supervisory bodies in order to ensure that we properly understand requirements and can have a say in the consideration of new standards. We also engage with industry associations and producers' unions, including the Consumer Market

Participants Union, the Russian Union of Industrialists and Entrepreneurs, the All-Russian Association of SMEs (Opora), the Civic Chamber of the Russian Federation, the National Dairy Producers Union, the RusBrand Association of Branded Goods Manufacturers and the Seafood Processors Union. In February 2021, a social media campaign was launched together with the Federal Research Institute for Nutrition and Rosprirodnadzor, the federal environmental service, to raise awareness of the importance of healthy food.





Product quality and safety assurance

[102-10] [102-12] [102-13] [404-2] [416-1] [417-1]

Pyaterochka: product quality and safety assurance key highlights

- Conducted 1,759 audits, including 569 of producers of private label goods (the number of audits increased as a result of the expansion of the Audit Department)
- Continued to digitalise quality control processes as part of its Freshness project:
 - Developed quality monitoring panels for products received at DCs
 - Launched an audit portal for suppliers, which enables the automatic management of audits and other functions
- Updated the checklist for conducting audits of food companies and DCs
- Developed an inspection checklist for companies delivering private label goods (import)
- Approved the presence of in-house personnel at the Bogorodsk, Novorossiysk, Ural and Pulkovo hubs as part of the "In-house quality employees at Direct Import hubs" programme, which we plan to extend to all hubs
- Expanded the quality control team
- Set up systems of quality control at DCs, following the completion of necessary integration
- Set up a single automated system to centralise microclimate monitoring across all DCs
- Implemented a system to submit business ideas through the Championship of Ideas competition

35

online courses were conducted in 2021, which had been developed for quality control management personnel, the product quality and safety service, and the Commercial Department 25,232

quality control and safety service employees completed the course in 2021 1,028_

Number of samples of private label goods undergoing quality testing

,392___

Number of tastings of private label goods

918

Number of agreed product benchmarks

39,928_

suppliers' goods underwent inspection and 30,861 were approved for delivery to stores

In addition, Pyaterochka continued to uphold principles of quality control based on HACCP standards throughout the product life cycle, further developing our approach in this area.

In 2021, a system of submitting acts of disagreement on quality through GK Software was launched. Stores can now submit an act through GK, where information on the delivery will be automatically retrieved. Flagged items are removed from stock, though repeat orders are not affected. Complaints are reviewed by the SAP ER complaints group. Since its launch, 25,288 complaints have been submitted, of which 5,753 were approved with a total value of more than RUB 5.5 million. Some 1,625 complaints resulted in the return of items to the supplier with a total value of almost RUB 2 million. In 2022, improvements and the addition of a complaints function for marked goods are planned.

In-house production at Pyaterochka stores (bakery, grill, freshly squeezed orange juice, coffee-based drinks)

- In 2021, 10,012 stores were licensed to prepare baked goods; 892, to prepare grilled chicken; 1,246, to prepare coffee-based drinks; and 732, to prepare orange juice.
- In 2021, we continued to audit suppliers of semifinished in-house products, which enabled us to control their quality. In total, 50 audits were conducted.
- In 2021, we received and processed 2,811 requests from customers for private label goods, compared with 864 in 2020.





Product quality and safety assurance

[102-10] [102-12] [102-13] [404-2] [416-1] [417-1]



Perekrestok

The Perekrestok Quality Department monitors stores' compliance with the established public health requirements regarding the storage, production and sale of products.

The Quality Department introduced a procedure for auditing the Company's commercial facilities, including a follow-up assessment of their condition.

The Quality Department is constantly updating its working and methodological instructions for the production and sale of products. Store personnel and store managers receive training on sanitation and hygiene through a programme for preparation for regulatory inspections as part of the Mercury product verification system.

Perekrestok: product quality and safety highlights

- Achieved a 60% reduction in the time spent on introducing products into the assortment and introduced new approaches to managing the safety of products when entering the assortment at the distribution centre
- Developed new approaches to managing product safety when new products are added to the assortment at DCs:
 - Introduced an automated system of allocating tasks to employees at DCs and a rating system to evaluate safety at DCs based on checklists

252 ___

product quality and safety inspections were conducted of suppliers of private label goods

537_____

quality control reports were prepared from the results of comparative tastings

- Increased the number of trusted suppliers at DCs. Trusted suppliers are evaluated based on vetting criteria. Suppliers who meet all criteria or with minimal, immaterial errors are considered trusted suppliers. The vetting criteria used are as follows:
 - Number of products returned from DCs
 - Number of critical product discrepancies in the supply process
 - Number of complaints from private label goods and DCs
 - Number of complaints from consumers

105

new private label goods were added to the assortment following quality inspections

1,939

Private label goods underwent laboratory research as part of quality control and safety and risk reduction measures



Vprok.ru Perekrestok online hypermarket

Goods are examined at the point of acceptance for a label on the product's packaging with full and reliable information in Russian on the product itself and its preparation. Inspections of the authenticity of a product are conducted through the federal state system. Inspections are conducted so that the customer has access to the necessary information on the product to make an independent decision. Verification of the supplier's documentation authorising the production and/or sale and distribution of the good is mandatory.

Quality inspections are regularly conducted on goods at dark stores during acceptance and storage (for expiry date, appearance, conditions of storage). If the quality manager discovers an infringement, the item is removed from sale and returned to the supplier or disposed of.

Special attention is paid to in-house production. The production of in-house goods undergoes regular controls and a daily audit according to strict sanitary requirements.

Vprok.ru Perekrestok has developed and operates a system of quality management control and conducts studies that enable it to evaluate the quality of service, customer satisfaction with the assortment and with pricing.

Internal documents have been introduced, such as instructions, regulations and standards, that regulate compliance with product quality and safety standards.

X5 HEALTHY LIFESTYLES

Product quality and safety assurance

[102-10] [102-12] [102-13] [404-2] [416-1] [417-1]



Chizhik

The main priority for the hard discounter is to adhere to national standards and to provide quality food products, without GMO, at affordable prices. These goals are strictly monitored from supplier to retail point. All suppliers have integrated HACCP principles, which is corroborated by X5 Group audits.

The discounter prioritises private label goods whose quality is comparable to or exceeds that of category leaders, a requirement for introduction into Chizhik's private label assortment. All of Chizhik's products have undergone some form of testing for food quality conducted by a private agency and are required to pass a test protocol consisting of approximately 20 laboratory trials.

The management of Chizhik's product quality monitors the adherence of its stores to sanitary and hygiene safety requirements on conditions of storage and production.

In order to maintain quality standards, regional managers inspect and evaluate the Company's retail facilities once a week. In addition, staff at each store conduct daily inspections to verify that quality and safety standards are met.



Mnogo Lososya

Mnogo Lososya's Quality Department audits suppliers. Deliveries to all retail chains are inspected for qualityand temperature controls.

Mnogo Lososya audits its dark kitchens three times a month. Products delivered to Perekrestok sushi points undergo testing and, receive technical regulatory documentation and a declaration of conformity. All food supplied is GMO-free, without food colouring and has confirmation of the quality of the product.



Product quality and safety assurance

[102-10] [102-12] [102-13] [404-2] [416-1] [417-1]

Direct Import business unit

The Direct Import unit's goal is to present the Company in the best light before international suppliers and to raise the Company's local product quality and safety regulatory documentation to international standards.

The Arm Surveyor project aims to optimise the time spent on delivery and the quality and safety control of products at the selection stage of goods from suppliers. We are shifting the focus of our control functions and are striving to carry only goods that we need and that meet our quality requirements. We have a network of our own non-staff experts in various countries and emphasise on-site expert opinion together with our automated reporting system, Surveyor, to reach prompt decisions. We understand that, if we were to outsource these functions, we would waste products, which would negatively impact both the Company's finances and the environment.

Smart Kitchen

Smart Kitchen monitors the quality of produce at all stages of the production process and hold a certificate confirming their adherence to the quality management scheme FSSC 22000 ver. 5.1. They are also included in the register of suppliers at international standard. Monitoring is conducted by commodity experts and quality managers, who inspect laboratories when required, and taste products from the network every Thursday. FIFO and FEFO processing principles are applied, which means that goods that are received first are also processed first.



Promoting healthy lifestyles



X5 has identified UN SDG 3 – Good Health and Well-being – as a UN SDG where we're positioned to have significant impact. Enhancing our healthy lifestyle assortment goes beyond the SDGs, however; it fulfils growing customer demand in Russia for a larger and more varied assortment of healthy food options.

The Company's Policy on Promoting
Healthy Living and a Healthy Diet sets
out principles for enhancing good health
among our customers, while the Responsible
Marketing Policy establishes our approach
to labelling (such as safe use, product
content and environmental or social impacts
of product disposal).

Pyaterochka

In 2021, Pyaterochka continued to expand its set of healthy living features and developed a new classification system of healthy living goods, which is based on the product's nutritional content, such as protein, fats, saturated fats, carbohydrates, cellulose, salt, sugar, calcium and omega-3s. This approach helps customers to lead a healthy lifestyle and to form a balanced shopping basket.

FEATURE	VERIFICATION METHOD
Vegan	Label on the package
Organic	Certification
Gluten-free	Certification
Clean ingredients	Internal regulations
Low-calorie product	Internal regulations
High-protein	Label on the package
No added sugar	Label on the package
Farm product	Internal regulations
Other healthy lifestyle	Internal regulations

Pyaterochka is currently transforming its healthy lifestyles strategy. Previously, Pyaterochka focused on specific product features, such as glutenfree, vegan and no added sugar, in its definitions of healthy living goods. Now the Company has expanded its vision and approach to healthy living goods, moving from the ultra to basic healthy living segment. The new classification system is based on the product's ingredients, evaluating features such as salt, sugar, protein, carbohydrates, fats, cellulose, and fruit and vegetable content. This classification system will not only allow more goods to be certified as part of the healthy living assortment but will also help develop and improve the nutritional content of private label goods in the future.

The information campaign on healthy lifestyles continues and includes the promotion of healthy eating through our social media channels in partnership with Rospotrebnadzor and the Federal Research Institute for Nutrition.





Promoting healthy lifestyles

Perekrestok

In 2021, we continued to focus on the "Supermarket of Healthy Habits" project, through which we aim to become a healthy lifestyle leader among Russian retailers through our assortment and environmental initiatives.

- Perekrestok held the "Health and hygiene school" project in partnership with Lysol and Dettol, where viewers learned useful information about the prevention of infections and means of protecting oneself from viruses and bacteria. This social educational project was aimed at improving knowledge about hygiene and disinfection as well as implementing healthy habits in viewers' lifestyles. The project had a total of 15 million viewers and, thanks to our participants, 2,671 Lysol and 1,956 Dettol products were sent to the Liza Alert fund.
- A pilot project of cold mist irrigation was implemented in three stores, as was water irrigation in five other stores.
- The number of PLUs in healthy living assortments was expanded.
- Perekrestok took third place in the market based on NPS, which demonstrates the Company's wide range of natural and healthy produce in its stores that help customers to lead a healthy lifestyle.

Perekrestok implemented a project for suppliers to automatically upload healthy living features into our system. When uploading product data, the supplier can immediately indicate the features present: vegan, glutenfree, sugar-free and others. If additional verification is required, the product will undergo additional certification through the Quality Department to receive the necessary documentation. Packet labels have significantly simplified the search for desired products in stores.

In 2021, Perekrestok launched two new environmentally friendly brands, "Market Collection" and "Home Story Eco", and expanded the "Green Line" product assortment, which includes goods that help lead a healthy lifestyle, such as gluten-free bread, alternatives to meat and others.

The healthy desserts project was implemented in a majority of stores, and pilot projects for a range of gluten-free and bakery products were launched.

Perekrestok promoted awareness of healthy lifestyles among customers, holding the Healthy Living festival, which aims to introduce customers to a range of new products that help them lead a healthy lifestyle.

For the convenience of its customers, Perekrestok installed special shelves with healthy living products, in addition to healthy living corners, in its stores. The healthy living assortment is located in one part of the sales hall and is organised thematically. Several hundred beneficial products are offered in the healthy living corners.

Our new approach assembling and maintaining a healthy lifestyle assortment. In February 2021, we introduced healthy lifestyle trackers that enable us to better monitor the launch of new items in this assortment.

Perekrestok and the company Justfood launched their first joint healthy living line of ready-to-eat food under the brand name Perekrestok Chef by Justfood. The products are offered just as in retail stores and are also available for online order through the Perekrestok website and mobile application.

Smart Kitchen

Almost all Smart Kitchen salads are considered healthy living products. In the production of private label goods there is a separate healthy living product line which is monitored by Smart Kitchen consisting of several items.





Our plans

Product quality and safety assurance

Pyaterochka

- Continued digitalisation of functional processes
 - Completed and implemented an automatic blocking function for suppliers of category D alimentary goods, developed an audits dashboard, reviewed fruit and vegetable category checklists and inspection checklists for alimentary goods, developed a checklist for banana soda stations (suppliers) and updated DC audit checklists. Conducted DC employee training on BRC quality standards. Training is planned for employees of the supplier audit department on legislation and international standards on systems of safety management for alimentary goods
- Development of supplier audits
 - Implemented Food and Non-food category blocks for the procurement department and for producers (if the supplier has several production sites)
 - Provided for anticipated actions upon agreement of new delivery orders by the procurement department and producer (if the supplier has one production site) which upon audit are deemed category D, so that substandard or potentially dangerous goods do not appear in retail outlets
 - Developed the quality control system and signed quality assurance documents through EDI
- Set up Pyaterochka quality laboratories, which enables the automation of the laboratory testing process
- Automation of the acceptance of cheeses. As part of its digitalisation measures, Pyaterochka plans to automate the acceptance process for cheeses

Perekrestok

- Automate quality checklists for employees with a focus on key product safety risks
- Automate checklist and task synchronisation for cross-functional divisions
- Introduce trusted acceptance of products from suppliers with low quality risk
- Automate the filling in of monitoring documentation (logs)

- Create an interface for functional tasks for employees in the mobile workplace
- Create an interface for monitoring employee task fulfillment in the directors' operating panel

Smart Kitchen

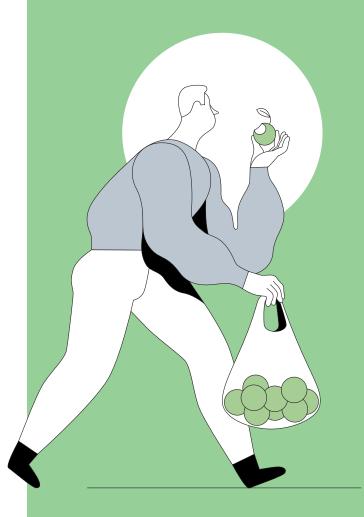
- Apply procurement division work processes in accordance with selection instructions for suppliers, the timely implementation of corrective measures for any discrepancy discovered with form entries, and the prevention of any potential discrepancies
- Engage leaders of all divisions in improving the quality and hygiene of work in industrial processes, and inform personnel of changes to regulatory requirements and internal instructions
- Once a month conduct an analysis of raw materials for quality and of customer complaints, conduct an analysis yearly of quality and safety management systems, and conduct sanitary audits monthly
- Verify safety systems in accordance with FSSC 22000 ver 5.1
- Observe the manufacturing control plan at 100% volume, keep regular and correct records at manufacturing sites according to the register of internal documents, transfer key logs and records into electronic form
- Optimise food preparation processes, standardise food preparation processes, and develop and introduce training materials for food preparation

Food.ru

 Plans to find experts to write articles on children's nutrition, to increase the number of articles on a responsible lifestyle and to inform readers about these questions more actively. Food.ru also plans to support a genderneutral agenda on its site

Chizhik

- In order to improve the quality of delivered goods, the discounter has
 focused financial resources where the risk of product expiry is highest,
 and will conduct tests on products most at risk of falsification in Russia.
 Supplier certifications will be collected on a regular basis according
 to the GFSI initiative
- In 2022, tests for the absence of GMO will continue





Our plans

Promoting healthy lifestyles



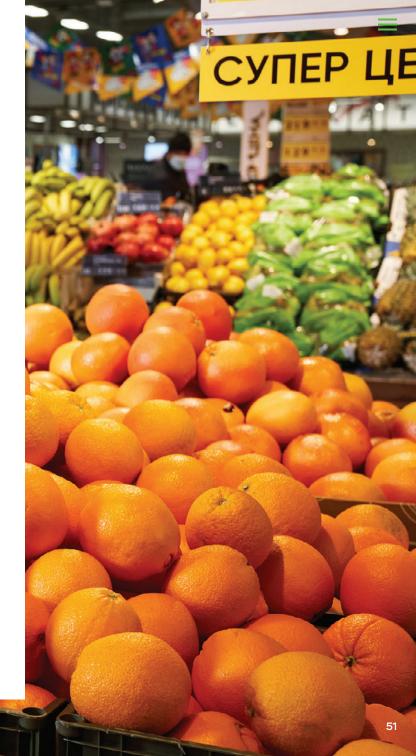
Pyaterochka

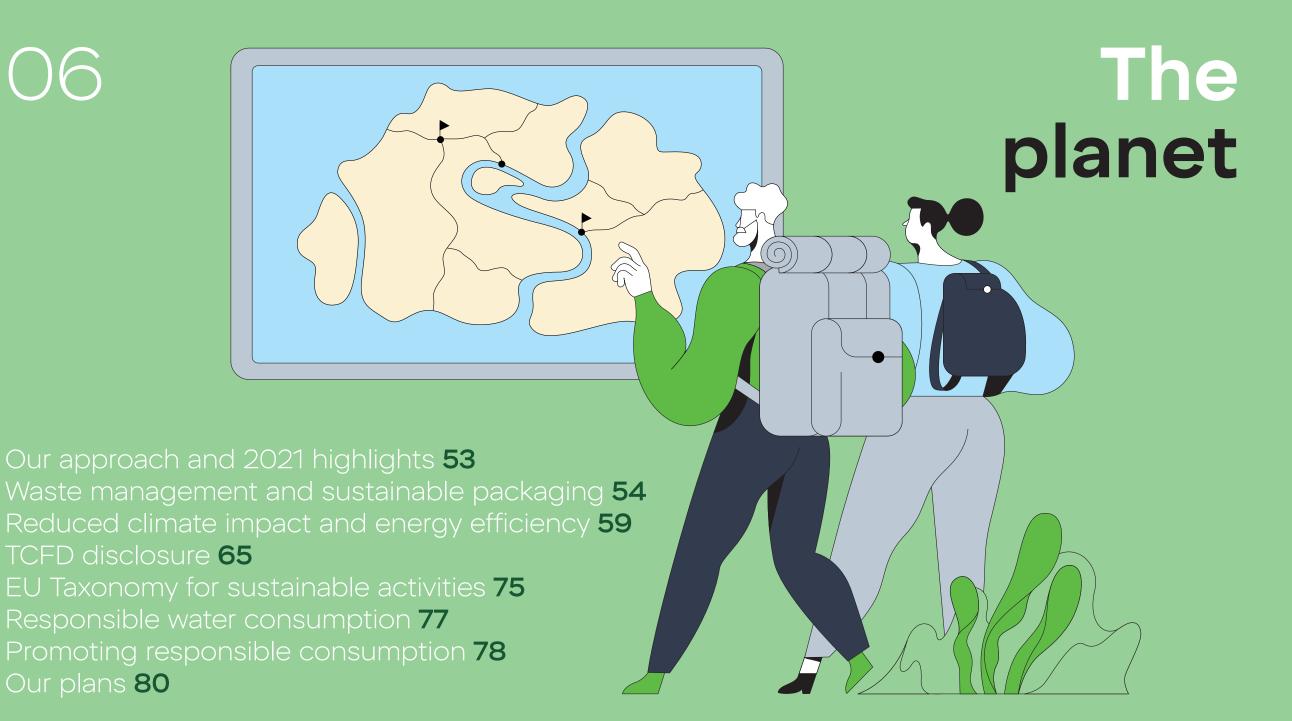
- Pyaterochka will continue to develop its offering of healthy living goods by expanding its assortment and by optimising their placement for the convenience of its customers, providing informative price labels and packaging. X5 will expand the possibilities for placing information on healthy living products on its supplier portal.
- In 2022, Pyaterochka plans to add a transportation section to the dataprocessing system, to incorporate monitoring systems for the X5 Transportation unit and the Direct Import business unit deliveries, and to automate the acceptance of deliveries (according to the conditions of transport), which will positively impact on the freshness of products.



Perekrestok

- Introduce additional navigation options for the convenience of customers, actively promoted and held festivals to further healthy living goods in the market and in the country as a whole, popularised a healthy lifestyle and promoted customer awareness of good habits with regard to the environment.
- Conduct a one-year pilot project (with the potential to be prolonged) in partnership with Souzmoloko and other milk producers to inform customers of the process of milk production and its potential uses through an interactive platform. Our aim is to popularise milk through education and excursions.
- Hold festivals to promote healthy lifestyles on the market and across the whole country, popularise healthy lifestyles, and raise customer awareness on environmentally friendly habits.
- Launch a large-scale PR campaign to popularise healthy living in all external
- Second place in the market by NPS in healthy leaving products.
- Break the assortment down further by category, rezone current blocks, organise additional navigation for the convenience of store customers.







Our approach and 2021 highlights

[103-1][103-2][103-3][301-3][302-1][302-3][302-3][302-4][305-1][305-2][305-3][305-4][305-5][306-1][306-2][306-3]



The operation of our stores, warehouses, offices and fleet of trucks has a variety of impacts on the environment. from the production of solid waste (including food waste) to direct and indirect carbon emissions. In order to manage and minimise our impact on the environment, and in line with the UN SDG of responsible consumption and production, the Supervisory Board has adopted strategic targets on 3-year and 10-year horizons as part of our sustainability strategy. In 2021, we worked hard to establish the business and management processes necessary to track our performance in this area. An important part of our work our efforts to raise awareness of responsible water consumption; although water -consumption is not substantial in retail, we nevertheless endeavoured to optimise our water usage across our business processes. In 2021, we published X5's Sustainable Development Policy and urged our suppliers to adhere to responsible consumption practices, including those related to water.

The following internal regulatory documents on environmental protection were adopted:

- X5 Group Waste Minimisation Policy
- X5 Group Waste Management Procedure
- X5 Group Instructions for the Shipment of Recyclables

The Company's management of questions of environmental protection (water consumption, energy efficiency, waste management) is organised through the clear demarcation of the individuals or departments responsible, who develop and implement environmental protection programmes as appropriate. Regular audits and performance evaluations are conducted to ensure compliance with relevant legislation and adherence to environmental standards, as are third-party employee training programmes to ensure that our approach is as efficient as possible. Ensuring that adequate resources are available to monitor changes in environmental protection legislation and avoiding of fines from supervisory bodies are also part of our measures.

Our Sustainable Development Policy establishes principles and rules for responsible business conduct to ensure that we positively impact the environment and society:

 The Company is committed to maximising recycling, the responsible use of resources and sustainable packaging in its operations.
 Preference is given to suppliers whose environmental policies are in line with the Company's principles.

- The Company promotes the use of voluntary environmental certifications by its suppliers and supports its partners in developing sustainable business practices.
- The Company is committed to fostering a culture of responsible consumption among its customers.

In accordance with the <u>sustainable development strategy</u> X5 adopted in December 2019, we continue to integrate principles and practices that support the achievement of UN SDG 12 (Responsible Consumption and Production, one of the Company's primary impact goals). To this end, we are developing and introducing new, innovative means of optimising our consumption of resources and of encouraging customers to follow the same principles of minimising consumption and reusing materials

Quantitative data in "The planet" section has been revised since the publication of the 2020 Sustainability Report following recalculations with counterparties, which were made after the reporting date.

2021 highlights

- Pyaterochka introduced pilot stores powered by solar energy, transferred one DC to CO₂ and connected stores in the Karelia region to hydroelectric energy sources. Pyaterochka has already transferred 11 DCs to hydroelectric energy
- In 2021, the Company obtained an International Renewable Energy Certificate (I-REC), which confirms that 75,000 MWh of energy was produced from renewable sources

Our 30x30 goals:

30%

reduction in GHG emissions (Scope 1 + Scope 2 intensity per sqm of selling space compared with 2019

30%

share of renewable energy used in X5 operations

30%

reduction in ratio of waste generated to retail sales compared with 2019

Waste management and sustainable packaging

[301-3] [306-1] [306-2] [306-3] [306-4] [306-5]

Sustainable packaging

As part of our sustainability strategy announced in 2019, we committed to increasing the share of sustainable packaging in our retail operations. In March 2021, we introduced detailed recommendations on sustainable packaging for 13 different categories of products. By developing such detailed recommendations at the category level, we were able not only to analyse the sustainable aspects of different packaging types but also to ensure that the barrier properties for each category are taken into account. The Ministry of Natural Resources and Environment supported X5's recommendations for sustainable packaging.

X5 updated its supplier portal, https://partner.x5.ru/. Now suppliers of goods to the Company must supply details on the use of recyclables in packaging materials, the presence or absence of certification on environmental and social responsibility, in addition to information on the types of packaging used, the colour of the materials used and other aspects. This update will enable X5 to systemise its monitoring of responsible suppliers and to analyse the process of transitioning the Company's partners to more sustainable packaging solutions.

Packaging recommendations are also shared with the Company's in-house production and with suppliers of private label goods. All packaging used by Smart Kitchen is sustainable, while approximately 70% of Chizhik products are packaged with sustainable materials.

Further details on our collaboration with suppliers are presented in the "Responsible supply chain" section.

It is essential for us that customers follow responsible consumption principles and work together with us towards the common goal of waste reduction. More information on our initiatives can be found in the "Promoting responsible consumption" section.

Reduction of single-use plastic packaging

Perekrestok and Pyaterochka have upgraded their requirements for suppliers of plastic bags, making a high percentage of recycled content obligatory. Since 2020, Pyaterochka has been using shopping baskets made out of recycled plastic in its new concept stores, a measure that is also being implemented in Perekrestok supermarkets. The use of recycled plastic has been established as a requirement for producers of shopping baskets working with our retail chains.

Raincoats, Panama hats and satchels have been made from bags collected in Perekrestok supermarkets and will be awarded to customers through a future giveaway contest.

Mnogo Lososya has stopped using polystyrene packaging, replacing it with more sustainable, recyclable polypropylene packaging.

Karusel now only uses packaging film made from over 50% recycled materials, and has stopped using polyethylene packaging for bags.



X5 THE PLANET

Waste management and sustainable packaging

[301-3] [306-1] [306-2] [306-3] [306-4] [306-5]



X5 encourages customers to buy reusable shopping bags. X5's business units sold 5.7 million reusable shopping bags and more than 369,000 reusable fruit and vegetable bags in 2021.

Recycling waste from operations

Pyaterochka reviewed its management of recyclables, equipping DCs with additional controls on recyclable material from stores to DCs that allow for deviations from normative values of recyclables to be monitored depending on the store's retail trade turnover. These changes enable reductions of recyclables returned to be monitored and for swift measures to be taken to eliminate the causes.

Pyaterochka launched a programme of reusing pallets at its DCs as part of its efforts to develop reusable materials in its logistics operations.

Perekrestok and Chizhik return pallets, plastic boxes and many other types of containers from stores to DCs for reuse. After the reporting date, in 2022, Chizhik also started collecting recyclables separately to be sent directly to a third party for recycling.

Vprok.ru Perekrestok collects recyclables separately and sends them to a third party for recycling. We also accept returned plastic bags used during delivery to be recycled.

Mnogo Lososya only accepts deliveries packaged in cardboard boxes, rather than plastic, which is reused. Additionally, all deep fry fat is turned over to contractors for recycling.

The Direct Import business unit expanded the range of recyclables that are collected separately, and now all forms are taken away to be recycled, including strapping tape, pallet netting and packaging belts. All hubs have also begun reusing pallets. In November 2021, a Green Haulier project was launched in Krasnodar to develop the recycling of transportation waste.

The Pulkovo hub has stopped purchasing food packaged in plastic boxes for employees, instead offering meals through a canteen, which has reduced plastic waste.

X5 Transport also improved its monitoring and calculation of technical waste.



Waste management and sustainable packaging

[301-3] [306-1] [306-2] [306-3] [306-4] [306-5]

Improving the accuracy of our order projects is one important tool to reduce the quantity of waste.

We continue to decrease our waste generation thanks to more accurate big data modelling of demand, more frequent product deliveries, better adaptation of the product mix to customer needs, smaller minimum order quantities negotiated with suppliers and strict compliance with temperature requirements during transportation.

We are piloting new means of preventing waste. In 2021, Perekrestok launched a pilot project to irrigate greens on shelves, which helps to keep produce fresh longer.

We recognise the potential negative impacts of solid waste on the environment, economy and society, including climate change and threats to wildlife and public health. We continuously work to reduce these impacts.

In 2020, we analysed our waste management procedures and published a set of comprehensive new policies aimed at reducing the volume of waste we produce, boosting our recycling efforts and decreasing our use of resources. These new policies impact all aspects of our operations, and we are now working to increase awareness of waste management among our suppliers and consumers. Our Waste Minimisation **Policy** is available on our **website**.

We continuously collect data related to waste movement, monitoring the volume of waste sent to landfills, the number of banana boxes and wood pallets, and the weight of other recyclable waste. These values are converted to ths tonnes using internal coefficients based on business specifics.

Moreover, we recognise that we not only produce waste in our own operations but also are involved in waste generated by our product suppliers, and we also pass on huge amounts of waste in the form of the packaging of the products we sell. As waste generated downstream in our value chain tends to be of a greater significance, we concentrate our efforts on reducing it by cooperating with our suppliers on promoting sustainable packaging (see "Responsible supply chain" section on page 36) and customers (see "Promoting responsible consumption" section on page 78).

Our goals to 2023

up to

reduction in ratio of waste generated to retail sales compared with 2019

up to

of recyclable solid waste generated by our retail chains that is sent for recycling

of non-expired food waste sent for reprocessing

Our 30x30 goals

30%

reduction in ratio of waste generated to retail sales compared with 2019





Waste management and sustainable packaging

[301-3] [306-1] [306-2] [306-3] [306-4] [306-5]

Total amount of waste broken down by disposal method and waste type¹

					2020				2021
		Total	Pyaterochka	Perekrestok	Other	Total	Pyaterochka	Perekrestok	Other
Total amount of waste by disposal method ²	ths tonnes	1,640	1,048	565	26	1,702	1,046	631	24
Amount of waste sent to landfills	ths tonnes	936	424	502	9	982	409	564	9
Amount of waste sent for neutralisation ³	ths tonnes	1	0	0	1	0	0	0	0
Amount of recyclable waste sold for processing	ths tonnes	613	546	55	12	618	549	59	9
Cardboard	ths tonnes	336	279	48	9	327	271	50	7
Banana boxes	ths tonnes	17	14	3	0	15	12	3	0
• Plastic	ths tonnes	12	9	2	0	13	11	2	0
 Polyethylene 	ths tonnes	26	23	2	1	30	26	3	1
Pallet scrap	ths tonnes	224	222	1	0	230	230	1	0
• Other	ths tonnes	1	0	0	1	3	1	0	1
Amount of non-expired food waste sold for processing	ths tonnes	87	79	8	1	99	88	8	3
Total amount of waste by waste type	ths tonnes	1,640	1,048	565	26	1,702	1,046	631	24
Stock written off	ths tonnes	959	462	487	10	1,010	456	544	10
Other waste, incl. logistics packaging	ths tonnes	681	586	78	17	692	590	88	14

Figures may not add up due to rounding.



² Data has been revised since the publication of the 2020 Annual Report following improvements to the data collection process.

³ Processing of hazardous waste (hazard classes I-III class according to Russian legislation) to prevent the negative impact of waste on the environment. After neutralisation, third parties send the waste either for recycling or to landfills, which is not currently monitored by the Company.





Waste management and sustainable packaging

[301-3] [306-1] [306-2] [306-3] [306-4] [306-5]

Managing food waste

As a food retailer, we strive to minimise the quantity of food waste we produce and the impact of its processing.

All food waste produced as a result of our stores' activities is turned over to partner companies for recycling and disposal. We are constantly looking for new means to handle our food waste responsibly and are piloting technologies to turn over food waste for reprocessing. As noted above, in 2020 Pyaterochka and Perekrestok launched a project to recycle non-expired food not sold in our stores as animal feed. In 2021, Vprok.ru Perekrestok also joined this programme.

In 2021, Karusel initiated a selection process to find a counterparty to purchase non-expired food waste for reprocessing. The project was launched after the reporting date, on 1 January 2022.

Chizhik has launched an similar programme, where the counterparty collects non-expired food waste from Chizhik stores every day.

In order minimise the quantity of food waste sent to landfill, X5's Direct Import business unit implemented a programme to optimise loss management. The creation of a loss prevention directive has significantly reduced the quantity of beneficial waste sent to landfill by sorting through goods, returns to suppliers and wholesale in the interests of the supplier. X5's loss reduction measures help the Company to achieve its goal of sending no waste to landfill.

A fruit and vegetable waste recycling programme for use as compost has been implemented in one of our Direct Import hubs at Bogorodsk. Currently, waste is used for worm composting, where organic matter is converted into fertiliser: our programme, therefore, supports the improvement of soil fertility. The fertiliser is produced at our counterparty's site, whose main activity is growing fruit and vegetable products. As such, our counterparty fertilises its soil and obtains better harvests.

Mnogo Lososya launched a project to reuse fish scraps and leftovers to produce cat food. Two products have been added to the menu, tuna with mint and shrimp with mint, which have seen strong demand and received positive reviews from customers. The project helps to reduce the quantity of food waste.

Improving the accuracy of inventory planning is an important tool for reducing waste generation. The Company uses big-data-driven demand modelling, more frequent product deliveries, better adaptation of the product mix to customer needs, smaller minimum order quantities negotiated with suppliers and strict compliance with temperature requirements during transportation as part of these efforts.

This process involves more than 50% of Pyaterochka's stores.

Pyaterochka continued to expand its collaboration with farmers. About 88 tonnes of non-expired food waste was turned over to farmers in 2021.

Other solid waste reduction highlights

In 2021, Pyaterochka expanded its battery collection programme, increasing the quantity of reverse vending systems which were also introduced this year in stores in Chelyabinsk. Customers can return batteries in 816 Pyaterochka stores. Batteries can also be returned in 62 Perekrestok stores. In 2021, customers returned around 16 tonnes of batteries for recycling.

Perekrestok launched a pilot project in partnership with Sobirator to collect unwanted items for recycling. Special containers were placed in 11 Moscow stores.

Pyaterochka conducted a marketing campaign on conscientious consumption. Customers can exchange points for eco-accessories made from recycled materials, such as rucksacks, bags, food containers and water bottles. The campaign was supported by a television and social media marketing campaign.

Perekrestok and Unilever launched a joint project to collect and recycle used aluminium aerosol cans. Special containers were installed at the entrances to 20 Perekrestok supermarkets in St Petersburg. The project will be continued until November 2022.

In January 2021, Perekrestok installed refill stations for household cleaning products, which are bottled after purchase in reusable containers, at nine Moscow stores. The project was launched in partnership with BioMio. We received a lot of positive feedback on this project, and so we began piloting the same project in St Petersburg, where we currently have two refill stations.





Reduced climate impact and energy efficiency

[102-13] [102-15] [201-2] [302-1] [302-3] [302-4] [305-1] [305-2] [305-3] [305-4] [305-5]

Reduced climate impact

X5 Group recognises the importance of climate change and its impact on the economy, and understands that the fight against climate change is one of the most important challenges facing all humanity. Urgent action is required to reduce human impact on the environment. As one of the largest retail companies in Russia, X5 Group strives to reliably evaluate its impact on the environment and to reduce emissions from its operations.

Since 2019, the Company has been evaluating and monitoring its Scope 1 and 2 greenhouse gas (GHG) emissions. Since 2020, the Company has also been evaluating its Scope 3 GHG emissions. The Company calculates emissions in accordance with the GHG Protocol, one of the most widely used international standards for calculating GHG emissions.

X5 Group has set targets for reducing its climate impact by 2030 as part of its sustainable development strategy, which was adopted in 2019. The targets focus on reducing Scope 1 and 2 GHG emissions per unit of retail space and on increasing the shared of renewable energy used in the Company's operations. In addition to these medium-term targets, the Company has also set short-term targets to 2023 based on the same metrics.

All of X5's key business divisions are included in calculations of the Company's GHG emissions, namely Pyaterochka stores, Perekrestok supermarkets, Karusel hypermarkets and Chizhik discount stores. Additionally, the Company's distribution centres, logistics complexes, smart kitchens, vehicle fleets and the Corporate Centre are also included in calculations. When defining its organisational boundaries and itemising emissions data for its calculations, the Company was guided by an operating control approach.

X5 Group strives each year to improve its calculation of GHG emissions to increase the reliability and accuracy of its baseline data. In the current reporting year, the values of Scope 1 and 2 GHG emissions for 2019–2020 were updated and, correspondingly, the total volume of GHG emissions was also updated. The changes were caused to a large extent by leakages from refrigerants. Since we improved our approach to data collection in 2021 and reviewed our calculations for 2020, we also reviewed our baseline metrics for 2019.

We are monitoring GHG emission trends compared with the base year 2019. In 2021, the total volume of Scope 1 and 2 GHG emissions was 3,551,081 tonnes of $\rm CO_2e$. Given that X5 Group's average retail space increased by 19% compared with 2019, and due to the development of new business units, the Company's gross GHG emissions increased in this year. Scope 1 and 2 emissions rose by 9% compared with 2019, while Scope 1 and 2 GHG emissions intensity per square metre of retail space decreased by 8.5%, which has enabled the Company to almost reach its targets for reducing emissions to 2023.

The largest sources of the Company's Scope 1 and 2 GHG emissions are the use of electricity and heating at X5's stores and distribution centres, primarily from the power grid, in addition to the use of refrigerants. X5 Group is introducing automated systems to calculate electrical energy use, which will enable it to reduce energy consumption and use. Every year X5 Group carries out initiatives to introduce energy-saving technologies, to optimise the use of energy and to develop the use of renewable energy. In 2021, X5 Group acquired renewable energy certificates (I-REC) for 75,000 MWh, equivalent to 26,700 tonnes of CO₂, which enabled a reduction of GHG emissions from energy use of 1.7%. In addition, over time the Company plans to transition to refrigerants with lower global warming potentials.

In addition to purchasing renewable energy certificates, X5 Group has also begun to develop its own production of renewable energy. In 2021, the Company produced 32 MWh. The Company continues to develop projects to generate renewable energy in order to increase the share of its own production.

The Company monitors Scope 3 emissions trends from the base year 2020, given that the collection of Scope 3 emissions data began a year later than for Scope 1 and 2 emissions. Gross Scope 3 emissions decreased negligibly in 2021. In addition, we reviewed emissions data for specific categories as part of our review of raw data. In the current reporting period, we included Category 9 (downstream transportation and distribution emissions) which was previously reported as immaterial. This category was included due to the growth of Vprok.ru Perekrestok and the increase in deliveries, in line with our development of operations in this area.

Our targets to 2023

10%

reduction in GHG emissions (Scope 1 + Scope 2) intensity per sqm of selling space compared with 2019



Increase in the use of renewable energy in our operations

Our 30x30 goals

30%

reduction in GHG emissions (Scope 1 + Scope 2) intensity per sqm of selling space compared with 2019

30%

share of renewable energy used in X5 operations



Reduced climate impact and energy efficiency

[102-13] [102-15] [201-2] [302-1] [302-3] [302-4] [305-1] [305-2] [305-3] [305-4] [305-5]

Greenhouse gas emissions¹

		2019	2020	2021
Total GHG emissions (Scope 1 + Scope 2 market-based method)	t of CO ₂ e	3,265,995	3,151,046	3,551,081
Total GHG emissions (Scope 1 + Scope 2 + Scope 3 market-based method)	t of CO ₂ e	n/a	31,298,911	31,611,068
Direct GHG emissions (Scope 1)	t of CO ₂ e	1,280,659	1,239,770	1,370,969
Refrigerant leaks	t of CO ₂ e	893,364	828,116	956,891
Fuel use in transportation	t of CO ₂ e	387,269	411,653	411,630
Fixed fuel use for energy generation	t of CO ₂ e	26	1	2,447
Energy indirect GHG emissions (Scope 2)	t of CO ₂ e	1,985,336	1,911,276	2,180,112
Electricity (market-based method) ²	t of CO ₂ e	n/a	n/a	1,481,679
Electricity (location-based method)	t of CO ₂ e	1,196,229	1,317,398	1,508,387
Heating	t of CO ₂ e	789,107	593,879	698,432
Other indirect GHG emissions (Scope 3)	t of CO ₂ e	n/a	28,147,865	28,059,987
Total GHG emissions intensity (Scope 1 + Scope 2) per sqm of selling space (period average)	t of CO ₂ e / m ²	0.478	0.419	0.437

Scope 3 emissions from X5 Group's operations were calculated across all material and relevant categories. The table on p. 60 details emissions by category. X5 Group's most significant Scope 3 emissions were, as before, Category 1 (purchased goods and services), Category 12 (end-of-life treatment of sold products) and Category 2 (capital goods).

² We have begun a transition to a market-based method of calculating greenhouse gases. As a result, from 2021 we will disclose metrics based on two methods of calculation in accordance with the requirements of the GHG Protocol. To calculate emissions for 2021, we made the following assumption: as of the end of 2021, information on the emissions factor for the residual mix was unavailable. As a result, a location factor is applied for calculating emissions from non-renewable energy.



^{1.} Figures may not add up due to rounding.





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X5 Group's Scope 3 emissions by category¹

Scope 3 emissions, t of CO ₂ e	2020	2021
Purchased goods and services	22,257,018	22,022,287
End-of-life treatment of sold products	4,109,039	4,445,998
Capital goods	728,313	699,364
Waste generated in operations	568,327	373,886
Employee commuting	281,016	280,409
Fuel- and energy-related activities	150,969	174,411
Upstream transportation and distribution	45,618	41,474
Business travel	7,565	13,552
Downstream transportation and distribution	n/a	8,607
Total	28,147,865	28,059,987

The following types of gases were included in the GHG emissions assessment: CO_2 , CH_4 , N_2O (Scope 1, Scope 2 and Scope 3) and HFCs (hydrofluorocarbons) for Scope 1. The calculation of biogenic CO_2 emissions is not relevant to X5 Group. Scope 2 emissions were estimated using two methods: the market-based method and the location-based method. Due to the limited availability of data for a market-based valuation, a location factor was used for the residual mix. The source for global warming potentials (GWPs) applied was the IPCC's Assessment Report 6.

In addition to calculating GHG emissions from operations, X5 recognises the importance of disclosing information on its climate strategy, managing climate risk and preparing for a global transition to a low-carbon economy. As such, the Company has continued the practice of disclosing information on managing climate risks and opportunities that it began in 2020, based on TCFD recommendations. The full disclosure text is available on page 65.

The key methodology documents used for calculation of our Scope 1, 2 and 3 emissions were:

- The GHG Protocol Corporate Accounting and Reporting Standard
- The GHG Protocol Scope 2 Guidance
- The GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard
- The GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (Version 1.0)

The major sources of emissions factors used for the calculation of GHG emissions were:

- 2006 IPCC Guidelines for National Greenhouse Gas Inventories (including the updates provided in the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories)
- IEA, 2020 Emissions Factors (Scope 2)
- EXIOBASE 3.0 (Scope 3)
- Greenhouse gas reporting: conversion factors 2020, UK Department for Business, Energy & Industrial Strategy

Figures may not add up due to rounding.

Reduced climate impact and energy efficiency

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Energy efficiency

All new and refurbished stores are now being equipped with a Smart Store system, which deploys special sensors, control devices and software to integrate into existing operating processes, thereby helping to reduce energy consumption, automate equipment control (for refrigerators, refrigerated display cabinets, heating and air conditioning units, lighting and heating solutions for selling space and utility rooms) and minimise the risk of accidents.

Pyaterochka

- Piloted solar panels in four stores.
- Eleven Pvaterochka DCs have moved to hydroelectric energy sources. All Pyaterochka DCs have moved to low-carbon sources of energy
- In December 2021, Pyaterochka signed an agreement to switch its stores in the Karelia Region to renewable energy sources. 17% of total energy consumption in Pvaterochka's stores in the region now constitutes green energy.

Based on an inspection of sustainable development performance and current and planned investments in sustainable development projects, the Company has identified the potential to improve operating efficiency regarding the emission of greenhouse gasses. Therefore, the Company established key targets for reducing yearly emissions to 2023 in order to reduce its impact on the climate.

All stores undergoing existing or planned refurbishments are equipped with the smart store system. The smart store system uses sensors, control devices and software to integrate into the store's existing operating processes, enabling a reduction in energy consumption and the automation of equipment control (for refrigerators, refrigerated display cabinets, heating and air conditioning units, lighting and heating solutions for selling space and utility rooms) to minimise the risk of accidents.

Reduction in electricity consumption at Pyaterochka¹

		2020	2021
Electricity savings from installation of smart store systems	MWh	7,147	32,299
Electricity savings from installation of remote refrigeration monitoring systems	MWh	11,847	14,478

Perekrestok

- Connected 39 more stores to the smart store system, reducing energy consumption by 12% on average. In total, 416 stores have been equipped with a smart store system and Perekrestok plans to connect 100 more in 2022.
- Integrated the refrigeration equipment of 189 stores into the smartstore system, saving 4% in energy costs.
- Signed agreements to reduce energy consumption on energy deliveries from the wholesale electrical energy market. Entry into the wholesale market in Q3 2022 will enable Perekrestok to reduce the cost of energy due to lower markups and to sign free bilateral agreements with suppliers of sustainable energy.
- Signed direct agreements with energy suppliers of 178 stores and DCs who have offered discounts, saving on average 2%-3% on energy costs.

Vprok.ru Perekrestok

During the reporting period, redundant lighting at facilities was removed to reduce energy consumption. Human detection sensors were installed at auxiliary and storage locations, and refurbishment to insulate external walls and replace windows and doors was carried out. Manual heating and ventilation controls were also installed.

Monitoring of hidden leakages to reduce water consumption is conducted regularly, including daily inspections of plumbing equipment to locate malfunctions.

Karusel

The Company has introduced a range of measures to reduce energy consumption, monitored by the Operating Department weekly.

¹ In 2021, projects on the installation of smart store systems and remote refrigeration monitoring systems were completed in Pyaterochka, and the actual results on reduction in electricity consumption for 2020-2021 were evaluated.





Reduced climate impact and energy efficiency

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Green office

X5 Group's head office in Moscow has Gold-level LEED environmental certification. This means that the office uses safe finishing materials, energy-efficient lighting (LEDs) and equipment, water-efficient plumbing in the bathrooms (dual-flush toilets, urinals set to drain in four seconds), solenoid valves that shut off the water if the room is empty, motion sensors, and offers collection of waste paper, lids and batteries.

At the Kalitniki office, systems of zoned lighting, recovery and dispatch in ventilation devices are in place. These measures, implemented in 2020–2021, enable the reduction of energy consumption in lighting and ventilation systems. Individual temperature regulation has been enabled in heating devices. Regulation of secondary individual heating units is dependent on the outdoor temperature. Sensor taps have also been installed at the Kalitniki and Oasis offices.

In 2021, our offices began using only FSC-certified paper for printing. X5 is a member of the Forest Stewardship Council (FSC) in order to promote alongside our partners the responsible use of forest resources. FSC certification indicates that a product's producer and seller have been certified and audited and guarantees that ecological standards are observed, minimal damage is caused to the environment, and that the concerns of local people are considered during the production process.

Our main furniture supplier, Kinnarps, has been certified by the Better Effect Index as an environmentally sustainable producer. This index is based on the following criteria: raw materials and resources, climate, purity of materials, social responsibility, recycling and ergonomics.

X5's offices operate a system of separate waste collection, including:

- used batteries
- plastic lids
- tooth brushes
- paper cardboard
- PET plastics

"Giving paper a new life"

As part of a previously launched project, the number of paper collection baskets has been increased, and baskets are available in every section of the Company's Kalitniki office and on all floors of the Oasis and Comcity offices

X5 Transport

At X5 Transport, a range of pilot projects are being developed to reduce its carbon footprint. By lightening vehicle loads, X5 Transport has achieved a reduction of emissions per unit of transported goods.

Likewise, X5 Transport constantly optimises its processes to achieve fuel reduction. In 2021, we introduced eco-friendly driving course, implemented fuel level sensors and reduced transportation distances by optimising logistics chains.

Due to the introduction of diesel technologies and other technical solutions, the intensity of greenhouse gas emissions have been reduced by 8% compared with 2020.

X5 has also transferred 19% of its transportation vehicles to hybrid engine vehicles using gas and diesel fuel, and introduced lighter-bodied trailers for lorries, enabling a reduction in emissions.





Reduced climate impact and energy efficiency

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Total electricity and heating energy consumption¹

					2020				2021
Business unit		Pyaterochka	Perekrestok	Other	Total	Pyaterochka	Perekrestok	Other	Total
Electricity consumption, total	MWh	2,774,051	719,763	205,702	3,699,516	3,155,518	928,337	152,029	4,235,884
Electricity consumption from non-renewable sources (from grid) ²	MWh	2,774,051	719,763	205,702	3,699,516	3,021,490	928,337	137,890	4,087,717
Electricity consumption from renewable sources, incl.	MWh	-	-	-	-	134,028	-	14,139	148,167
On-site renewable energy generation	MWh	-	_	_	-	32	_	-	32
• Direct agreements with energy suppliers ³	MWh	-	-	-	-	58,996	-	14,139	73,135
 Renewable energy certificates (I-REC) 	MWh	-	-	-	_	75,000	-	-	75,000
Heating	Gcal	1,168,207	436,475	78,389	1,683,071	1,224,995	676,274	78,110	1,979,380

1. Figures may not add up due to rounding.

Total fuel consumption

		2020	2021
Diesel consumed by transportation	I	155,261,188	153,030,402
Gasoline (petrol) consumed by transportation	I	172,452	225,384
Compressed natural gas consumed by transportation	cubic m	9,900,796	12,718,267
Diesel consumed by diesel generators ⁴	l	500	977,160

² Electricity consumption from non-renewable sources is provided minus I-REC certificates.

^a According to the statements of the power supply company, X5 receives energy from their hydroelectric power plants.

^{4.} An increase in diesel consumed by diesel generators is related to changes in the scope: starting 2021, Pyaterochka DCs are included in the calculation.



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The following TCFD disclosure presents the results for the Group, as well as a holistic picture of the legislative and political environment at the time. Unless otherwise noted, all data in this section is as of December 31 2021.

Governance

To face the challenges associated with climate change, X5 is building resilience by developing a sustainable development strategy for decision-making processes. We have set ambitious goals for decreasing our environmental impact and mitigating climate-related risks. Our corporate governance structure ensures that climate change is taken into account at the highest levels. In 2021, we established The Committee on Sustainable Development and Innovation as a dedicated team responsible for developing our sustainable development strategy and measures to mitigate climate risks. In addition, in 2022, we set up the Committee on Sustainable Development at the Executive Board level to implement measures and changes within the Group's sustainability agenda in a timely manner.

Corporate governance structure

Supervisory Board

The Supervisory Board is responsible for governing the Company's management (the Executive Board) and oversees the general course of affairs, including the annual budget for the Company and its ESG projects, inclusive of climate-related initiatives. It delegates certain tasks to its three permanent committees - the Audit and Risk Committee, the Nomination and Remuneration Committee, and the recently created Sustainable **Development and Innovation Committee** - while maintaining overall accountability. The Supervisory Board meets at least four times a year and discusses climate-related issues within the framework of the Audit and Sustainable Development and Innovation Committees. Our sustainable development strategy was approved by the Supervisory Board and integrated into our long-term business strategy. By analysing the detailed reports submitted by appropriate committees, the Board keeps track of all key projects and activities, including progress

measured against the sustainable development strategy, the implementation of climate-related mitigation measures and project outcomes. Our climate risk assessment process aligns with the Group's general risk assessment and is closely reviewed on a regular basis during Supervisory Board strategy sessions.

Executive Board

The Executive Board is in charge of properly administering progress against the Company's strategy and the sustainable development strategy, as well as the associated risks, including all climate-related risks and opportunities. It meets at least once a month and reports on the progress of projects and climate-related findings to the Supervisory Board. Representatives of business units report to the Board to further discuss climate-related issues and opportunities.

The Committee on Sustainable Development and Innovation

In 2021, the Group established the Committee on Sustainable Development and Innovation, which is responsible for developing the sustainable development strategy and monitoring its progress, as well as overseeing other sustainability aspects. The Committee consists of Supervisory Board members, ensuring that the climate agenda is monitored at the highest levels of corporate governance. A complete list of the responsibilities of the Committee can be found in the Rules of Procedure of The Supervisory Board (Annex E).

The Committee on Sustainable Development

In 2022, the Group set up a Committee on Sustainable Development at the Executive Board level. The Committee is responsible for implementing decarbonisation measures and developing action plans to mitigate climate risk, which are then submitted to the Committee on Sustainable Development and Innovation, as well as the Supervisory Board, for approval. The Committee on Sustainable Development also monitors national and international regulatory changes. Committee members oversee the operational levels of all business units in order to ensure that the Group's strategy is properly implemented. The Committee consists of representatives from the following functions:

- Heads of of all business units to monitor the sustainable development goals;
- Corporate Communications and Sustainable Development;
- Strategy;
- Investor Relations:
- Risk and Internal Control;
- Personnel and Organizational Development.

In 2021, the Committee held four meetings at which the working group finalized the X5 decarbonisation road map for the short and medium term.

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Strategy

The sustainable development strategy is based on cost-effective decarbonisation measures that are set to benefit X5's long-term value. When making decisions about investment initiatives, X5 assesses the potential financial impact of possible transition and physical climate risks by calculating Scope 1, 2 and 3 GHG emissions and benchmarking progress against the Group's targets, among other methods. By analysing how climate risks affect us, we have a more comprehensive understanding of how our strategy should be designed, as well as how we should mitigate the consequences of potential issues in the future. We continually review the potential financial impacts of climate-related issues and changes in climate scenarios on our strategy (additional information is provided on page 67–70).

The sustainable development strategy is integrated into the Group's overall strategy, and the long-term goal is to achieve carbon neutrality by 2050, in line with the Paris Agreement and national decarbonisation goals. As part of this, X5 has introduced the 30x30 agenda, which includes reaching the following medium-term targets by 2030 (additional information is provided on page 20):

- Reduce GHG emissions (Scope 1 and Scope 2) intensity per sqm of selling space by 30% compared with 2019
- Increase share of renewable energy used in our operations to 30%
- Reduce the ratio of waste generated to retail sales by 30% compared with 2019

This agenda requires strong and ambitious actions on the part of all business units. The Group has developed a decarbonisation road map, which includes intermediate short-term targets to be achieved by 2023 (additional information is provided on page 20–22):

- Reduce GHG emissions (Scope 1 and Scope 2) intensity per sqm of selling space by 10% compared with 2019
- Increase the use of renewable energy in our operations
- Reduce the ratio of waste generated to retail sales by up to 10% compared with 2019





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Climate-related risks

In order to efficiently identify and monitor climate-related issues and develop effective decarbonisation measures, the Group analyses its transition and physical risks. The results below are based on 2021 qualitative assessment and represent the results for the whole Group.

X5 Group pays particular attention to materiality scores within the SSP2-4.5 scenario (Scenario ~2.0°C). We consider the SSP2-4.5 scenario the primary one for our industry, and we believe it will have a long-term effect on the Group's strategic resilience and estimated financial impacts.

Our risk assessment process is informed by the following climate scenarios from IPCC's Sixth Assessment Report (AR6) and IEA's annual outlooks.

1.5°C scenario (Scenario SSP1-2.6)

This scenario would be the most challenging, requiring substantial changes in Company operations, yet it would significantly help reduce the impact of physical climate risks for the Company, and more globally, for society. GHG emissions decline more than twofold by 2050, with a 1.8°C rise in average global temperature by 2100 and carbon neutrality by 2080. This scenario ensures that the goals of the Paris Agreement are met. The world is moving toward a greener path of development, which entails lowering resources and energy usage while also rapidly adopting a low-carbon economic model.

It is assumed that the policies and economies of developed and developing nations are aimed at attaining carbon neutrality as soon as is practicable. In addition to reducing GHG emissions in hard-to-abate sectors, carbon capture technologies are developed. As a result of the worldwide contribution to an immediate reduction in energy sources, the percentage of fossil fuels in the pattern of global energy use will decrease in the mid-2020s and flat-line in the 2030s.

2.0°C scenario (Scenario SSP2-4.5)

This scenario would require considerable changes in Company operations, albeit to a lesser extent than the 1.5°C scenario. The impact of physical climate risks for the Company and for the global economy would be partially limited.

GHG emissions gradually decline after peaking in 2030-2050, with a ~2.7°C rise in average global temperature by 2100. This route results in worsening climate change and more hazardous repercussions than the 1.5°C scenario. It does, however, imply that the global energy balance will change towards more sustainable sources. It also predicts that economic development will continue, despite the threats posed by climate change and decreasing use of energy sources such as oil and gas. The scenario likewise reduces overall energy usage, although it is less effective and less green than the preceding scenario. Both emerging and developed nations may strive for carbon neutrality; hence, the role of fossil fuels in the global energy use pattern drops around 2030 and flat-lines around the 2040s. Economic development goals are achieved despite a slowdown in the growth of resource and energy consumption. However, this trend is less prominent than that included in the SSP1-2.6 scenario. The resource and energy intensity of the global economy declines as a result of decarbonisation measures taken by developed countries and subsequent similar actions introduced by developing countries with a delay of several decades.

4.0°C scenario (Scenario SSP5-8.5)

This scenario does not require significant changes in Company operations and would be in line with business-as-usual practices. The impact of physical climate risks for the Company and for the global economy would increase.

GHG emissions continue to grow through 2100, with an increase in global average temperature of 4.4°C by 2100. The global economy and development continue to operate as normal. Both industrialised and emerging nations see rapid economic growth. Oil and gas continue to be the most significant sources of energy and power; natural resource and material consumption remains high. Some nations want to pursue decarbonisation programs, but this will not significantly impact the global economy, development, or energy intensity. GHG emissions continue to rise throughout the century. The proportion of fossil fuels in the global energy consumption pattern is unchanged and may even increase.



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Transition risks

X5 Group closely monitors environmental changes that may affect the severity of transition risks (risks related to the transition to a low-carbon economy). Such risks are more likely to have a significant impact on the Group and its financial performance. The table below presents average materiality results of transition risks for the Group in the 2021 reporting year based on the results of the qualitative analysis and expert assessment; however, X5 analyses each business unit separately in order to have a comprehensive understanding of risk exposure to disparate business activities and geographies.

Risk	Description	Consequences	Risk management initiatives	Commentary on the scoring results
Change in regulations	Regulatory risks are governmental requirements aimed at achieving compliance with national climate goals and international commitments to combat climate change. The risk includes: Payments for greenhouse gas emissions; A ban on refrigerants with high GWP; Payments for greenhouse gas emissions for electricity and heating suppliers; Changes in the requirements of stock exchanges for the disclosure of climate information of public companies.	 The payment for GHG emissions would increase logistics costs; Restrictions on the supply and production of refrigerants with high GWP would increase the costs of refrigerants and may lead to a shortage; Due to the increase in the price of electricity and hearing supply, operating costs may rise; The Group could be suspended from stock exchange listings for failing to disclose climate-related aspects in its operations. 	 Monitoring the volume of emissions in Scope 1, 2 and 3 and provide annual climate-related disclosure; Reduction of overall GHG emissions across the value chain; Developing of GHG emission-reduction initiatives including the transition to refrigerants with lower GWP; Increasing the share of on-site renewable energy generation; Utilizing an internal carbon price within the discussion stage of the projects; Conducting climate-related risk assessment in line with the TCFD and other applicable standards. 	This risk could have a medium impact on the Group due to potential negative ramifications for the Group's quarterly financial KPIs. The severity of the risk increases by 2050 in the ~1.5°C scenario represent considerable difficulties to maintaining low costs without decarbonisaiton of the group.

The colours in the table represent the materiality scores each risk has within a specific climate scenario and time horizon.

- lowest impact
- medium impact
- highest impact

Scenario SSP1-2.6 (~1.5°C)	Scenario SSP2-4.5 (~2.0°C)	Scenario SSP5-8.5 (≥4.0°C)	
2023	2023	2023	
2030	2030	2030	
2050	2050	2050	



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Risk	Description	Consequences	Risk management initiatives	Commentary on the scoring results
Changes in investor behaviour	Investors may have more exacting requirements regarding a company's climate strategy and actions, particularly the depth of disclosures related to climate change. Since ESG scores may play a significant role in investor decision-making processes, a low ESG score alerts investors to increased climate risks and poor quality of management.	A potential loss of investor interest in the case of insufficient public information about: • activities that the Company is taking in response to climate change; • the impact of climate change on the Company's financial performance; • greenhouse gas emissions, carbon intensity of production and other climate metrics and targets.	 Implementing best practices of responsible business and decarbonisation methods; Articulating the company's sustainable development strategy and explaining what challenges the Company may face during the transition. Providing a third-party assurance of climate-related data. Improving climate-related disclosures for key ESG ratings. 	This risk could have a medium impact on the Group. Potential investors may decline investments due to an insufficient quality of ESG reporting. In the ~1.5°C scenario, the severity of the risk would intensify by 2050 due to the increasing importance of the ESG agenda for businesses and investors. Correspondingly, the impact of the risk may decrease in the ≥4.0°C scenario due to the delayed growth in the importance of the ESG agenda.
Macroeconomic risk	The Russian economy is highly dependent on oil and gas prices. The simultaneous decline in prices and demand for energy carriers results in a drop in potential export earnings and, therefore, the rate of economic growth in Russia. The economic downturn could lead to a reduction in customer purchasing power, leading to increased demand in more budget-friendly retail stores and decreased interest in expensive products. Climate change has an indirect impact on the Company through suppliers and changes in the market, which may lead to supply instabilities.	 A likely decrease in sales and profits following a potential slow growth of incomes; Supplier price shocks and temporary shortages of some categories of products may occur due to instabilities in supply. 	 Ongoing analysis of market changes for further appropriate responsive measure development; Developing budget-friendly stores; Increasing supplier awareness of climate- related risks. 	This risk may have a low to medium impact on the Group. The ~1.5°C scenario may lead to business units failing to achieve their quarterly KPIs. In addition, potential adaptation for the non-core market could be required at the business unit level. The severity of the risk decreases in the ~2.0°C and ≥4.0°C scenarios due to a slower global energy transition and delayed price drop for oil and gas.
Changes in consumer preferences	Changes in consumer preferences, such as increased demand for low-carbon products, may lead to pushed changes in product range.	Consumers may increase their focus on the Company's ESG agenda and boost demand for low- carbon products.	 Implementing new marketing strategies focused on business responsibility and sustainability. 	The socio-economic factors affecting consumer behavior are divergent, but materialize rather slowly. The Company is likely to adjust its marketing strategies and product ranges in an appropriate matter and timing in every scenario.

The colours in the table represent the materiality scores each risk has within a specific climate scenario and time horizon.

- lowest impact
- medium impact
- highest impact

Scenario SSP1-2.6 (~1.5°C)	Scenario SSP2-4.5 (~2.0°C)	Scenario SSP5-8.5 (≥4.0°C)
2023	2023	2023
2030	2030	2030
2050	2050	2050
Scenario SSP1-2.6 (~1.5°C)	Scenario SSP2-4.5 (~2.0°C)	Scenario SSP5-8.5 (≥4.0°C)
2023	2023	2 023
2030	2030	2030
2050	2050	2050
Scenario SSP1-2.6 (~1.5°C)	Scenario SSP2-4.5 (~2.0°C)	Scenario SSP5-8.5 (≥4.0°C)
2023	2023	2023
2030	2030	2030

2050

2050





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Physical risks

X5 pays particular attention to risks that may have a negative effect on its supply chain and suppliers. As stated in the IPCC's Sixth Assessment Report (AR6), physical climate-related risks (risks related to the physical impacts of changing climate, for example, droughts, storms and forest fires) are expected to be more frequent by 2050, and the main risks for the Group are extreme weather events and changes in precipitation amounts and patterns. X5 considers these risks to be the most dangerous for the supply chain and, therefore, for the retail activity of the Group. The table below presents the average materiality results of physical risks for the Group in the 2021 reporting year based on the results of a qualitative analysis and expert assessment; however, X5 analyses each business unit separately in order to have a comprehensive understanding of risk exposure to disparate business activities and geographies.

Risk	Description	Consequences	Risk management initiatives	Commentary on the scoring results
Air temperature change	The air temperature in Russia is rising rapidly. On average its growth is +0.47°C in 10 years, which is twice as high than as in the rest of the world. This risk is associated with seasonal temperature changes and extremely high-temperature changes.	 Increased costs for refrigeration systems and equipment; Risks to employee health, for example, heatstroke, dehydration and possible cardiovascular issues; Increased use of air conditioning. 	 Improve the efficiency of refrigeration systems; Monitoring and improving energy efficiency indicators; Monitoring the work conditions of employees to ensure timely adjustments. 	Overall, this risk is considered immaterial for the Group. The risk could entail minor repairs at a limited number of assets that do not involve significant interruptions to activities. The physical effect on employees is likely to be more common among people with chronic diseases. The severity of the risk increases by 2050 in the ≥4.0°C scenario and may lead to the suspension of activities at several stores for up to a week.

The colours in the table represent the materiality scores each risk has within a specific climate scenario and time horizon.

- lowest impact
- medium impact
- highest impact

Scenario SSP1-2.6 (~1.5°C)	Scenario SSP2-4.5 (~2.0°C)	Scenario SSP5-8.5 (≥4.0°C)
2023	2023	2023
2030	2030	2030
2050	2050	2050



[102-32] [201-2] [302-1] [302-3] [302-4] [305-1] [305-2] [305-3] [305-4] [305-5]

Risk	Description	Consequences	Risk management initiatives	Commentary on the scoring results
Changes in annual precipitation patterns	This risk is associated with the standard volume of precipitations being exceeded. An increase in precipitation during the winter season may lead to a disruption in logistics due to peak snowfall.	Temporary logistical issues due to heavy snowfall: the difficulty of unloading goods near stores and collapses on roads in the first 48 hours after heavy snowfalls.	 Communicating with suppliers regarding the effectiveness of mutual logistics infrastructure; Visualizing and mapping climate risks to track possible supply chain disruptions. 	Overall, this risk may have a medium impact on the Group. It implies changes to precipitation rates in winter, requiring constant risk monitoring. Leading up to 2050, precipitation is likely to increase, however would not exceed medium impact for the company.
Extreme weather events: forest fires, strong wind and floods	In Russia, this risk is mostly associated with forest fires and severe winds, which may have a negative effect on employee health and safety on Company property.	 Threats to employee health and safety during extreme weather events; Costs may arise to repair the Group's property and compensate inventory disposal as a result of potential losses; Temporary interruptions in supplying stores and warehouses during extreme weather events. 	 Monitoring the frequency of extreme weather events; Monitoring the work conditions of employees; Communicating with suppliers regarding the effectiveness of mutual logistics infrastructure. 	Overall, this risk is considered immaterial for the Group. The Group's assets in regions likely to have wildfires are limited. Climate-induced severe winds and floods are rated as low for regions where the Group's assets are located. The severity of the risk increases by 2050 in the ≥4.0°C scenario and may lead to the temporary suspension of activities at some stores and warehouses.
Sea level rise	This risk is associated with floods in the coastal areas of Russia (including sea ports), which may face damages caused by rising sea levels.	Supply chain disruption caused by the temporary compromise of sea port operations due to increased see level.	Tracking the consequences of the rise in sea level, while developing alternative routes and supply-chain processes if needed.	Overall, this risk is considered immaterial for the Group. It is highly unlikely to significantly affect the activities of any components of business units. The severity of the risk increases by 2050 in the ≥4.0°C scenario; however, the pace of sea level rise would provide the necessary space to react to the risk.

The colours in the table represent the materiality scores each risk has within a specific climate scenario and time horizon.

- lowest impact
- medium impact
- highest impact

Scenario SSP1-2.6 (~1.5°C)	Scenario SSP2-4.5 (~2.0°C)	Scenario SSP5-8.5 (≥4.0°C)
2023	2023	2023
2030	2030	2030
2050	2050	2050
Scenario SSP1-2.6 (~1.5°C)	Scenario SSP2-4.5 (~2.0°C)	Scenario SSP5-8.5 (≥4.0°C)
2023	2023	2023
2030	2030	2030
2050	2050	2050
Scenario SSP1-2.6 (~1.5°C)	Scenario SSP2-4.5 (~2.0°C)	Scenario SSP5-8.5 (≥4.0°C)
2023	2023	2023
2030	2030	2030
2050	2050	2050

[102-32] [201-2] [302-1] [302-3] [302-4] [305-1] [305-2] [305-3] [305-4] [305-5]



The assessment has revealed that some physical and transitional risks include aspects that are considered to be opportunities for the Group. For example, the expected change in air temperature may lead to an increase in average temperatures in winter, resulting in reduced expenses for heating at all business units.

Opportunities

In addition, market risk presents opportunities for X5 to interact with local suppliers. Expected air temperature growth may also promote the further cultivation of warm-climate plants in Russia, which could both reduce the cost and carbon footprint of shipping these goods.

2021

Risk mitigation activities are interconnected with X5 Group's 30x30 agenda. We have already performed a range of activities in 2021 in the field of energy efficiency, as it is one of the primary sources of greenhouse gas emissions for the Group:

- X5 has started using alternative energy sources like hydro and solar power. For example, Pyaterochka business unit has begun switching stores in the Karelia region to green energy sources. As a result, in 2021, about 17% of the total power consumption of their stores there were from hydroelectric energy.
- In addition, Pyaterochka is piloting the use of solar panels at four of its stores and initiating a pilot project based on the transition to the more environmentally friendly CO₂ refrigerant (R744) at the Podolsk DC. Both projects are expected to have substantial results with regard to GHG emissions and are planned to be scaled up within the Group.

- X5 Group purchases I-REC certificates to ensure that goals will be achieved, especially in regions with limited access to renewable power sources.
- In 2022, Perekrestok is set to install doubleglazed refrigeration units in 86 stores, which should decrease the use of refrigeration energy by 11%. We plan to scale up this measure to cover the whole Group.
- X5 Group plans to purchase alternative energy on the wholesale market to reduce costs by decreasing retail mark-ups. Hence, energy costs will decrease 2–3% on average per store, and there will be a positive impact on the volume of GHG emissions produced.

Additional information on X5's environmental initiatives is provided on page 20–22.





TCFD disclosure

[102-32] [201-2] [302-1] [302-3] [302-4] [305-1] [305-2] [305-3] [305-4] [305-5]

Risk assessment

Our climate risk assessment process aligns with the Group's general risk assessment and is closely reviewed on a regular basis during Supervisory Board strategy sessions. Additional information on the Group's risk management is provided on page 30. Our decarbonisation initiatives are in line with measures to mitigate climate risk to ensure the sufficient and effective resilience of the sustainable development strategy. The risk assessment is in accordance with the Task Force for Climate-related Financial Disclosures (TCFD), as well as the IEA scenarios.

The results of climate risks and opportunities assessments allow the Group to develop a more in-depth understanding of the changes necessary to transition to a low-carbon-economy business model.

Climate risks, including physical and transitional, are incorporated within the general risk register and are reviewed yearly. The climate risk assessment is in line with the Group's risk assessment and includes the following steps:

Risk identification

Risk assessment

Risk response (avoidance, mitigation, transfer or acceptance)

Development and implementation of measures to reduce risks

Control and monitoring

Risk management reporting

The Group's strategy and climate risk assessment is aligned in accordance with three time horizons:

- Up to 2023, short-term horizon
- 2023-2030, medium-term horizon
- 2030-2050, long-term horizon

The Group uses common approaches to assessing the climate risks, such as a scale for risk impact, which ranges risks from the lowest possible impact (green) to the most significant possible impact (red) to estimate the materiality of climate threats. Risks are identified and scored upon each business unit separately. This assessment includes the impact of risks on market share, financial performance, investor relations, interactions with regulators, operational processes and employees.

The Group periodically assesses the impacts of climate-related risks and opportunities on X5's financial performance through 2030. The financial consequences of physical and transition risks have been assessed taking into account potential effects on key financial performance indicators of the Group.





TCFD disclosure

[102-32] [201-2] [302-1] [302-3] [302-4] [305-1] [305-2] [305-3] [305-4] [305-5]

Metrics

The long-term goal of achieving carbon neutrality by 2050 heightens the importance of accurately calculating total GHG emissions and other climate-related metrics.

Since 2019, the Group has been assessing GHG emissions in accordance with the Corporate Accounting and Reporting Standard of the GHG Protocol. In 2021, this assessment included GHG emission sources at key business units that make up at least 95% of all GHG emission sources, namely Pyaterochka, Perekrestok and Chizhik stores and Vprok.ru Perekrestok online delivery services, Karusel hypermarkets and Smart Kitchen, as well as distribution centres, logistics hubs, vehicle fleets, the Corporate Centre and the Direct Import business unit. Additional information on assessment results and methodologies is provided on page 59.

Our Scope 1 and Scope 2 GHG emissions mostly stem from the consumption of electricity and heat by X5's stores and distribution centres, as well as from the use of refrigerants and our own fleet of delivery vehicles. In order to effectively manage these emissions, the Group carries out initiatives to optimize energy consumption, increase the share of renewable energy, and switch to refrigerants with low global warming potential in operations.

The greater part of our Scope 3 emissions arise from purchased goods and services and the end-of-life treatment of sold products. We are working with suppliers and customers, providing advice on climate change adaptation and mitigation measures; we also seek to increase the share of low-carbon products for our customers.

When developing a decarbonisation pathway, X5 established a feasible internal carbon price to aid in strategic decision-making. However, internal carbon pricing has not led the Group to abandon any investment projects to date.

Moreover, X5 Group has set climate-related KPIs for management to motivate the implementation of the 30x30 agenda. The KPIs include the LTI programme, which has a 10% indicator on decarbonisation by 2023 in comparison with 2019. The KPIs also include other sustainability indicators, such as the increase in the share of recycled packaging and waste management initiatives that are important for decreasing Scope 3 emissions. Overall, climate KPIs comprise 5% of the total managementteam KPIs.

In December 2020, X5 Group announced its commitment to the Science Based Targets initiative (SBTi). In 2021, we greatly advanced our understanding of the specific measures needed; however, the Group is set to continue to analyse the particular steps required to achieve sciencebased targets. Our internal targets within the 30x30 agenda, as well our carbon neutrality goal, is set to be reached by 2050, which is much earlier than the national target to achieve net zero emissions by 2060. Additional information on our climate-related targets, including GHG emissions, green energy and waste management, is provided on page 53-63.



EU Taxonomy for sustainable activities

The European Commission has adopted an ambitious and comprehensive package of measures to help investors make greener and more environmentally friendly investment choices. The Taxonomy, a classification system for environmentally sustainable economic activities, is an important part of these measures, helping to improve the flow of money towards sustainable activities across the European Union. The Taxonomy prescribes quantitative and qualitative reporting on predefined key performance indicators (KPIs) as of the reporting year 2021.

In this section, we present the share of X5 Group's consolidated total operating revenue, capital expenditure (capex) and operating expenses (opex) for the reporting period 2021. These are associated with Taxonomy-eligible economic activities related to the first two environmental objectives - climate change mitigation and climate change adaptation - and are presented in accordance with Regulation (EU) 2020/852 as supplemented with Commission Delegated Regulation (EU) 2021/2139 and Commission Delegated Regulation (EU) 2021/2178 (EU Taxonomy).

Taxonomy-eligible activities

In the table below, we align the X5 Group business units and their activities with the descriptions of the economic activities in the Taxonomy.

X5 Group activities

EU Taxonomy activity

X5 Transport enables X5 to provide a reliable supply of goods to our growing network of stores efficiently and dependably. We mainly operate trucks, but a small part of operations in remote towns is provided by rail transport. Vprok.ru Perekrestok operates lightweight trucks for the delivery of goods ordered online.

6.2 Freight rail transport

6.6 Freight transport services by road

X5 Real Estate manages real estate projects, including construction of new buildings, renovation of existing ones and acquisition and ownership of buildings. In 2021, however, X5 Group was not involved in the construction of new buildings or in the acquisition of buildings; only renovation took place.

7.2 Renovation of existing buildings



EU Taxonomy for sustainable activities

EU Taxonomy KPIs

The activities described in the table on the right are not revenue-generating for the Company; therefore, the proportion of turnover that can be considered eligible is 0%.

The proportion of our capital expenditure attributed to these activities was calculated by assessing the economic activity to which each asset category relates: asset categories associated with Taxonomy-eligible activities were included in the calculation. For X5 Transport this included the acquisition of new trucks, and for real estate management it included all materials and salaries of workers taking part in the renovation of existing buildings, since they are capitalised.

The proportion of our operating expenses was calculated by direct expenditures relating to the day-to-day servicing of assets eligible for the capital expenditure KPI. These were mainly expenses on fuel, lubricants and vehicle repair. No opex was associated with the renovation of buildings.

X5 Group EU Taxonomy KPIs in RUB million / percentage¹

Economic activities	Code	Absolute turnover	Proportion of turnover	Absolute capex	Proportion of capex	Absolute opex	Proportion of opex
Taxonomy-eligible activities	_	-	-	39,891	41%	9,224	3%
Freight rail transport	6.2	-	-	-	-	129	_
Freight transport services by road	6.6	-	-	7,048	7%	9,094	3%
Renovation of existing buildings	7.2	-	-	32,843	34%	-	_
Activities that are not Taxonomy-eligible	_	2,204,819	100%	57,873	59%	284,243	97%
Total	-	2,204,819	100%	97,764	100%	293,467	100%



Figures may not add up due to rounding.

Responsible water consumption

[303-1] [303-2] [303-3] [303-4] [303-5]

The preservation of water resources is one of X5's general goals for environmental responsibility.
Our Sustainable
Development Policy affirms the Company's obligations to optimise the use of water in all X5's processes.

We recognise our responsibility to inform our customers and suppliers of sustainable development and responsible consumption. Our sustainability recommendations for suppliers include a position on the rational use of water resources. The training events that we hold for customers aim to raise awareness of the importance of rational water use.

Managing water consumption

X5 mainly uses fresh water from urban water supplies in its operations. The majority of our facilities are connected to the water grid, which is the source of 98% of the water used in our operations. In our value chain, fresh water is mostly used for the production of the goods we sell. The Company does not operate in the area with water stress, thus water withdrawal, discharge and consumption does not take place in such areas. The Company uses estimated standard values to calculate water management metrics, while in some stores water meters are implemented to check whether the standard values are correct.

On the Company's property, water is used by employees and counterparties to maintain health standards and regulations on handling products. Water quality from urban water supplies is strictly controlled by municipal services, and so additional quality control on X5's property is not required.

Some X5 facilities have limited access to municipal water networks, including Smart Kitchen and some Vprok.ru Perekrestok and Karusel

warehouses. A system of groundwater abstraction, making use of boreholes, has been developed for these facilities.

Most of the drainage goes to city sewerage, where it is purified and discharged into the groundwater. The Company does not reuse water, as it is not profitable at the current moment due to the small volumes of water abstraction.

Smart Kitchen is the only one of our business units that uses water in its production processes. Smart Kitchen uses water to clean and prepare fresh produce.

In order to reduce its impact on the environment, X5 takes measures to limit the contamination of water by pollutants. Water is discharged at temperatures close to that of the surrounding environment. We expect that water consumption will remain the same in the medium term, as we are not planning any significant changes in our operations.

Metric	Unit of measure	2021
Water withdrawal	ML	9,326
Withdrawal from groundwater	ML	232
Withdrawal from third-party resources (city grid)	ML	9,094
Water discharge	ML	9,298
Water consumption	ML	28



Promoting responsible consumption

X5 Group launched a project to collect used plastic and aluminium packaging from customers to be recycled by installing reverse vending systems in its stores. The project was implemented in partnership with Unilever and Henkel.

At Pyaterochka and Perekrestok stores, customers can receive electronic receipts instead of paper ones in order to reduce paper waste by registering through the respective retail chain's app.



Pyaterochka

Pyaterochka and Procter & Gamble, in partnership with the Ecocentre Sborka project and GK EcoTechologies, opened an ecological centre in Ekaterinburg. The city was chosen based on the results of a national online survey conducted by the project "Let's save the planet together". The centre will offer residents of the city the opportunity to lead a more environmentally responsible lifestyle. Besides serving as a collection point for recyclable materials, the centre also contains a store offering zero-waste goods and locally produced brands as well as a special exhibition on recycling technology, where visitors can learn about the life cycle of household goods.

Pyaterochka now offers reusable bags for fruits and vegetables. Pyaterochka also launched a marketing campaign called "Environmentalism Is Easier than It Seems", which encourages the purchase of eco-goods, such as food containers and water bottles made from recycled plastic.

The Company is implementing a project to encourage the use of reusable packaging, such as eco-bags made from untreated cotton and fruit and vegetable bags. Customers choosing to shop

with reusable bags receive double points on their loyalty card. This is the first closed-loop economy project of its kind in Russia.

Reverse vending systems have been installed to collect recyclable materials. In July 2021, a series featuring Irena Ponaroshku called "Recycle it!" was launched dedicated to Russian eco-culture and problems of recycling plastic.

Pyaterochka and Garnier opened a new ecobeach in Vityazevo, in the Krasnodar region.

The primary materials required for its construction were selected in order to minimise harm to the local environment. The wood for walkways, deckchairs and playgrounds, for example, is FSC-certified, a guarantee of responsible production practices, while some of the plastic structures necessary were made from recycled plastic materials. More economical "smart" showers equipped with an automatic water supply system were also installed.

Pyaterochka began to use its own recycled materials for its shopping bags. Shopping bags made from 35% recycled plastic were made available at Moscow stores.



Promoting responsible consumption



Perekrestok

We continued to upscale a pilot programme in partnership with BioMio that allows customers to bottle household cleaning products with their own containers; we installed refill stations in Perekrestok stores and set up containers in several stores to collect unwanted clothes.

Perekrestok added replaceable blocks in soft packaging to its assortment in partnership with Synergetic; the packaging is made from 50% less plastic.

Containers for collecting plastic lids were installed in 323 supermarkets in partnership with Henkel. The plastic will be recycled and used to make special ramps which will be installed at the entrance to supermarkets in various regions. Around 11 tonnes of plastic lids were collected.

We launched a project to collect and recycle aerosol canisters in partnership with Unilever in 10 stores in St Petersburg. We conducted a treeplanting campaign with Colgate and launched a project to promote recycling together with Sobirator, where customers receive coupons in our stores and our partners' stores in return for returning recyclable materials.

We continued a project to collect plastic toothbrushes in partnership with Splat. The project will run until 31 August 2022. Since the project's inception, approximately 2.5 tonnes of plastic toothbrushes have been returned for recycling, from which polymer-sand pavement tiles were made.

As a result of an initiative, approximately 177,000 customers refused paper receipts in Perekrestok stores, a figure that is steadily increasing. Approximately 4.4 million receipts were not printed.

Vprok.ru Perekrestok

For our customers' convenience, we created a separate eco-goods subcategory within the household cleaning products category in our catalogue. We held an Earth Day event where customers could try eco-goods, and published an informational article on our website together with Colgate about recycling toothbrush packaging.

Vprok.ru Perekrestok continued to accept returned plastic bags used during delivery to be recycled. Customers can return the bags used for delivery to the courier, which reduces the quantity of waste taken to landfill.





Our plans

X5 Head Office

X5's existing initiatives to promote sustainable development and reduce its negative impact on the environment will continue in all the Company's offices.

The Company plans to add spectrally selective film to all its windows and outward-facing glass walls. The film blocks 99% of UV light and 60% of thermal radiation, which will reduce air conditioning and ventilation expenses, and as a result electricity consumption.

X5 Transport

- Further develop our unified digital platform. X5 Transport, by accelerating its processes through automation, expanding channels for filing claims for in-house and hired transportation, and making the platform's services more convenient for drivers
- Fully implement Company standards to reduce the total weight of transportation vehicles. As of now, standards are applied to 70% of cases based on their technological features. Lightening vehicle loads reduces emissions per unit on transported goods
- Develop electronic document workflow and transfer the remaining accompanying documentation into digital format
- · Continue to test and implement gas-based and alternative fuel technologies
- Expand the geography of our delivery network, open new cross-docking for retail chains and develop our international logistics operations
- Identify strategic partnerships with large transportation companies for intracity and inter-branch deliveries
- Increase the efficiency of in-house refurbishment work due to the lack of external maintenance stations for our equipment
- Reduce the number of empty delivery runs and responsibly consume resources (water, energy, waste products)

Pyaterochka

- In 2022, Pyaterochka will continue to employ the smart store system in its new stores and to modernise existing stores to increase control over energy consumption for electricity and heating. Besides this, we will begin to use a more environmentally friendly cooling agent, which will replace freon. Regarding energy production, we will present a technologically and economically grounded proposal to install biogas generators at DCs and a range of large supermarkets, and continue to develop alternative sources of energy, including the installation of solar panels
- Pvaterochka continues to automate control processes for food waste. at the same time reducing their total volume by passing on 15% more non-expired food products for reprocessing than in 2021, and by installing composting machines at our stores and DCs. Besides this, we will continue to promote recycling among our customers by organising eco-projects in our stores. We will also continue our project to promote the use of bags containing no less than 35% recycled plastic, and will work to implement sustainable/recyclable packaging for private label goods
- Develop biogas installations at one of the Company's DCs or find a partner to implement a joint project on its territory
- Continue developing the use of alternative energy sources and energysaving technologies Continue to switch stores to green energy and develop pilot projects to install solar power stations
- Launch pilot programmes to switch to using a safer CO₂ cooling agent and test waterloop technology
- Expand healthy living programmes and pilot marketing campaigns to promote a healthy lifestyle
- Pilot food sharing programmes
- Collect materials used for advertising campaigns for future reuse, reprocessing and sale in goods such as shopping bags and clothing collections
- Develop and launch a food-sharing project







Perekrestok

Perekrestok will also continue a pilot project to reprocess unexpired food products as animal feed. We will continue to recycle waste from our stores through DCs, and we have already introduced compulsory requirements for all suppliers to use bags made from recycled plastics. Having published guidance on sustainable packaging in March 2021, we will start applying it to the production of private label goods and to promoting sustainable packaging among our suppliers. To encourage recycling among customers, we will continue to install reverse vending systems, containers and battery collection points.

- Review and improve the environmental settings of our DCs, as well as our entire logistics process and supply chains
- Centralise the transfer of recyclables through our DCs for efficient management of the process
- Review our processes of waste formation and develop and correct them based on alterations in the weight of plastic boxes and by reducing the quantity of cardboard and film used
- Continue to teach and inform our customers about environmentally friendly habits. Perekrestok will launch a single platform for waste collection and install containers for separate waste collection in 400 stores
- In 2022, we plan to connect 100 more stores to the smart store system to reduce energy consumption by an average of 9%
- In Q1 2022, refrigerated cabinets in 86 stores will be fitted with fibreglass, which will decrease the energy
 consumption of our stores by 11%. Fibreglass panels were purchased in 2021, and assembly is well under
 way
- Enter the electric energy market and purchase of green energy from hydroelectric plants.
 We are considering installing solar panels in the Southern FD
- Install a universal type of container to collect different categories of recyclables and continue to collaborate with key brands, through which we will also collect those categories that are not supported by our containers
- Switch some of our suppliers to more environmentally friendly forms of packaging (relying on our own range of packaging recommendations), starting with private label goods
- Launch environmental education course together with our partners on separate waste collection and on leading and ecologically friendly way of life for both children and adults
- Develop and launch a food-sharing project

Vprok.ru Perekrestok

- Increase the percentage of recycled materials compared with 2021, expand the list of recycled materials
- Move from luminescent lighting of internal spaces to LED lighting. Luminescent light bulbs contain mercury (luminophore)
 and are category 1 hazardous waste. These light bulbs carry a risk of breaking and contaminating work locations. LED
 lighting can be used continuously for up to 25 years without needing to be replaced and does not contain hazardous
 substances
- Update environmental documentation
- Fully move to using shopping bags containing greater than 30% recycled materials
- Install highly effective modern NERA filters in general ventilation systems. They purify 97% of pollutants in the air

Direct Import business unit

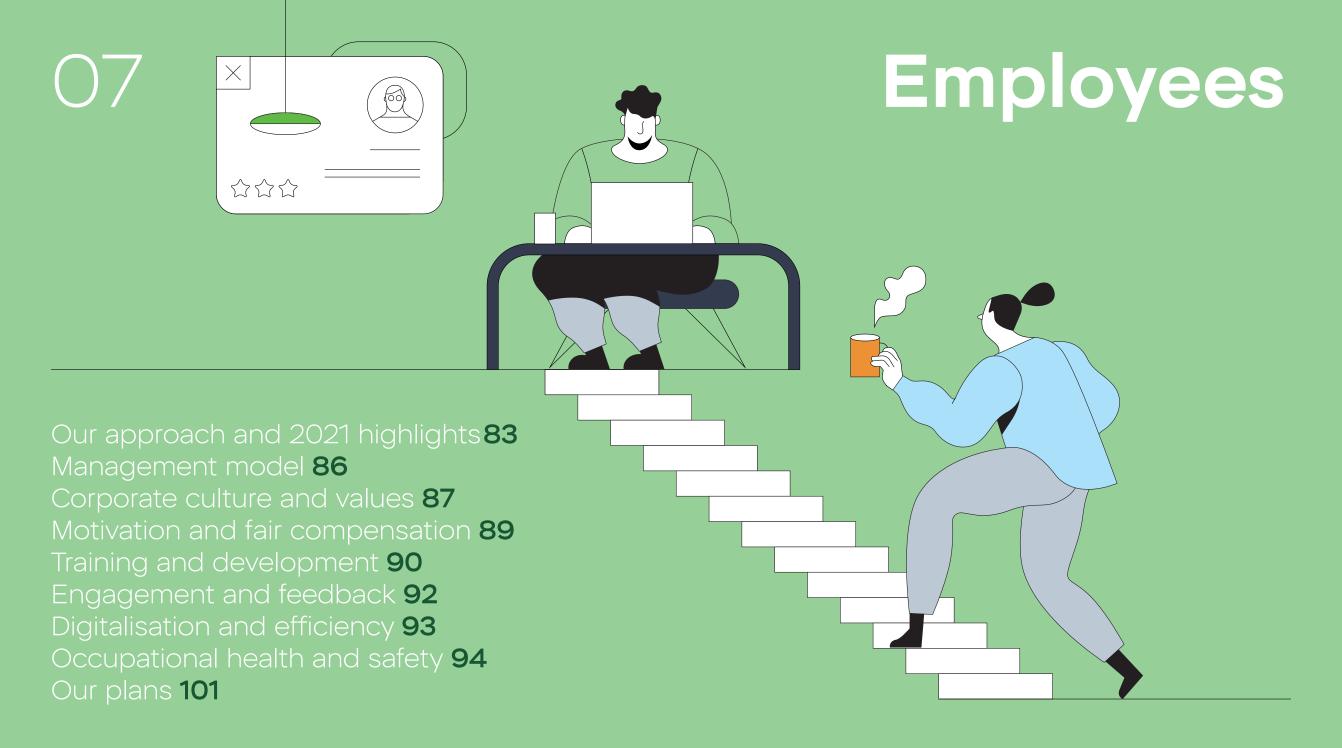
• Launch an initiative to use ethylene filters, which ensure that products remain fresh during long-haul transportation, which in turn will reduce food waste. The use of filters will also enable the transportation of goods that are incompatible with ethylene, which in turn will help optimise our logistics processes

Other business units

Chizhik plans to scale up a project to pass on biowaste to farms

Karusel plans to continue its programme of reducing energy consumption by optimising technological and cooling equipment, and to develop a project to reuse non-sellable goods. These goods will be passed on to farms to produce animal feed and fertiliser

Mnogo Lososya plans to develop its use of leftovers from food products to make animal feed to reduce its food waste



Our approach and 2021 highlights

 $[103-1] \ [103-2] \ [103-3] \ [102-7] \ [102-8] \ [102-41] \ [401-3] \ [401-3] \ [403-2] \ [403-2] \ [403-4] \ [403-4] \ [403-5] \ [403-6] \ [403-6] \ [403-8] \ [403-8] \ [403-9] \ [40$



In 2021, X5 Group celebrated 15 years since its founding. This anniversary year was one of transformation and renewal. The Company updated its name to underline its transition from the retail to the food market, and changed its logo as a sign of the importance of sustainable development and care for the community. Ensuring our employees' health and safety, improving working conditions for personal development and career growth, and overseeing the transformation of our organisation's management model remain priorities for the management and HR team.

The Company aims to strengthen cooperation between departments and internal efficiency, and to create a culture of entrepreneurship by extending powers and responsibilities at all levels of management. Digitalisation, continuing automation and detailed analysis of our HR work have strengthened the flexibility and speed with which our organisation makes decisions and has supported more personalised interactions between X5 and each group of its employees.

Management through our employees' expertise lies at the heart of the development of X5's HR processes: that is, through defining needs, feedback channels, research and testing hypotheses, we achieve quality results through teamwork.

Our complex approach towards team management, our application of both Russian and international best practice and our attentive approach towards people and their needs make X5 a trendsetter in HR and help us to become the best employer we can be.

82.5%

In 2021, employee engagement increased from 77.7% (2020) to 82.5%

29.2%

Our employee net promotor score (eNPS) increased from 25.4% in 2020 to 29.2% in 2021. This means that more of our employees consider the Company a good workplace relative to those who would not recommend us as an employer

36%

Staff turnover decreased by 2 p.p. to 36%





Our approach and 2021 highlights

[103-1][103-2][103-3][102-7][102-8][102-41][401-1][401-3][403-1][403-2][403-3][403-4][403-5][403-6][403-6][403-7][403-8

2021 highlights

- X5 fully adapted its working processes to the coronavirus pandemic.
- Measures to protect our employees' safety were transformed into a complex health and well-being support system. The Company operates a health monitoring system, which features a range of processes that enable it to receive prompt information on cases of illness among employees and their condition in every business, region and workspace. In 2021, vaccination data was added.
- Thanks to a large-scale vaccination campaign, the percentage
 of employees vaccinated against COVID-19 continues to rise. X5's
 proactive position on its team's health enabled it to keep coronavirus
 infection rates among its employees lower than the national average.
- The transition to a new management model for increasing the speed and accuracy of operating decisions continued, both at the level of X5 as a whole and of the Group's business units.
- X5's HR functions successfully supported the Company's development through employee attraction and retention under growing competition and changes to the labour market. Forming new businesses such as X5 Media, transitioning Chizhik to a retail format and integrating Mnogo Lososya all formed part of the Company's development strategy.
- All X5's business units are improving their working conditions and constantly monitor the wage market for line personnel to ensure that X5 remains competitive. A flexible motivation system is being developed for employees, who will be offered a wide range of performance-based rewards. Already, for example, Pyaterochka and Perekrestok retail employees have access to the Telemedicine programme.
- A pilot programme to promote and reward entrepreneurial leadership among directors of Pyaterochka and Perekrestok stores has been launched. The development of our entrepreneurial approach combine our store directors' potential and interests with X5 Group's development goals.

- X5 updated its succession planning methodologies and talent development.
- X5 Group launched an internal vacancies platform on its corporate portal to support internal career growth for its employees, and continued to develop the succession pool for all employee categories.
- In 2021, 71% of vacancies at the management level were filled by internal candidates, 22% more than in 2020.
- In accordance with X5's Equal Opportunities Policy, the Company supports an equal attitude towards all employees, regardless of their gender. Forty-three per cent of X5's management team (Executive Board, senior and middle management) are women, and men and women develop their careers equally.
- Recruitment committees now follow a Company-wide methodology across the talent pool. This strengthens the mobility of talented personnel within the Company, allowing it to unlock the potential of its top talents.
- The Company is developing an HR platform that will enable designs and services to be reused across its divisions. We are creating a unified digital solutions pathway, which will be available to functions and employees.
- HR analytics is becoming more diverse and detailed both at the level
 of the Group and of its departments. This helps us to improve the quality
 and efficiency of decision-making. Our HR-monitoring product, a salary
 management system based on operating data from the labour market,
 was introduced at Pyaterochka in 2020 and expanded to all business
 units in 2021. Analytical instruments are now available to a greater
 number of managers: the Clue platform (data-driven personnel
 management), for example, is now used in all Perekrestok stores.

- A joint educational programme called Innovation in Retail has been launched by the Higher School of Economics and X5 Group. X5 also opened an Industrial Data Analysis in Retail department at the School of Applied Mathematics and Informatics at the Moscow Institute of Physics and Technology.
- In 2021, the Company was one of 11 platinum employers in Russia according to Forbes, one of the Changellenge's 20 most attractive companies for IT specialists and one of Future Today's 30 "best of the best" employers. X5 Group, Pyaterochka and Perekrestok were ranked in first, second and third place among the best food retail employers in Russia according to HeadHunter.
- Pyaterochka began to hire employees with hearing impairments to collect orders in Moscow and Moscow region stores. The retail chain is conducting a campaign in partnership with the Russian Society of the Deaf to attract employees with hearing impairments.
- Perekrestok is conducting an offline audit of stores for accessibility items for people with disabilities. In 2021, audits of 100 stores were conducted in Ekaterinburg, Belgorod, Voronezh, Moscow and St Petersburg as a result of which 30 stores received certification confirming their adherence to all relevant requirements (height of shelves, width of aisles and so on, with the main condition that an employee is always on hand to help). Employees are trained to work with people in wheelchairs as well as people with limited mobility, visual impairments, hearing difficulties and all other forms of disability. The certification was developed by Everland, who have also developed special courses for employees on communicating with people with disabilities.
- Perekrestok's Accessible Environment site was created taking into consideration people with disabilities.
- X5 Transport significantly increased investment in human resources, increasing its attractiveness as an employer for hauliers. For example, full-time instructors and mentors are now employed, and renovation is taking place on rest and relaxation rooms for hauliers.



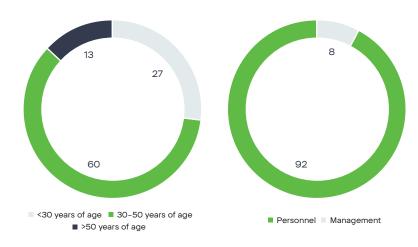
Our approach and 2021 highlights

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	2020	2021
Headcount ¹	342,330	340,928
Staff turnover	38%	36%
• men	50%	48%
• women	34%	32%
• <30 years of age	56%	55%
• 30-50 years of age	32%	31%
• >50 years of age	25%	23%
Percentage of men among staff	26%	26%
Percentage of women among staff	74%	74%
Full-time equivalent	286,564	297,550
Number of hours worked	451,251,238	462,289,874
Percentage of employees receiving performance assessment and feedback	100%	95%
Total number of employees that took parental leave during the reporting period, incl.	11,698	12,701
• men	125	140
• women	11,573	12,561

Turnover is generally high in the retail industry, since specialists at stores and DCs frequently change jobs in search of the best working conditions and benefits. Nonetheless, we managed to reduce the turnover rate in 2021 compared with 2020, following our talent engagement and retention initiatives.

Personnel structure in 2021, %

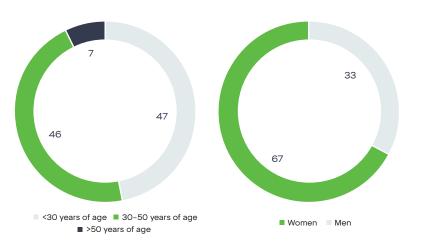


Percentage of women in management positions

	2020	2021
Total management team, incl.	43%	43%
• Executive Board / CEO-1	43%	36%
• Senior management / CEO-2.3	39%	38%
• Middle management / CEO-4	45%	47%

New hires in 2021

total new hires



¹ The headcount includes staff and outsourcing.

Management model

Every X5 business has its own HR function, which reports directly to the managing director. Our business partnership model supports the work of our new businesses. In addition to recruitment and onboarding, evaluations, the administration of compensation and benefits, and personnel training and development, each function is responsible for organisational design, HR brand development and internal communications.

Strategic personnel management and the development of key HR agendas for X5 businesses are carried out in the central offices of the Company's retail chains. In 2021, the Company continued to increase the powers of its regional divisions, whose responsibilities were extended to include the entire range of HR processes.

- X5's HR function is overseeing the Company's transition to a new operational management model. Within the X5 Business Support division, a Legal Support Centre has been set up, in addition to business units responsible for human resource work, financing and non-commercial purchases.
 The Company continues to centralise HR processes at its multifunctional service centre in Nizhny Novgorod.
- The transformation of Karusel continues.
 As Karusel's structure and size changes, the chain is focused on retaining key employees within X5 and on supporting motivation and high productivity in operating stores.
- Perekrestok has implemented a new operating model for management which strengthens the powers delegated to the regional level.
- Pyaterochka has extended the powers of its territorial managing directors: development, commerce, finances, supply chain management and HR, including management of employee rewards.



Corporate culture and values

[102-16] [102-18]

As part of the Group's overall strategy, its management model is becoming less hierarchical, granting more freedom and power to X5's assets. X5's corporate culture, based on a unified strategy, mission and values, supports the Company's further evolution. In 2021, ideas of partnership, quality of communications between the Group's divisions, entrepreneurship and efficiency were introduced into the Company's development, motivational, educational and entertainment programmes and initiatives.

X5 supports a systematic approach to informing personnel of changes to the Company's operating activities through all available channels. In 2021, special importance was placed on informing employees of COVID-19 vaccinations and the transformation of X5's operational management model.

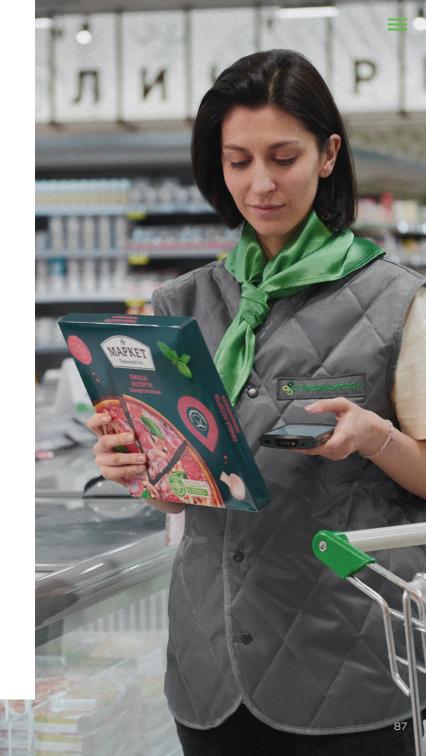
Over the course of the year, the Company conducted a communications campaign dedicated to its 15th anniversary called "First 15". Considering working conditions during the pandemic, it was dedicated to the health and well-being of employees, whose energy and engagement are the foundation of the business's success. The campaign also recognised employees who have worked for our businesses for 15 years or more.

X5 continues to develop reward and recognition programmes for employees through gamification and other means. In 2021, the Company launched an X5 internet store, where employees can buy souvenir items by collecting points and badges on the portal, and a corporate shop for retail employees of Perekrestok through the Perchatka application. Perchatka is an application for employees that offers messaging and other corporate services, such as shift and vacation timetables, information about wage payment and others, such as managing a blog and commenting on colleagues' publications.

- A quarterly recognition system, Q BEST X5 TECH, was developed for X5 Technology employees. The division's directors select the best employees, who receive a prize from the managing director.
- X5 Transport launched a new Avatar competition for drivers. Annual. biannual and quarterly motivation programmes are in operation at the Shared Service Centre.
- Virtual prizes are available to employees through the Perekrestok Perchatka application for commendable actions.
- Pvaterochka and Perekrestok launched a "Thank vou" service in their mobile apps for retail staff. X5 held its first online "Thank you day", where employees sent each other more than 7,000 thank you cards.
- Perekrestok is developing an operating competition called "Heroes race". The retail chain has increased the number of nominations and redeveloped its operational rating system.

A remote and hybrid working programme, X5 Home Office, is being developed. Microsoft Teams for remote team-based work has been launched, and a service for booking workplaces and meeting rooms is also being used. The Company began to deliver equipment and souvenirs to employees from the internet store to pickup points through its own logistics service, 5Post. The hybrid onlineoffline format has opened up new possibilities to attract a greater number of employees to our traditional activities.

- December marked the ninth year that office employees went to stores to help their colleagues during high season as part of our traditional X5 Friday event. In 2021, employees of our Vprok.ru Perekrestok dark stores also joined the event. The number of participants achieved a new record, exceeding 11,000 applications from 6,000 employees.
- The corporate cybersports tournament featured over 300 contestants. The X5 Group teams won prizes for the third year running.
- Pvaterochka held the largest online workout, setting a new Guinness World Record. On 31 July, over 600 people from 10 cities across Russia, including our own employees and other participants, joined Pyaterochka's took part in online workout as part of our Turbostart sports games.



Corporate culture and values

[102-16] [102-18]



The Company is building a corporate culture based on common values, adherence to ethical norms, mutual respect and compliance with legislative requirements. Our corporate values are respect, customer orientation, honesty, integrity and a commitment to excellence. These values and principles are reflected in the Code of Business Conduct and Ethics (the "Code"), in corresponding policies and procedures and in our training, feedback and qualification improvement programmes.

Code of Business Conduct and Ethics

The Code of Business Conduct and Ethics and related policies were adopted to help employees act in accordance with the law and to follow ethical principles in fulfilling their work responsibilities. All X5 policies are published on the Company's website and/ or on the corporate portal and are available to all employees and partners. The Code and its related policies are regularly reviewed and updated in accordance with changes to the law and the Company's internal process.

The Code of Business Conduct and Ethics defines standards of conduct that employees should observe rigorously in interactions with customers, suppliers and colleagues, and also lays out basic principles in accordance with which the Company conducts business.

The Code covers questions of fair competition, the fight against corruption and bribery, preservation of the environment, protection of personal data and Company assets, prevention of conflicts of interest, equal opportunities for employees, safe working conditions as well as principles for interacting with customers, suppliers and competitors. Besides this, the Code includes reporting mechanisms in case of violations of the Code. The Code applies to all employees regardless of their position or status, who are informed of its content through regular

interactive training. A survey was conducted of the office employees of all our retail chains and business units about the ethics hotline. According to the survey:

- 93% of employees confirmed that they are familiar with the Code of Business Conduct and Ethics
- 85% of employees know that the Company operates an ethics hotline
- Of the respondents 2% had used the ethics hotline, of whom 69% were satisfied with the results of the subsequent review

Reasons for employees not contacting the X5 ethics hotline. %¹

Nothing to report	90
Concerns about anonymity/ confidentiality	12
Doubts about the effectiveness of the ethics hotline	7
Fears about possible consequences	4
Other	4

Declaration on Human Rights Protection

X5's Declaration on Human Rights Protection defines principles and rules in respect of compliance with and promotion of high international standards for the protection of human rights at every level of the Company's operations:

- Prohibition of discrimination and forced labour;
- Prohibition of harassment:
- Respect for cultural diversity and values;
- Respect for the right to freedom of assembly and association;
- Occupational health and safety.

As a complement to the Code of Business Conduct and Ethics, the Declaration on Human Rights Protection is a binding document for all X5 employees.

Other policies can be found in the "Compliance and business ethics" section of this report.

¹ The sum is not equal to 100%, since respondents could select multiple reasons for not contacting the X5 ethics hotline.



Motivation and fair compensation

[102-35] [405-2]

X5 Group operates a remuneration and incentive system with common corporate rules that takes into consideration the specificities of each of our retail formats, digital businesses and developing assets. As part of our policy on equal opportunities, we strive to always treat our employees equally, to offer fair remuneration for their labour in accordance with their qualifications and skills, with the time and effort spent, and with the difficulty of the tasks completed, and also based on the quantity and quality of their work. The level of remuneration does not depend on age, gender, race, religious beliefs, sexual orientation or disability. Company-wide principles and approaches towards personnel rewards are fixed in X5's Policy on Remuneration.

In 2021, X5's retail chains began to develop an entrepreneurship incentive system for store directors. Directors have been given more power and opportunities to manage standard processes. The incentive component accounts for participation in the store's financial results and exceeding targets and applies to both the director and employees of the store. The development of an entrepreneurial approach unites store directors' interests with X5 Group's development goals.

The current level of renumeration is in line with other leading Russian companies. The average wage for operating staff is RUB 37,800, and all wages and renumeration are paid in accordance with Russian labour law.

- All X5 business units constantly monitor the wage market for line personnel
 to ensure that X5 remains competitive. In 2021, wages for hauliers
 and production staff of Smart Kitchen were reviewed. Pyaterochka staff
 were transferred to a new renumeration system. The criteria that total wage
 payment depends upon are available to employees through their personal
 account in our mobile application. They can also choose the date of markup
 payments for their qualifications or experience and, if desired, can receive their
 salary three times a month.
- A flexible incentive system for various employee categories was launched by Vprok.ru Perekrestok; X5 Food Tech introduced quarterly incentives for IT staff.
- A new model for base renumeration for IT specialists has been introduced.
 This approach allows us to consider changes in the wage market for various IT competencies and their importance to the Company as part of the sum.
- A long-term incentive programme for X5's leadership was agreed for 2021 to 2023. Long-term incentive programmes were developed and introduced for the management of Chizhik and other business units.

As part of our social measures to support employees, we offer material aid and discounts in the Company's stores and on our partners' goods, children's presents for New Year's, and for several categories of employees we offer yearly flu vaccinations, mobile internet connection and life and health insurance. Pyaterochka also offers compensation for trips to children's camps.

- In 2021, the Telemedicine programme offering online consultation with doctors was made available to retail personnel of Pyaterochka and Perekrestok as part of our package of additional benefits. An analogous pilot service was launched for X5 Transport employees.
- All employees of X5's retail chains can use corporate discounts in X5 stores through their personal account in our mobile applications. Perekrestok's employee discount is also tied to the length of their service within the Company.

All X5 departments work to improve working conditions for all categories of employees. X5 Transport refurbished 20 rest zones for hauliers. At X5 Import's hub in Novorossiysk, the first rest zone for staff was opened, and the refurbishment of Pyaterochka and Perekrestok stores includes modernising rest and dining spaces for store employees. The transformation of office and working spaces in Moscow and Russia's regions continues, as we seek to support remote and hybrid working.

- Pyaterochka launched a pilot project to implement a smart workforce management system (WFM). The system calculates optimal loads, sets timetables and plans shifts. We expect the system to reduce employee productivity loss by approximately one and a half hours a day.
- A shift exchange system has been integrated with our WFM system.
 This allows employees to work overtime at times convenient to them,
 and enables employers to monitor this in line with the Russian Labour Code.
- Flexible resource planning is becoming a priority for the majority of X5's divisions, such as X5 Technology, Vrpok.ru and others. Pyaterochka tested a resource requirement planning system in its stores based on current processes and their labour intensiveness. In 2022, expansion is planned across the whole chain.
- The Company continues to work with self-employed specialists, for whom
 a flexible work schedule and short shifts are important. Pyaterochka
 is trialling this format in the Moscow region, Voronezh and St Petersburg. X5
 Food Tech has launched a project for working with self-employed specialists
 together with Alfa Bank.

Gender pay disclosure

	2020	2021
Ratio of women's base salary to that of men at the executive level (CEO, CEO-1) ¹	0.80	0.66
Ratio of women's base salary to that of men at the management level (managerial positions below CEO-1)	0.95	0.96
Ratio of women's remuneration (basic salary + other cash incentives) to that of men at the management level (managerial positions below CEO-1)	0.96	0.96
Ratio of women's base salary to that of men at the non- management level	0.93	0.97

Ratio of women's base salary to that of men at the nonmanagement level, by significant regions of operation



^{1.} An increase in ratio of women's base salary to that of men at the executive level (CEO, CEO-1) was due to changes in the composition of the Executive Board.



Training and development

[404-1] [404-2]

X5 stands out as an employer by offering career and professional growth opportunities. Our fast growth and active development of new lines of business open up a wide range of interesting positions in our established business, digital assets and new business lines to employees who strive to develop themselves further.

We welcome internal mobility and strive to create an environment in which everyone can develop their skills and competencies, and gain knowledge and experience. X5 develops conscious career management among staff, offering employees convenient and simple means to develop themselves further, including appraisal and succession pool programmes, and an internal vacancies platform with options to apply directly or recommend an appropriate candidate for a role.

 In 2021, 71% of vacant positions at the management level were filled by internal candidates, 22% more than in 2020.

In accordance with its Equal Opportunities Policy, X5 guarantees that all employees will be treated equally regardless of their gender. Women make up 43% of our management team, and both men and women develop their careers equally within the Company.

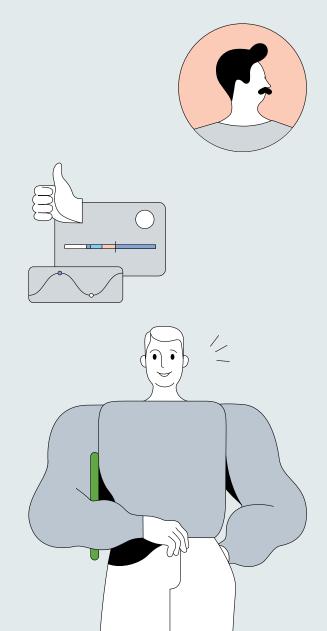
- In 2021, X5 launched a unified vacancies platform on its corporate portal for internal candidates. Employees can apply for positions appropriate to their experience in any of our divisions, including digital businesses and new business lines. Employees can also recommend candidates, whether it be a former colleague, friend or family member.
- Pyaterochka developed a programme to prepare employees for key retail and logistics positions. In the Company's mobile application, the succession pool programme has been automated for retail personnel in their personal account.
- X5 Food Tech launched a KPositions project for internal and external personnel reserves. Eighty per cent of appointments came from our internal talent pool.
- Recruitment committees now follow a Company-wide methodology across the talent pool. This strengthens the mobility of talented personnel within the Company, allowing it to unlock the potential of its top talents.
- A strategy for developing X5's top-level managers was developed to support X5's development goals.

In 2021, the Company hired 161,190 new employees. Highly developed onboarding processes, tailored to the requirements of each division and even position, help our new employees integrate quickly into our team. Part of the onboarding programme is automated, improving the quality and increasing the speed of its delivery.

- A pilot programme was launched to automate the onboarding process for retail employees at Pyaterochka, and online onboarding was launched at Vprok.ru Perekrestok. The Direct Import business unit launched a new onboarding programme. X5 Media uses a practice of Wiki checklists, its own adaptation plan, key contacts, knowledge, access and so on for its onboarding.
- The Get to Know onboarding programme was automated for employees of the Company's management, X5 Business Support and X5 Technology. A non-standard but effective means of introducing employees to X5 Group is an online quiz about the Company.
- Perekrestok conducted focused work on its onboarding systems. The company updated its onboarding and mentoring systems at distribution centres: simplified onboarding systems for backbone staff, which immediately improved efficiency; and reviewed onboarding systems for cluster directors.

X5 Group is developing mentoring programmes and new strategies for passing on and bringing together collective knowledge and professional experience.

- Perekrestok implemented a Buddy project, where managers helped supermarket directors solve everyday problems.
- Mentoring programmes for new employees were launched at X5 Transport and at Smart Kitchen dark kitchen. The Shared Service Centre introduced a reward coefficient for mentoring into its motivation system.
- In 2021, X5 launched a project to create professional communities based on MS Teams software. X5 Technology communities took part in testing the Yammer function.
- In 2022, the Company will offer employees the opportunity to set up professional and interest-based communities and to become the leaders of those communities. Employees can now look up their colleagues on the corporate portal by hobbies, competencies and participation in Company projects.





Training and development

[404-1] [404-2]



X5 Technology launched an open training programme called Mentoring School that enables. It allows employees to develop flexible skills required to be a good mentor and to exchange expertise within the community.

X5 employees have access to a wide range of training programmes and tracks that enable them to develop skills within their current position or in other career directions within X5. Our training system is constantly evolving to become more technological and more closely adapted to the needs of specific groups of employees. The system is also adapted to the speed with which the Company's and our employees' needs change.

- As part of X5's internal training ecosystem, the Company successfully conducted a "Development portal" pilot, a marketplace for various training programmes. The system enables employees to study in a convenient format at a time that suits them, and programmes are offered through a variety of platforms, including through the mobile devices.
- More than 38,000 employees of our retail chains completed training through VR headsets. Pyaterochka developed a training programme for bakers using VR headsets.
- In-trend training formats are being introduced. Pyaterochka held a knowledge marathon on the Eduson training platform. Vprok. ru Perekrestok held an online soft skills development marathon for line operations management.
- The development programmes X5 Leaders. IMD and X5 Leaders.Skolkovo for top-level management were completed.
- Smart Kitchen is holding an in-person training programme, called Hero's Path, for food production employees. The Direct Import business unit developed and conducted crosscultural negotiation training.
- Pyaterochka developed a business game to simulate store management for retail management staff. X5 Technology conducted more than 300 training programmes.
- Our Digital Academy launched pilot school streams for system and business analysis, and developed courses on a productive approach and on technologies for non-specialised professionals in partnership with the business intelligence programmes Qlik and Tableau. Courses on productive approaches for specialised professionals, a scrum master school and a Speak Up School for public speaking were held.

 Perekrestok implemented a system of constant employee training, from the start of their time at the company (onboarding courses) to mentoring for their next position (knowledge check systems, preparation for their next role) and the development of competencies.

In 2021, the Company continued to work with young people. In February, X5 and the Higher School of Economics (HSE) agreed to a long-term strategic partnership in education.

Together we launched a practical Innovation in Retail programme for students from HSE and other universities; opened a multifunctional auditorium, called X5 Group, for lectures, seminars and practical workshops developed by students; and held networking events with leading Russian and international companies.

- Pyaterochka held a youth business case competition on entrepreneurial ideas in retail, #StartUps, which had more than 2,000 contestants from more than 100 cities across Russian and from over 300 higher education institutions.
- X5 opened an Industrial Data Analysis in Retail department at the Moscow Institute of Physics and Technology.
- Pyaterochka launched a dual education pilot programme together with A. V. Nikulin Poldolsk College.. The college's students can continue studying while working at the Company's Moscow region distribution centre at the same time.

Employee training

	2020	2021
Total number of hours of training for Company employees	2,638,338	4,031,369
Average number of hours of training and development per employee	8.0	8.7
Average number of hours of training and development per employee, women	8.2	8.9
Average number of hours of training and development per employee, men	7.6	7.5
Average number of hours of training and development per employee, management	9.8	17.3
Average number of hours of training and development per employee, personnel	7.7	7.4



Engagement and feedback

Our employees determine our priorities for improving interactions between the Company and its personnel through a highly developed feedback system. In 2021, we updated the methodology of our Your Voice engagement survey, making it more flexible to consider our businesses' various needs. The survey is conducted yearly, and X5's divisions can independently decide the survey's schedule and add questions from their own agenda.

Our retail, logistics and operating personnel can give regular feedback to management through our mobile applications and the ethics hotline. All X5 divisions organise direct contact with top-level management through strategical and functional online sessions. The number of participants of our online sessions is not limited, meaning all of our employees' questions and feedback are taken into account to develop X5's processes and improve our employees' well-being.

- The Company operates a feedback platform called eNPS. In 2021, Pvaterochka alone conducted more than 1.000 surveys. Perekrestok measures eNPS every quarter and takes all our employees' questions and feedback into account to develop X5's processes and improve our emplovees' well-being.
- Pvaterochka launched a newsfeed for employees through its Mv Work mobile application. In 2021, employees left 17,615 comments.
- As a result of our feedback system, our employees founded X5 Group's football club.

The Company creates an entrepreneurial environment and welcomes new ideas, improvements and changes. We use a number of methods to support this, from large-scale brainstorming programmes to local initiatives to encourage employees to improve corporate decision-making and our customer services.

- X5's corporate entrepreneurship programme, X5 Idea Challenge, received 362 applications, 60% more than the previous year.
- Pyaterochka organised a corporate youth council for young specialists, 25 years or age or younger, in retail, logistics and the Company's office. Staff can contribute to the Company's development in two areas: healthy lifestyles and training, development and career.

- The Company's office employees helped our Express Scan service team find glitches in the app. More than 100 influencers from X5's team tested and suggested ideas for improving the X5 Paket subscription.
- Pyaterochka held an ideas competition for students called Next5. Some 156 teams from 19 Russian cities took part.
- Pyaterochka, Perekrestok, Vprok.ru Perekrestok and X5 Transport operate brand ambassador projects.

In 2021, the Company launched Company-wide volunteering programmes that complement X5's Policy on Charitable Giving. X5 Group supports intelligent volunteering through the platform procharity.ru, and encourages employees to volunteer in X5 stores for the Basket of Kindness project. All the Company's divisions are able to initiate their own volunteering projects too.

- X5 Technology employees volunteers as teachers for people with disabilities and people raised in orphanages.
- Pyaterochka held a grant contest for volunteering projects called Leaders of Care, to support five key goals from the Company's Care for the Community corporate programme. The goals are to provide help for children, protect the environment, promote healthy lifestyles, improve housing and transform Pyaterochka stores into centres for mutual assistance. The contest received 99 applications.
- Pyaterochka, together with the All-Russian Society for the Deaf, launched a project to hire people with hearing impairments to collect orders in Moscow and the Moscow region.



Digitalisation and efficiency

The Company works to improve the efficiency of its functions by automating and simplifying its processes, transferring all HR services to digital formats and supporting platforms and mobile applications that make its services available to every employee.

X5 is transitioning systematically to an electronic document workflow and is collecting employee data to develop and deepen HR analytics at the level of both the Group and its various divisions.

- The Company launched a number of new analytics services and HR
 management systems, including analysing the influence of key HR
 indicators on the Company's business performance through market
 analysis and medical statistics, monitoring the level of COVID-19 vaccination
 and analysing the competitiveness of X5's employee remuneration.
- X5 launched projects to analyse the interests of our employees, such as analysing the use of employee benefits programmes, analysing gratitude on the corporate portal and other things.

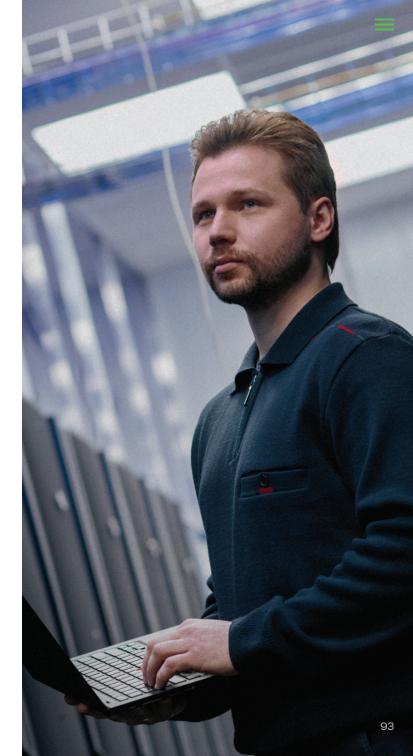
X5 pays close attention to means of increasing the efficiency of employees and HR functions. We continue to centralise our services at our multifunctional service centre.

- Pyaterochka expanded its mass hiring system, Skillaz, across the entire network. Skillaz is also used by Perekrestok, X5 Transport and others.
- HR monitoring. A system for managing wages on the basis of operating data from the labour market was introduced at Pyaterochka and Perekrestok.
- The process of sending offers to successful candidates was automated in some of X5's divisions. Digital offers were developed in-house, reducing the time spent preparing job offers by 75%.
- The Clue platform (data-driven staff management) is already available at all Perekrestok stores. Clue helps prevent payroll overspending and increases retail productivity.
- Employee resource planning was automated through the launch of Team Planner at X5 Technology.

- The basic functionality of our automated task management system was made available at Pyaterochka, increasing the efficiency of its operations by ensuring that standards are observed.
- A Minimum Viable Product system was developed to set and monitor task fulfilment for employees and managers. Its The system makes tasksetting more efficient by decreasing the amount of time employees spend on fulfilling their tasks, allowing for goals to be corrected and their status to be updated more quickly and with greater frequency.

Employees' personal accounts on our mobile applications are becoming the common portal for the Company's services, which is especially important for retail and operating personnel. Today employees can complete almost any task through their online account, from ordering records to requesting relocation and signing Company documents with an electronic signature. For example, Pyaterochka automated the relocation process through personal accounts and set up a process for estimating planning and quotas for the staff reserve. The number of application users grew by 68% in 2021. Since 2021, personal accounts have been available to employees of X5 Transport, 5Post and the Group's new digital businesses.

The Company is developing an HR platform that will enable designs and services to be reused across its divisions. We are creating a unified digital solutions pathway that is available to all functions and employees. This has already enabled us to switch to a unified automated platform for registering business trips and to make Perekrestok's HR monitoring system 90% cheaper than its previous iteration. In 2022, we plan to transition employees from a number of divisions to a new version of the personal account based on Pyaterochka's active digital solutions.





Occupational health and safety

[403-1] [403-2] [403-3] [403-4] [403-5 [403-6] [403-7] [403-8] [403-9]



As part of our occupational health and safety measures (OHS), we strive to identify and implement measures to improve our sustainable safety culture. The Company has adopted an OHS Policy. As a responsible employer, we guarantee every employee the right to a favourable work environment that meets state OHS regulations, in which we are guided by the following principles:

01

Be a leader: all X5 employees are involved in improving and upholding OHS in the workplace. Managers of all levels should set an example for all employees to follow.

02

Identify dangers: identify hazards, assess risks, analyse the root causes of accidents for future prevention

03

Set goals: the Company develops action plans to reduce OHS risks

04

Improve the OHS management system: the Company strives to constantly evaluate and improve its OHS management system 05

Ensure a safe working environment: all equipment and workplaces should comply with national OHS standards

06

Improve qualifications: the Company will ensure that each employee's qualifications are in line with their duties, and that all employees are made aware of up-to-date OHS practices

07

Invest in personnel: incentivise compliance with OHS requirements and implement employees' proposals and ideas to improve OHS

80

Focus on safety: employees act responsibly with regards to their own health and their colleagues'

X5 operates an Occupational Health and Safety Management System (OHSMS) in accordance with international OHSAS 18001 standards. The system can be applied at all management levels, and allows for the timely identification of potentially dangerous situations, the development of appropriate countermeasures to ensure working conditions meet safety standards, and the adoption of informed management solutions.

- The main legislative act governing our OHS system is the Labour Code of the Russian Federation (Art. 212).
- The regulatory document for the development and implementation of an OHSMS is Standard Regulations on an OHSMS. This document sets out the requirements for an OHSMS.
- On the basis of the Standard Regulations on the OHSMS, our other business units have developed their own OHSMS.

All X5 employees are covered by the Occupational Health and Safety Management System.

In accordance with OHS Policy, we encourage employees to participate in the development of our Occupational Health and Safety Management System, and offer consultations on request.

Our employees can report work-related hazards and hazardous situations to their direct supervisor, or notify the Company through a dedicated email address, hotline, or via a corporate mobile application. Our OHS Policy stipulates the right of every employee to remove themselves from potentially dangerous or hazardous work situations. All employees who report work-related risks or hazards are protected against reprisals.

See OHS organisational chart in Annual Report 2021.





2021 OHS highlights

- On 1 January 2021, new occupational health safety legislation came into force in the Russian Federation. Internal regulatory documents were reviewed and adjusted, and unscheduled training of personnel was conducted.
- On 1 April 2021, a new procedure for mandatory, preliminary and periodic medical examinations for employees (Order 29n) came into force, in accordance with which the procedures for medical examinations and relevant internal regulatory documents were adjusted
- Successful functioning of the Occupational Health and Safety Management System, including the following key activities:
 - Conducting a special evaluation of occupational health and safety in every workplace in accordance with an approved timetable
 - Conducting occupational health and safety training in accordance with approved procedures implemented periodically
 - Conducting periodic occupational health and safety training at licensed training centres and in the enterprise's commissions
 - Conducting internal audits of occupational health and safety observance in the workplace
- Participated in a programme to finance injury prevention, paid for by the Social Insurance Fund
- X5 Corporate Centre LLC observed OHS standards and requirements, as a result of which not one case of occupational disease was registered
- Key OHS leaders from X5's divisions took part in an exhibition called "Occupational Health and Safety" in Moscow, which improved their expertise and enabled them to exchange experiences of solving urgent problems with colleagues at other companies
- Updated a range of functions in the automated control programme for employees' medical examinations

• Pyaterochka:

- Launched a new tool called "open window" for evaluating the quality
 of pallets delivered to stores, which decreased injuries as a result
 of broken pallets. Employees evaluate the quality of coiling
 and kitting through a questionnaire. Feedback is relayed to Logistics,
 which implements corrective measures
- Employees of the Maintenance Division underwent training according to ISO 45000 standards, which will enable the Company to standardise and bring its occupational safety structures to Western levels
- Professional risk evaluation training was held according to ISO 45000 standards, which will enable leaders of action teams and commissions to evaluate safety risks correctly and efficiently
- Conducted an audit of production processes, which exposed several issues not regulated by the Occupational Health and Safety Management System. From the audit's conclusions, the Company has created a road map of the necessary requirements and normative legal acts that need to be reviewed or updated
- Perekrestok transferred routine occupational health and safety procedures to the Service Centre. All OHS specialists were transferred to X5 Synergy as part of a Company-wide centralisation of support functions in one location

• X5 Transport:

- Developed and implemented occupational health and safety standards in all business activities, which are based on normative government requirements and the Company's OHS Policy
- Introduced an internal audit system to ensure the Company's compliance with relevant legislation and to prevent infringements of employment rights
- Distribution of PPE is now registered electronically
- Refurbished rest and recovery rooms for hauliers, and purchased mobile rest and recovery rooms and canteens
- Modernising the depot and improving working conditions for drivers by installing heating, air conditioning and sleeper cabs in all transportat vehicles
- Chizhik opened new facilities and hired regional HR managers, a new position in the company, who ensure the observance of occupational safety in the divisions they are responsible for
- 5Post expanded its occupational health and safety staff. One OHS specialist was hired, and an HR manager position was established at the sorting centre, who will be responsible for OHS
- Vprok.ru Perekrestok set up an OHS service. Four darkstores hired OHS specialists
- X5 Transport is working on improving working conditions for hauliers and other employees
 - A training programme on safe driving was launched together with the technology's producers in order to raise professionalism
 - An innovative anti-sleep system began installed in vehicles, which monitors the condition of drivers at the wheel





	2020	2021
Number of identified OHS violations ¹	10,884	19,670
Number of OHS violations resolved within 5 days	8,290	15,897
Number of employees taking part in OHS training (excluding compulsory briefings)	71,925	109,628
Percentage of employees covered by OHS management system	100%	100%
Number of recordable work-related injuries, incl. ²	214	255
Number of recordable work-related injuries, excluding fatalities, incl.	212	251
- Among employees	212	248
- Among employees of contractors	n/a	3
Number of fatalities as a result of work-related injuries, incl.	2	4
- Among employees	2	4
- Among employees of contractors	n/a	0
Number of hours worked among employees	451,251,238	462,289,874
Lost time injury frequency rate (LTIFR) among employees ³	0.47	0.55

Improving occupational health and safety competencies

We provide health and safety training in order to improve overall occupational health and safety (OHS) competencies within X5 Group. Completion of regular health and safety training is essential for both managers and operational staff, and includes workplace methods and techniques, first-aid provision, health and safety courses and workplace training. All new employees undergo OHS training remotely, which includes familiarising the employee with their basic legal rights and obligations under OHS and labour laws, and on their first day. Within structural units, direct managers provide practical OHS instruction and are responsible for ensuring that work is completed under the supervision of more experienced employees and in compliance with relevant safety measures.

Measures to promote employee health and well-being

We provide voluntary medical insurance for a number of categories of employees and offer discounts for employees' relatives. We also offer corporate discounts for fitness clubs, organise testing of employees for COVID-19, conduct annual flu vaccinations and offer a course titled "Keeping healthy nutrition simple" at Perekrestok. As part of the medical examination process, Pyaterochka trains employees on regulatory sanitation requirements.

All office and certain line personnel have access to our voluntary health insurance policy. Line personnel can also use Telemedicine services. Employees of X5 Transport and their relatives who fell ill with COVID-19 were offered consultation and, where necessary, a doctor's appointment and PCR test through voluntary health insurance.

Our voluntary health insurance includes:

- Treatment of COVID-19
- Regular over-the-phone appointments with doctors
- Rehabilitation after severe cases of COVID-19
- Employees can choose to organise a post-covid clinical assessment
- Over-the-phone COVID-19 consultation through the Telemedicine programme are open to all employees and their families
- An email address was set up where employees can ask any questions they have about coronavirus
- Financial support in the case of severe illness



¹ An increase in identified OHS violations to 2020 was caused by the lifting of restrictions on internal inspections, increase of the number of inspections by state bodies, as well as changes in the methodology for detecting violations within the company.

² An increase in recordable work-related injuries compared to 2020 was related to tense conditions due to the COVID-19 pandemic, which led to an increase in the intensity of work and employees' workload due to the large number of staff calling in sick.

³ Incident rates are calculated based on 1 million hours worked. Only X5 employees' recordable work-related injuries are used in this calculation, including fatalities. Employees of contractors and third parties are excluded in accordance with the law. An analysis of injuries (statistical data) on the number of accidents was used in the calculation.





Flexible working hours and working from home

A part of the X5 Home Office remote work project, employees can arrange hybrid or remote work.

Flexible working hours apply to both office and store staff. Perekrestok has made this an element of its EVP, which enables it to hire employees on schedules for several hours a day at their request and to give jobs to young mothers, students and other vulnerable categories of job seekers.

On 1 January 2021, changes in the Russian Labour Code came into force with regard to occupational safety for remote workers (Article 312.7). Interactions with employees working remotely were altered as a result: workers are exempt from occupational safety instructions, and employees are familiarised with safety rules for working with office equipment.

Childcare institutions or contributions

Pyaterochka partially compensates employees for children's visits to health resorts and camps. Benefits are regulated by the Regulation on the Provision of Additional Benefits to Employees.

Managers at all levels play a leading role in these activities.

The Company has adopted an OHS Policy. As a responsible employer, we guarantee every employee the right to a favourable work environment that meets state OHS regulations, in which we are guided by the following principles:

- Complying with legal requirements
- Prioritising the life and health of employees
- Continuously developing a culture of safety
- Creating and ensuring a safe working environment for suppliers

Logistics safety

X5 has an anti-sleep programme in place that solves a problem well known to all hauliers: the system is installed in vehicles to monitor the driver's condition. If the system believes that something is not right - for example, that the vehicle is beginning to drift from its lane - a siren sounds to wake the driver up. This not only improves the safety of our drivers but also that of other road users. Preliminary data suggests that this system can reduce the risk of road accidents by 40% on average, since heavy vehicles present the biggest danger on the road. This not only improves the quality of driving, through timely reaction to incidents on the road, but also helps prevent dangerous driving, which can also activate the system. According to the results from 2021, 20% of fleets of the Moscow region have equipped an anti-sleep system.. The programme was introduced in 2020 and continues to be expanded every year.





Key measures and practices

- Online meetings are organised regularly between each business unit's key OHS managers, chaired by the Head of Health and Safety
- The Head of Health and Safety shares information on upcoming OHS webinars and conferences conducted outside the Company (in online and offline formats)
- The Head of Health and Safety sends regular updates on all changes to OHS normative legal acts. Updates are sent to the OHS Manager of every business unit and retail chain
- A chat has been set up to aid communication between OHS managers of all business units and retail chains on urgent OHS matters
- We continue to transfer OHS training online. External training is now primarily held online for OHS specialists and operational staff of the Corporate Centre, Karusel, Perekrestok, X5 Technology and X5 Synergy
- All business units conduct regular consultations with employees on questions of occupational health and safety via email, telephone and online meetings
- Regular OHS online training is held for line managers, who oversee the observation of OHS requirements in the divisions they are responsible for
- Meetings and consultations are held with personnel on OHS during audits
- Meetings are held with division managers regarding filing of OHS documentation
- In December 2021, Perekrestok conducted focused research in its DCs, gathering feedback from employees on OHS. The results will be taken into account for further decision making
- Every large Pyaterochka store has an initiative group or commission that
 monitors hazards and evaluates risk in the workplace. Leaders undergo
 a special training programme called Evaluating Professional Risks to explain
 the causes of professional injuries
- The Head of Health and Safety's contact details are available on the internal portal. Oral and written consultations were held with employees

Occupational risk management

The principle of occupational risk management is at the foundation of our OHS system. Assessing and managing occupational risks includes, among other things, determining occupational risk factors, identifying exposure levels that are safe/dangerous for workers, monitoring workplace health and safety and analysing the causes of accidents and occupational illness. Our policy for improving working conditions includes compiling a risk register and analysing the risks (a risk assessment) inherent in employees' work.

COVID-19

The Company as a whole took the following measures:

- Vaccinations in the workplace
- Promoting awareness of COVID-19 risks in the Company's offices, warehouses, dark stores, haulier companies, DCs and stores
- Regular emails and communications reminding employees of the importance of vaccination
- Regular consultations with doctors
- Included vaccination in the voluntary health insurance policy
- Included vaccination consultation in the Telemedicine service
- Set up an email address for any questions on vaccinations

Additionally, business units:

- Set up vaccination points in offices
- Invited medical professionals to facilities to hold consultations
- Voluntary health insurance and Telemedicine were suspended for unvaccinated employees, to encourage vaccination take-up
- Pyaterochka expanded the number of vaccination points for its employees
- Employees of Perekrestok's DCs were provided with free transport to clinics for vaccination

Thanks to the efforts of every one of our employees, X5 was able to continue operating without interruption and ensure the safety of its employees and customers. We introduced a number of sanitary and epidemic-prevention measures, and actively promoted the vaccination of our employees to prevent the spread of COVID-19. We allowed many employees to work remotely and regularly tested employees for COVID-19. COVID-positive employees were sent home in a timely manner and were replaced with staff from our mobile teams to react quickly and flexibly to the challenges posed by the pandemic.



Occupational health and safety

[403-1] [403-2] [403-3] [403-4] [403-5 [403-6] [403-7] [403-8] [403-9]

Managing contractor safety

To ensure employee health and safety, including personnel from external contractors, we have implemented a corporate standard for interacting with contracting entities based on the principle of professional risk management including for work conducted by contractors. One of the main aims of organising work with contractors under the OHSMS is to manage activities, coordinate efforts and ensure the coherence of work based on confidence stemming from the implementation of systematic oversight of contractor personnel's adherence to health and safety practices. All contractor staff working in X5 premises are required to undergo introductory health and safety training for representatives of third-party organisations. The main responsibility for health and safety is assigned to contractors under the supervision of X5's structural division heads.

Every organisation supplying contracted services to X5 is contractually obliged to ensure the health and safety of its employees, and compliance is the responsibility of the contracting organisation.

Preventing work-related injuries

The Company operates three lines of defence against hazardous incidents: facility leadership, the safety service and the OHS service.

The Company operates a duty officer service, which is notified of all incidents at our business units' facilities. Information about an incident is sent to an email address that is monitored by managers and on-duty officers. If an incident occurs, an investigation is launched in accordance with Russian labour law. Corrective measures are developed through a process of regular evaluation of professional risks. We also reduce risk significantly by eliminating hazards and avoiding dangerous tasks.

As part of its investigation and analysis into work-related injuries, the Company groups key causes of incidents. Working groups have been set up between relevant structural divisions, which develop hypotheses, some of which are eliminated through additional training and research. The remaining hypotheses are tested with a range of auxiliary methods, such as evaluating quality and feedback, before being launched as pilot programmes, where the measures the working group believe will have the most influence are tested.





Occupational health and safety

[403-1] [403-2] [403-3] [403-4] [403-5 [403-6] [403-7] [403-8] [403-9]

Investigating incidents and accidents

Russian labour law requires compliance with procedures for investigating and responding to industrial accidents. All incidents involving Company employees or contractor staff are subject to mandatory investigation: in addition to providing first aid to injured workers and preventing the escalation of emergencies, all incidents are investigated and documented by a business unit commission. In the case of severe or fatal injuries, representatives from state regulatory bodies are also included on the commission.

Work-related incidents are also investigated, even though there is no obligation to do so under Russian labour law. In the event of minor injuries or narrowly avoided incidents, the OHS service works together with the head of the facility to conduct an internal investigation and to implement corrective measures.

An analysis of incidents and accidents conducted in 2021 showed that the vast majority of incidents were "falls on level surfaces" or "falls from heights". Business units have therefore taken the following measures:

- Internal OHS should pay special attention to flooring (holes, ledges, interference with the integrity of flooring material and similar)
- Set up a maintenance service for to eliminate infringements
- Include safe maintenance of flooring material in the maintenance service's inspection checklist
- Renew warning notices at elevation drops
- Inspect staircases and stepladders for safety

In 2021, Pyaterochka focused on women in the workforce and unloading vehicles in stores. Pilot projects using new equipment to ease unloading operations were launched and proved to be effective. Through a number of meetings of the working groups, it was revealed that broken pallets were one of the main causes of work-related injuries. Pyaterochka therefore introduce an "open window" tool for evaluating the quality of pallets delivered to stores according to a range of criteria: height, quality of coiling, placement of products on the loading unit (from heavy to light), etc. The system reveals improper loading of deliveries. The implementation of this project has significantly reduced the risk of one of the main causes of accidents.

Vprok.ru Perekrestok revealed a previously unconsidered risk: large angles between the warehouse floor and ramps, which leads to the spontaneous movement of trolleys. Elimination of this risk has been included in the project to refurbish the company's facilities in 2022.

The Company regrets to announce four fatal road accidents at X5 Group in 2021 (including one accident from the previous period). In one case, an external party was at fault; three cases were caused by traffic violations by our employees.

An analysis of the injury frequency rate (the number of accidents per 1,000 employees) shows a small increase from the previous year: 0.79 in 2020, 0.91 2021.

The increase in the injury frequency rate is related to tense conditions caused by the COVID-19 pandemic, which led to an increase in the intensity of work and employees' workload due to the large number of staff calling in sick.

According to the Company's research, the main causes of accidents in 2021 were "carelessness of the injured party", which made up 39% of the total number of injuries; 21% were "illegal activity by third parties (customers)"; and 11% were a "violation by the injured party of OHS requirements".

In order to prevent accidents in the future, the Company's business units will:

- Conduct unscheduled training with employees on the reasons and circumstances causing accidents
- Answer questions on OHS requirements at the workplace at daily meetings
- Implement measures to eliminate the causes of accidents according to the results of research, indicating responsible parties and a time frame for completion

Business units are also planning to introduce the following measures in 2022:

- Review the procedure for interactions between employees and customers in cases of theft in order to protect employees' privacy. Consider strengthening private security in stores
- Conduct an audit of OHS training courses for the presence, completeness, relevance and availability of material
- Collect feedback from employees on their understanding of material (by testing their knowledge before and after training)
- Identify a training system that is optimised for use on mobile platforms, set aside training hours, etc.



In 2022, the Company will continue to transform its operational management models, including the development of the Institute of the Board of Directors, making changes to the authority of joint management structures and expanding the powers of on-site managers.

X5 will improve the flexibility and adaptability of its business management and processes and personalise its services for both customers and employees. The Company also plans to develop methods for flexible resource planning, including shift timetables for various employee groups, to continue to move towards electronic document workflow, to digitalise its services and automate business processes, and to deepen HR analytics as part of its expansion of HR functions in 2022.

The retention and engagement of employees through the integrated work of all HR functions will remain a priority for the Company, from improving working conditions to personalising onboarding and training programmes. Efforts to ensure the well-being of staff will continue to form part of the Company's care for employees and their health. We will also continue to expand opportunities to enable employees to build their career at X5 through internal transfers .

Perekrestok

- We will continue to improve inclusivity.
- Perekrestok has already conducted training for employees on inclusive stores. Company facilities are being certified to this end.
- In 2022, 100 Perekrestok stores will undergo an audit, as will stores that received certification in 2021. The company also plans to add stores in the Moscow region, Leningrad region and Nizhny Novgorod to this list.
- In 2022, Perekrestok plans to audit its digital platforms, such as its site
 and mobile application. The company is also developing online training
 for employees on communicating with customers individually and helping
 them choose products.

OHS goals for 2022

- Perekrestok will also continue to develop a culture of leadership and safety.
- Prevent occupational injuries and diseases
- Expand advanced domestic and overseas experience of improving OHS practices
- Review the Company's by-laws in response to changes to Russian labour law and OHS legislation, and implement appropriate measures. Conduct unscheduled tests of all workers' OHS knowledge and unplanned training of specialised workers
- Move to electronic document workflow on OHS in all divisions.
 Conduct OHS training and a special evaluation of working conditions
- Implement a project to automate registration for medical examinations (through the portal) across all X5 business units (in 2022, across four business units)
- Launch a project to automate registration of uniform distribution for Perekrestok, the online hypermarket and 5Post
- Complete planned measures to improve OHS conditions in business units
- Perekrestok:
 - Develop standardised risk evaluation cards for all positions, which will enable work factors with the most risk of injury to be evaluated and the planning of measures to reduce these
 - Implement automated checklists for internal OHS inspections at distribution centres

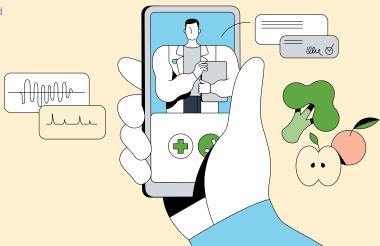
- Introduce cardinal OHS rules at distribution centres and focus on safety at DCs
- Automate registration of the distribution of special uniforms

• Pyaterochka:

- Update and integrate the OHS management system into all key industrial processes
- Describe OHS processes in working groups for their optimisation
- Describe work processes with contractors at all stages to eliminate the risk of injuring third parties

• X5 Transport

- Organise health resort treatment for workers approaching retirement age
- Renovate relaxation rooms for drivers at eight haulier companies (Veliky Novgorod, Kuznetsk, Perm, Ekaterinburg, Ufa, Sochi, Nevinnomyssk, Krasnoyarsk)
- Acquire or develop OHS training courses



08

Local communities

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Our approach and 2021 highlights

[203-1] [203-2] [413-1] [415-1]

Since its founding, X5 Group has strived to contribute to the health and well-being of residents of the areas that it operates in. We will continue to work towards these aims as part of the Company's sustainable development strategy, in accordance with UN SDGs of Zero Hunger and Good Health and Well-being. The community projects we are implementing have been developed on the basis of our understanding of priority areas where we can have the most meaningful impact on the health and well-being of local communities.

We also work towards achieving Russia's national development goals, drawing on specialist opinion from NGOs and global best practice. X5's Corporate Brand department, its retails chains' marketing departments and Pyaterochka's Transformation Office are responsible for implementing the Company's charitable programmes.

The Company has conducted a complex evaluation of the impact of its charitable programmes on various aspects of life in local communities. We have developed a monitoring system, regulations on regular assessments and theory-of-change maps for important projects.

In 2021, the Company's Charity Policy was reviewed, and new priorities for charitable work were identified. The Policy sets out general principles and rules for charitable activity and describes key areas of funding for charitable projects. In addition, the Policy defines the roles and responsibilities of employees involved in implementing charitable programmes. The Policy applies to all divisions of X5 Group.

The Donors' Forum project, which aims to support, develop and promote corporate charity and community investments, upgraded the Company from C (developing practice) in 2020 to B+ (advanced practice) in 2021 in its Leaders of Corporate Charity rating.

Our community projects received a number of awards last year:

- The Basket of Kindness project was a finalist in the #alltogether prize
- The Safety Zones project won Most Important Community Project at the Mum's Choice 2021 Awards
- Our documentary show "The Returned 2", about saving missing persons, which was made for the Liza Alert organisation and aired on TV-3, took third place at the Effie Awards and was recognised at the National Business Communication Awards
- The Help project won a number of professional and communications prizes







[203-1] [203-2] [415-1]

The Company has identified the following priority areas of support for charities:

- Food assistance
- Creating a safe environment
- Health and healthy lifestyles, children's sports

The Company does not donate money, nor does it provide any other forms of assistance to non-charitable organisations (including commercial organisations and political parties, movements and associations) or for events organised by non-charitable organisations. X5 Group also does not offer direct financial assistance to individuals. Our goal is to provide transparent access to information on the Company's charitable activities and to raise awareness of X5's expectations regarding the observance of applicable legal requirements during the implementation of its charitable programmes.

To achieve this goal, we abide by the following commitments:

- To publish data on the Company's charitable activities in the sustainability section of our annual report and in a separate sustainability report
- To regularly monitor the use of allocated funds
- To monitor and analyse requests from NGOs
- To conduct outreach campaigns through the media

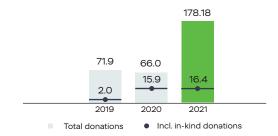
Every non-governmental organisations that works with the Company provides feedback after completing a project.

In 2021, the Company allocated a total sum of RUB 178 mln to charitable initiatives.

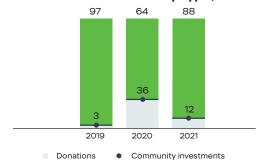
In June 2020, changes to tax legislation were introduced that reclassified donations to socially oriented non-commercial organisations included in state registries as non-operating expenses. This has enabled X5 to expand the volume of its food aid, which has proved particularly important during the COVID-19 pandemic. In 2021, the Company paid particular attention to providing food assistance to families facing material hardship, the elderly shielding at home and doctors.

According to the Donors' Forum, an association of the largest grant-making organisations in Russia, X5 improved its rating as a socially responsible company from C to B+ (advanced practice).

Donations to initiatives to help those in need, RUB mln



Donations breakdown by type, %



X5 Group's social and economic contributions

At the beginning of 2022, the Company published its first report to present an evaluation of X5 Group's impact on the Russian economy by sector and by various levels of influence. The main focus of the report was to evaluate the significance of the employment, income and value that the Company directly creates and supports in the Russian economy as a result of its economic activity.

To evaluate its economic impact, X5 Group performed an input-output analysis using the Company's detailed data on employment, procurement of goods and services, and on other expenses, in addition to Russian macroeconomic data.

The Company also evaluated additional contributions to the economy – namely, value-added productivity per employee, investment per sector, tax payments to federal and regional budgets and the development of digitalisation in the retail sector. The Company also presented the results of its social contributions – namely, programmes and support measures taken during COVID-19.

More detailed information on the methodology used to calculate X5 Group's social and economic impact and the results of its social and economic contributions can be found in the document linked here.

Food assistance

Food banking

In August 2015, X5 launched the nationwide project Basket of Kindness, together with Foodbank Rus, to donate food aid to those in need. In 2021, 3,769 stores were involved in the project. In total, 355.7 tonnes of food was collected and donated to the elderly, large families and the disabled.

Almost

2,300

corporate volunteers took part in the project, and more than 184,900 people, or around 96,700 families, received assistance.

Citywide food drive

In 2021, X5 and Foodbank Rus held a regional food drive in the Rostov region and citywide food drives in Chelyabinsk, St Petersburg, Pskov, Nizhny Novgorod and Moscow. Through this initiative, 100 tonnes of food aid was collected, which was donated to 12.200 families.

Basket of Kindness for animal shelters

As part of the Basket of Kindness project, we also provide aid to animal shelters. Some 128 Karusel, Perekrestok and Pyaterochka stores in 11 cities installed collection boxes for animal feed. In 2021, customers donated 9 tonnes of feed directly, while an additional 19 tonnes was purchased thanks to donations made through the website корзинадоброты.рф and by X5.

Basket of Kindness charity card

In July 2021, in honour of its 15th anniversary, the Company launched a new way to provide food aid as part of its Basket of Kindness community project. Some 2,940 families from 15 regions received charity cards enabling them to purchase products from Perekrestok stores.

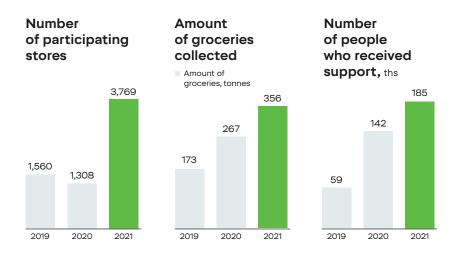
Fourteen categories of goods are available for purchase, excluding alcohol and tobacco products. Aid is offered to single mothers, large families and families facing material hardship. The Company transfers funds from Foodbank Rus, which deposits RUB 1,000 every month onto the charity cards.





Food assistance

Basket of Kindness results



- In 2021, 3,769 stores were involved in the project
- A total of 355.7 tonnes of food was collected and donated to the elderly. large families and the disabled
- Approximately 9,000 volunteers took part in the project, including fund volunteers and more than 1.700 X5 corporate volunteers
- More than 184,900 people, or around 96,700 families, received assistance

As a result of this programme, 12,800 cats and dogs in 13 shelters in Moscow, the Moscow region, Rostov-on-Don, Kazan, Volgograd, Samara and other regions received approximately 28 tonnes of food.

Support for the Urban Animal Protection Fund

Mnogo Lososya donates 5% of its revenue from food to cats through the Urban Animal Protection Fund, and conducts joint events with the Cat Bureau cat cafe, which is owned by the Fund.

Home delivery of food aid

Pvaterochka donated almost 70 tonnes of food to veterans, doctors, families, people affected by emergencies and elderly people living alone.

The Corporate Centre donated 40 tonnes of food to doctors, families and pensioners.

Perekrestok donated 5 tonnes of food to doctors, families and veterans.

Assistance was provided to:

- 33,000 doctors working with COVID-19 patients at 40 hospitals in 10 regions
- 20.259 children
- 7,139 veterans
- 1,395 people affected by emergencies

Over 72,000 people received a total of 114.5 tonnes of food and household cleaning products.



The Pomosch project

In 2021, Perekrestok supported the I'll Help foundation's Pomosch project, which was founded by the actor Nikita Kukushkin. Perekrestok is investing in developing the project's digital platforms and is the project's general partner as a food retailer. In 2021, the Company donated approximately RUB 31 million to the project. Thanks to our cooperation with the I'll Help foundation, 1,216 people under the project's care, from 26 Russian cities, receive monthly food aid through sets of 33 items weighing 20 kg and worth RUB 3,500.



Supporting children in need

Life Line Foundation — donation boxes

We have installed donation boxes for the Life Line Foundation, an organisation that helps children with serious illnesses, at more than 400 stores. In 2021, RUB 10 million was collected through our stores, which helped 57 children make full recoveries.

Life Line Foundation - Candies of Kindness

Customers can purchase Candies of Kindness at the checkout counters at every Pyaterochka store. RUB 5 from the sale of every candy is donated to cover the costs of operations for those under the care of the Life Line Foundation. In 2021, the project raised approximately RUB 10 million for the treatment of 23 seriously ill children.

Points for children

For the past six years, members of the Perekrestok Club loyalty programme have been helping children by donating their bonus points to charitable causes. Perekrestok converts the points into roubles at a rate of RUB 1 for every 10 points, before doubling the total amount. In 2021, more than RUB 500,000 was donated to the Life Line Foundation through this programme, as a result of which four children received highly qualified medical care.

Heart to heart

From the middle of December 2020 to 15 January 2021, RUB 1 from every RUB 1,000 spent in Perekrestok stores was donated to the Life Line Foundation. As a result, RUB 10 million was raised, which helped 19 seriously ill children make full recoveries.

Kindness bags

Since the end of 2020, Perekrestok supermarkets across Russia have been selling shopping bags made from natural cotton with the words "I'm carrying kindness". Kindness bags can be found near checkout counters and cost RUB 199. RUB 10 from each bag sold is donated to the Gift to an Angel fund.

The inscription "I'm carrying kindness" was made with the help of Dobroshrift in order to raise awareness of children with cerebral palsy. Thirty-three children under the fund's care wrote a letter each, which professional designers used to create a unique typeface. The initiative seeks to raise awareness of those suffering from diseases of the central nervous system.

In 2021, RUB 650,000 was donated, which funded a two-day seminar on logopaedic rehabilitation at home through the Schools for Unique Children project.

Kindness lids

Plastic lid collection containers were installed in 323 Perekrestok supermarkets in partnership with Henkel. The plastic will be recycled and used to make special ramps which will be installed at the entrance to supermarkets in various regions. Around 11 tonnes of plastic lids were collected at the beginning of 2022. The money received from the lids collected is donated to a charity to help orphaned children. Over the period the initiative was held, almost RUB 280,400 was donated to this charity.

Supporting people with disabilities

Unity deaf-blind support foundation - food support for quiet homes

Since January 2017, the Company has been supplying groceries free of charge to residential institutions for people with visual and hearing impairments. Pyaterochka stores in Troitsk and Lyubertsy provide groceries to two institutions. In 2021, almost RUB 1.4 million worth of food was donated.

Accessible stores

In 2021, Pyaterochka launched a project to adapt its store areas to the needs of people with visual and hearing impairments, a particularly vulnerable sector of society. Eleven stores in Moscow and St Petersburg are taking part in the pilot to test the Speaking City system, which helps those with visual and hearing impairments orient themselves at the entrance and inside store areas.

Perekrestok launched a programme called Accessible Environment, which aims to improve supermarket infrastructure for people with disabilities. The project is currently being implemented in five regions: Moscow, St Petersburg, Ekaterinburg, Voronezh and Belgorod. Thirty stores have received certification for accessibility, of which 18 are in Moscow, 10 in St Petersburg, and 2 in Ekaterinburg. In the future, we plan to expand this project to other regions. Supermarket employees undergo training on communicating with customers with health-related limitations.



Assistance for lost or disoriented people

The Centre for Missing Persons and the Liza Alert search-and-rescue team – Safety Zones

Safety Zones are special areas in stores designated by a distinctive orange geolocation pin, which act as a point of reference for lost or disoriented people. Any lost or disoriented person can ask an employee for help in any Pyaterochka or Perekrestok store, or wait to be offered help.

The Safety Zones project was launched in spring 2019 at more than 2,600 Pyaterochka stores in Moscow and the Moscow region, and by autumn had expanded to all Pyaterochka stores in 66 Russian regions. By November 2020, all Perekrestok stores had also joined the project.





Preventing social orphanhood

Every year more than 50,000 children in Russia are orphaned. For 8 out of 10 of these children, one or both parents are still alive. It is the inability of the parents to handle crisis situations that leads to the social orphanhood of their children. X5 has donated funds to Russia's largest family strengthening centre located in St Petersburg. The centre brings together knowledge, approaches and methodologies for preventing social orphanhood which are then scaled up to all regions where SOS Children's Villages are located. The Centre's support helps the development of the entire programme, which offers a broad range of possibilities to families who find themselves in difficult circumstances.

SOS Children's Villages, with X5's support, organise individual consultations based on a specially developed plan for each family in need, in addition to various events, masterclasses, training, educational assistance and comprehensive support for members of the family. In 2021, 447 families, including 578 children and 747 adults, received support.

Local community centres

Pyaterochka has taken on a new role in the community as a place for neighbourly conversation and mutual assistance.

The interests, participation and development of children from local communities, including children of our employees, are at its focus:

- Fruit gifts
- Excursions around stores
- GoodPost
- Friendship notebooks
- Basket of Champions
- Exhibitions
- Quests and masterclasses



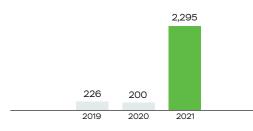


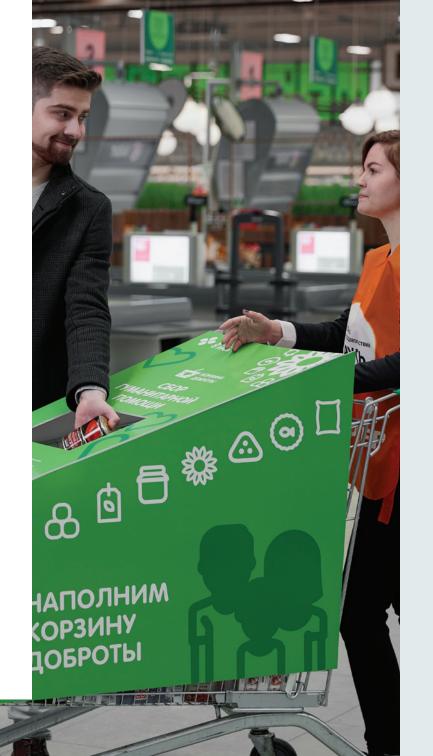
Corporate volunteering

In 2021, corporate volunteering was more systematic, and a range of initiatives, including the Week of Kindness, trips to animal shelters and a new programme on intellectual volunteering, were held. A system to encourage corporate volunteering was also developed and introduced.

In total, there were almost 2,300 corporate volunteers in 2021

Number of employees taking part in social projects (volunteer activities)





Our plans



- · Achieve targets for charitable metrics:
- Increase the number of families receiving food aid through the Basket of Kindness project to 30%
- Support the operation of Safety Zones in all Pvaterochka and Perekrestok stores to help lost and disorientat people



• Develop and launch a food-sharing project



 Develop current programmes aimed at local communities



Pyaterochka was the first private business in Russia to support the federal approval of a new joint mechanism for solving social problems, thanks to a partnership between the government, investors, the expert community and non-commercial organisations. Pyaterochka was announced as the organiser of a children's health project aimed at the early diagnosis and prevention of obesity in children aged 6-9 in the Sverdlovsk region. The main part of the project's funding will be provided for 2022 and 2023.



In 2022, Vprok.ru Perekrestok plans to take part in the Delight in Old Age and Care for Animals charitable projects.





Contacts

[102-53]

We would be happy to answer any questions regarding this Report and X5 Group's sustainability agenda. Please send your requests to the Sustainability and Investor Relations departments:

ESG@x5.ru

IRO@x5.ru

Independent practitioner's assurance report



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Independent practitioner's assurance report

To the Supervisory Board of X5 Retail Group N.V.

We have been engaged by X5 Retail Group N.V. to perform a limited assurance engagement, as defined by International Standards on Assurance Engagements. (herein 'the Engagement'), to report on X5 Retail Group N.V. (hereinafter 'the Company') Sustainability Report (hereinafter 'the Report') for 2021 (hereinafter 'the reporting period').

Under this engagement, we did not perform any procedures with regard to the following:

- Forward-looking statements on performance, events or planned activities of the Company:
- Statements of third parties included in the Report.

Applicable criteria

In preparing the Report the Company applied Global Reporting Initiative Sustainability Reporting Standards (hereinafter 'GRI Standards' in Core option and the sustainability reporting principles of the Company as set forth in chapter 'About this report' of the Report (hereinafter 'the Criteria').

The Company's responsibilities

The Company's management is responsible for selecting the Criteria, and for presenting the Report in accordance with the Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the Report, such that it is free from material misstatement, whether due to fraud or error.

The Practitioner's responsibilities

Our responsibility is to express a conclusion on the presentation of the Report based on the evidence we

We conducted our assurance engagement in accordance with International Standard for Assurance Engagements (revised) International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (hereinafter 'ISAE 3000'), ISAE 3000 requires that we plan and perform our engagement to obtain limited assurance about whether, in all material respects, the Report is presented in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

Our independence and quality control

We apply International Standard on Quality Control 1 (ISQC 1), and accordingly, we maintain a robust system of quality control, including policies and procedures documenting compliance with relevant ethical and professional standards and requirements in law or regulation.

We comply with the independence and other ethical requirements of the IESBA Code of Ethics for Professional Accountants, which establishes the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Summary of work performed

The assurance engagement performed represents a limited assurance engagement. The nature, timing and extent of procedures performed in a limited assurance engagement is limited compared with that necessary in a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance en-

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within information technology sys-

A limited assurance engagement consists of making inquiries, primarily of persons responsible for preparing the Report and related information, and applying analytical and other appropriate procedures.

- Inquiries of the representatives of the Company management and specialists responsible for its sustainability policies, activities, performance and relevant reporting:
- Analysis of key documents related to Company sustainability policies, activities, performance and rele-
- Obtaining understanding of the process used to prepare the information on sustainability performance indicators of the Company;
- Analysis of the Company stakeholder engagement activities via reviewing register of communication and results of stakeholder meetings conducted by
- Benchmarking of the Report against sustainability reports of selected international and Russian peers of the Company and lists of sector-specific sustainability issues raised by stakeholders;

Совершенствуя бизнес.

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- Review of a selection of corporate and external me- Assessment of compliance of the Report and its dia publications with respect to the Company sustainability policies, activities, events, and performance in the reporting period:
- Analysis of material sustainability issues identified by the Company:
- ▶ Identification of sustainability issues material for the Company based on the procedures described above and analysis of their reflection in the Report;
- Review of data samples regarding key human resources, environmental protection, health and safety, and charitable activities etc. indicators for the reporting period, to assess whether these data have been collected, prepared, collated and reported appropriately:
- Collection on a sample basis of evidence substantiating other qualitative and quantitative information included in the Report at the headquarters level;

- preparation process with Company's sustainability reporting principles:
- Assessment of compliance of information and data disclosures in the Report with the requirements of the Core option of reporting 'in accordance' with the GRI Standards.

We also performed such other procedures as we considered necessary in the circumstances.

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Report is not represented fairly, in all material respects, according to the Criteria.

TSATR - Audit Services Limited Liability Company 27 May 2022

Details of the independent practitioner

Name: TSATR - Audit Services Limited Liability Company Record made in the State Register of Legal Entities on 5 December 2002, State Registration Number 1027739707203. Address: Russia 115035, Moscow, Sadovnicheskaya naberezhnaya, 77, building 1.
TSATR - Audit Services Limited Liability Company is a member of Self-regulatory organization of auditors Association "Sodruzhestvo". TSATR - Audit Services Limited Liability Company is included in the control copy of the register of auditors and audit organizations, main registration

Name: X5 Retail Group N.V. Record made in the State Register of Legal Entities on 13 August 1975, State Registration Number 33143036. Address: 1077 XV. Zuidolein, 196, Amsterdam, The Netherla

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Annex







GRI Content Index 115
SASB Content Index 126
TCFD compliance statement and index 128
UN SDGs content index 132





GRI Standards Indicator	Description	Reference	Page	Comments
GRI 102: General Disclo	sures 2016			
102-1	Name of the organization	Title		
102-2	Activities, brands, products, and services	About the Company: Business model; AR: Business model ¹ ; AR: Our formats	10-12	
102-3	Location of headquarters	GRI Content Index		The Company's HQ is located in Amsterdam.
102-4	Location of operations	About the Company: Business model, Geography of operations	10-12, 13	
102-5	Ownership and legal form	GRI Content Index; AR: Principal activities and the Group structure		X5 Retail Group N.V. is a joint stock limited liability company established in August 1975 under the laws of the Netherlands.
102-6	Markets served	About the Company: Business model, Geography of operations; AR: Russia's food retail market	10-12, 13	
102-7	Scale of the organization	About the Company: 2021 key highlights, Operational and financial overview; Employees: Our approach and 2021 highlights; AR: Consolidated statement of financial position	14, 17; 85	
102-8	Information on employees and other workers	Employees: Our Approach and 2021 Highlights	85	
102-9	Supply chain	Responsible business conduct: Responsible supply chain; AR: Retail infrastructure	36-37	
102-10	Significant changes to the organization and its supply chain	About the Company: Strategic highlights; Responsible business conduct: Responsible supply chain; Healthy lifestyles: Product quality and safety assurance; GRI Content Index	15-16; 36-37; 43-47	There were no significant changes in supply chain in 2021.
102-11	Precautionary Principle or approach	Responsible business conduct: Risk Management; GRI Content Index	30	The company applies the precautionary principle (Principle 15) set out in Rio Declaration on Environment and Development adopted in 1992.

^{1. &}quot;AR" refers to 2021 Annual Report



GRI Standards Indicator	Description	Reference	Page	Comments
102-12	External initiatives	Sustainable development and the Company's business: Sustainable development strategy;	20-23;	
		Healthy lifestyles: Product quality and safety assurance	43-46	
102-13	Membership of associations	Sustainable development and the Company's business: Sustainable development strategy; Healthy lifestyles: Our approach and 2021 highlights, Product quality and	20-23; 41-42	List of the main associations X5 Group is a member of: • UN Global Compact
		safety assurance; The planet: Reduced climate impact and energy efficiency	43-46; 59-64	 Collaboration for Healthier Lives Coalition of the Consumer Goods Forum AKORT (Russian Retail Companies Association)
				 Consumer Market Participants Union Russian Union of Industrialists and Russian online retail association Non-Commercial Partnership «Russian Guild of Bakers and Confectioners»
				Forest Stewardship council (FSC)Donor's Forum Association
102-14	Statement from senior decision-maker	Chairman statement, President's statement	3, 4	
102-15	Key impacts, risks, and opportunities	Chairman statement, President's statement; About the Company: Strategic highlights, Operational, financial, and sustainability highlights;	4; 15-16, 17;	
		Sustainable development and the Company's business: Sustainable development strategy;	20-23;	
		Responsible business conduct: Risk management; The planet: Reduced climate impact and energy efficiency; AR: Risk management	30; 59-64	
102-16	Values, principles, standards, and norms of behavior	About the Company: Our approach, values and goals; Responsible business conduct: Compliance and business ethics; Employees: Corporate culture and values	8-9; 31-35; 87-88	
102-17	Mechanisms for advice and concerns about ethics	Responsible business conduct: Compliance and business ethics	31-35	
102-18	Governance structure	Responsible business conduct: Compliance and business ethics; Employees: Corporate culture and values; AR: Corporate governance	31-35; 87-88	



GRI Standards Indicator	Description	Reference	Page	Comments
102-20	Executive-level responsibility for economic, environmental, and social topics	Sustainable development and the Company's business: X5 Sustainable Development Governance Model;	19;	
		Responsible business conduct: Compliance and business ethics	31-35	
102-22	Composition of the highest governance body and its committees	AR: Corporate governance		
102-23	Chair of the highest governance body	AR: Corporate governance		
102-24	Nominating and selecting the highest governance body	AR: Corporate governance		
102-25	Conflicts of interest	Responsible business conduct: Compliance and business ethics; AR: Governance structure	31-35	
102-26	Role of highest governance body in setting purpose, values, and strategy	Sustainable development and the Company's business: X5 Sustainable Development Governance Model; AR: Corporate governance	19	
102-28	Evaluating the highest governance body's performance	AR: Corporate governance		
102-29	Identifying and managing economic, environmental, and social impacts	Sustainable development and the Company's business: X5 Sustainable Development Governance Model	19	
102-30	Effectiveness of risk management processes	Responsible business conduct: Risk management; AR: Corporate governance	30	
102-31	Review of economic, environmental, and social topics	Chairman's statement; Sustainable development and the Company's business: X5 Sustainable Development Governance Model	3; 19	
102-32	Highest governance body's role in sustainability reporting	Chairman's statement; About this report: Report methodology; The planet: TCFD disclosure	3; 6; 65-74	
102-33	Communicating critical concerns	GRI Context Table		In case critical concerns appear, they are raised within meetings of the Executive and Supervisory Board, which take place four times a year.
102-35	Remuneration policies	Employees: Motivation and fair compensation; AR: Remuneration report	89	



GRI Standards Indicator	Description	Reference	Page	Comments
102-36	Process for determining remuneration	AR: Remuneration report		
102-37	Stakeholders' involvement in remuneration	AR: Remuneration report		
102-40	List of stakeholder groups	About this Report: Determination of material topics; Sustainable development and the Company's business: Stakeholder engagement	6; 25-28	
102-41	Collective bargaining agreements	Employees: Our Approach and 2021 Highlights	83-85	No employees were covered by collective bargaining agreements in 2021.
102-42	Identifying and selecting stakeholders	Sustainable development and the Company's business: Stakeholder engagement	25-28	
102-43	Approach to stakeholder engagement	About this Report: Determination of material topics; Sustainable development and the Company's business: Stakeholder engagement; Responsible business conduct: Responsible supply chain	6; 25-28; 36-37	
102-44	Key topics and concerns raised	About this Report: Determination of material topics; Sustainable development and the Company's business: Stakeholder engagement; Responsible business conduct: Responsible supply chain	6; 25-28; 36-37	
102-45	Entities included in the consolidated financial statements	GRI Content Index		All entities included in the organization's consolidated financial statements or equivalent documents are covered by this Report.
102-46	Defining report content and topic Boundaries	About this Report: Report methodology, Determination of material topics	6	
102-47	List of material topics	About this Report: Determination of material topics	6	
102-48	Restatements of information	GRI Content Index		As a result of the improvement of data collection in 2021, changes were made relative to the previous period. Relevant comments have been added to the report.



GRI Standards Indicator	Description	Reference	Page	Comments
102-49	Changes in reporting	GRI Content Index		Material topics in 2021, as in the previous period, remained:
				Energy efficiency,
				 Product safety, quality, and affordability,
				 Customer relations and responding to customer requests,
				 Employee well-being and fair working conditions,
				Business ethics and anti-corruption;
				The material topic of the previous period "Waste management" in 2021 is divided into:
				Food waste management,
				 General waste management and recycling of plastics,
				Sustainable packaging;
				In contrast to the previous period, in 2021, material topics are recognized:
				Supply chain sustainability and transparency
				Responsible product marketing and labelling
				 Products with healthy, balanced ingredients
				Occupational health and safety.
102-50	Reporting period	About this Report: Report methodology	6	
102-51	Date of most recent report	About this Report: Report methodology	6	
102-52	Reporting cycle	About this Report: Report methodology	6	
102-53	Contact point for questions regarding the report	Contacts	112	
02-54	Claims of reporting in accordance with the GRI Standards	About this Report: Report methodology	6	
02-55	GRI content index	GRI content index		
102-56	External assurance	Independent report	113	



GRI Standards Indicator	Description	Reference	Page	Comments
GRI 103: Management A	pproach 2016			
103-1	Explanation of the material topic and its Boundary	About this Report: Determination of material topics; Responsible business conduct: Risk management; Healthy lifestyles: Our approach and 2021 highlights; The planet: Our approach and 2021 highlights; Employees: Our approach and 2021 highlights	6; 30; 41-42; 53; 83-85	
103-2	The management approach and its components	Sustainable development and the Company's business: Sustainable development strategy; Responsible business conduct: Risk management; Healthy lifestyles: Our approach and 2021 highlights; The planet: Our approach and 2021 highlights; Employees: Our approach and 2021 highlights	20-23; 30; 41-42; 53; 83-85	
103-3	Evaluation of the management approach	Sustainable development and the Company's business: Sustainable development strategy; Responsible business conduct: Risk management; Healthy lifestyles: Our approach and 2021 highlights; The planet: Our approach and 2021 highlights; Employees: Our approach and 2021 highlights	20-23; 30; 41-42; 53; 83-85	
GRI 201: Economic Perfe	ormance 2016			
201-1	Direct economic value generated and distributed	About the Company: Operational, financial and sustainability highlights	17	
201-2	Financial implications and other risks and opportunities due to climate change	Responsible business conduct: Risk management; The planet: Reduced climate impact and energy efficiency, TCFD disclosure; AR: Risk management	30; 59-64 65-74	
GRI 203: Indirect Econo	omic Impacts 2018			
203-1	Infrastructure investments and services supported	Sustainable development and the Company's business: COVID-19 Response; Local communities: Our approach and 2021 highlights; Socio-economic Impact Assessment Report, X5 Group	24 103-104	
203-2	Significant indirect economic impacts	Local communities: Our approach and 2021 highlights; Socio-economic Impact Assessment Report, X5 Group	103-104	
GRI 205: Anti-corruption	n 2016			
205-2	Communication and training about anti- corruption policies and procedures	Responsible business conduct: Compliance and business ethics	31-35	Partially disclosed. The percentage of employees who have been trained in anti-corruption policies and methods is indicated, as well as the percentage of members of governing bodies and the percentage of employees who have been informed about the organization's anti-corruption policies and methods.



GRI Standards Indicator	Description	Reference	Page	Comments
GRI 301: Materials				
301-3	Reclaimed products and their packaging materials	The planet: Waste management and sustainable packaging, Reduced climate impact and energy efficiency	54-58 59-64	Partially disclosed. Information is disclosed in absolute figures, the breakdown by the product category is not provided.
GRI 302: Energy				
302-1	Energy consumption within the organization	The planet: Reduced climate impact and energy efficiency, TCFD disclosure	59-64 65-74	
302-3	Energy intensity	The planet: Reduced climate impact and energy efficiency, TCFD disclosure	59-64 65-74	
302-4	Reduction of energy consumption	The planet: Reduced climate impact and energy efficiency, TCFD disclosure	59-64 65-74	
GRI 303: Water				
303-1	Interactions with water as a shared resource	The planet: Responsible water consumption	77	
303-2	Management of water discharge-related impacts	The planet: Responsible water consumption	77	
303-3	Water withdrawal	The planet: Responsible water consumption	77	Partially disclosed. The total water withdrawal by type of sources is indicated.
303-4	Water discharge	The planet: Responsible water consumption	77	Partially disclosed. The total water discharge is indicated.
303-5	Water consumption	The planet: Responsible water consumption	77	Partially disclosed. The total water consumption in all areas is indicated.
GRI 305: Emissions				
305-1	Direct (Scope 1) GHG emissions	The planet: Reduced climate impact and energy efficiency, TCFD disclosure	59-64 65-74	
305-2	Energy indirect (Scope 2) GHG emissions	The planet: Reduced climate impact and energy efficiency, TCFD disclosure	59-64 65-74	
305-3	Other indirect (Scope 3) GHG emissions	The planet: Reduced climate impact and energy efficiency, TCFD disclosure	59-64 65-74	
305-4	GHG emissions intensity	The planet: Reduced climate impact and energy efficiency, TCFD disclosure	59-64 65-74	
305-5	Reduction of GHG emissions	The planet: Reduced climate impact and energy efficiency, TCFD disclosure	59-64 65-74	



GRI Standards Indicator	Description	Reference	Page	Comments
GRI 306: Waste				
306-1	Waste generation and significant waste-related impacts	The planet: Waste management and sustainable packaging	54-58	
306-2	Management of significant waste-related impact	s The planet: Waste management and sustainable packaging	54-58	
306-3	Waste generated	The planet: Waste management and sustainable packaging	54-58	
306-4	Waste diverted from disposal	The planet: Waste management and sustainable packaging	54-58	Partially disclosed. Information provided is not broken down by hazardous and non-hazardous waste.
306-5	Waste directed to disposal	The planet: Waste management and sustainable packaging	54-58	Partially disclosed. Information provided is not broken down by hazardous and non-hazardous waste.
GRI 307: Environmental	Compliance			
307-1	Non-compliance with environmental laws and regulations	GRI Content Index		Partially disclosed. Information is provided by total sum of monetary fines. In 2021 the method of calculation was changed: the total sum of fines from infringements of the Russian Administrative Code, and not infringements of regional laws, were considered. Figures for 2020 were recalculated with the updated method. In 2021 the total sum of fines was RUB 3,364,000; in 2020, RUB 4,581,000
GRI 308: Supplier Enviro	onmental Assessment			
308-1	New suppliers that were screened using environmental criteria	GRI Content Index		Environmental criteria are not used when evaluating new suppliers. Therefore, the percentage of new suppliers selected using environmental criteria is 0. However, we encourage our suppliers to apply responsible social practices, which is described in the Responsible Supply Chain section.
GRI 401: Employment				
401-1	New employee hires and employee turnover	Employees: Our Approach and 2021 Highlights	83-85	
401-3	Parental leave	Employees: Our Approach and 2021 Highlights	83-85	Partially disclosed. Information provided on the number of employees that took parental leave during reporting period broken down by gender.
GRI 403: Occupational I	Health and Safety 2018			
403-1	Occupational health and safety management system	Employees: OHS	94-100	
403-2	Hazard identification, risk assessment, and incident investigation	Employees: OHS	94-100	
403-3	Occupational health services	Employees: OHS	94-100	





GRI Standards Indicator	Description	Reference	Page	Comments
403-4	Worker participation, consultation, and communication on occupational health and safety	Employees: OHS; GRI Index Table	94-100	Formal joint management-worker OHS committees are not presented in the company.
403-5	Worker training on occupational health and safety	Employees: OHS	94-100	
403-6	Promotion of worker health	Sustainable development and the Company's business: Stakeholder engagement; Employees: Our approach and 2021 highlights, Corporate culture and	25-29; 83-85	
		values, Digitisation and efficiency, OHS	87-88 93 94-100	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Employees: OHS	94-100	
403-8	Workers covered by an occupational health and safety management system	Employees: OHS	94-100	
403-9	Work-related injuries	Employees: OHS	94-100	Qualitative information fully disclosed. Quantitative information partially disclosed. Quantitative indicators disclosed for all employees:
				The number fatalities as a result of work-related injury;
				The number and rate of recordable work-related injuries;
				The main types of work-related injury;
				The number of hours worked.
				Quantitative indicators disclosed for all workers who are not employees but whose work and/or workplace is controlled by the organization:
				The number fatalities as a result of work-related injury;
				The number recordable work-related injuries;
				The main types of work-related injury.



GRI Standards Indicator	Description	Reference	Page	Comments
GRI 404: Training and E	ducation			
404-1	Average hours of training per year per employee	Employees: Training and development	90-91	
404-2	Programs for upgrading employee skills and transition assistance programs	Sustainable development and the Company's business: Sustainable development strategy; Healthy lifestyles: Product quality and safety assurance	20-23; 43-47	Partially disclosed. Does not provide information on continued employability facilitation.
404-3	Percentage of employees receiving regular performance and career development reviews	Employees: Our Approach and 2021 Highlights	41-42	
GRI 405: Diversity and E	Equal Opportunity			
405-1	Diversity of governance bodies and employees	Employees: Our Approach and 2021 Highlights	41-42	
405-2	Ratio of basic salary and remuneration of women to men	Employees: Motivation and fair compensation	89	
GRI 406: Non-discrimin	ation			
406-1	Incidents of discrimination and corrective actions taken	GRI Index Table		In 2021, total number of confirmed discrimination cases was 5. Correction actions for each of them were taken in accordance with our established procedures.
GRI 408: Child Labor				
408-1	Operations and suppliers at significant risk for incidents of child labor	GRI Index Table		The company does not employ children and does not accept suppliers violating human rights in accordance with legislation and internal documents
GRI 409: Forced or Com	npulsory Labor			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	GRI Index Table		The company has zero tolerance to forced and compulsory labor in its own operations and in supply chain in accordance with legislation and internal documents. Not disclosed.
GRI 412: Human Rights	Assessment 2016			
412-2	Employee training on human rights policies or procedures	Responsible business conduct: Compliance and business ethics	31-35	
GRI 413: Local Commun	ities 2016			
413-1	Operations with local community engagement, impact assessments, and development programs	Sustainable development and the Company's business: COVID-19 Response; Local communities: Our approach and 2021 highlights; Employees: OHS; Socio-economic Impact Assessment Report, X5 Group	24; 103-104; 94-100	



GRI Standards Indicator	Description	Reference	Page	Comments
GRI 414: Supplier Social	Assessment			
414-1	New suppliers that were screened using social criteria	Responsible business conduct: Responsible supply chain; GRI Content Index	36-37	Social criteria are not used when evaluating new suppliers. Therefore, the percentage of new suppliers selected using social criteria is 0. However, we encourage our suppliers to apply responsible social practices, which is described in the Responsible Supply Chain section.
GRI 415: Public Policy				
415-1	Political contributions	Local communities: Our approach and 2021 highlights	103-104	
GRI 416: Customer Heal	th and Safety			
416-1	Assessment of the health and safety impacts of product and service categories	Healthy lifestyles: Product quality and safety assurance; AR: How we manage risk	43-47	
GRI 417: Marketing and I	Labeling			
417-1	Requirements for product and service information and labeling	Healthy lifestyles: Product quality and safety assurance, Promoting healthy lifestyles	43-47 48-49	
GRI 418: Customer Priva	су			
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	GRI Content Index		In 2021, we did not receive substantiated complaints concerning breaches of customer privacy.
GRI 419: Socioeconomic	: Compliance			
419-1	Non-compliance with laws and regulations in the social and economic area	GRI Content Index		Partially disclosed. Information is provided by total sum of monetary fines. In 2021 the method of calculation was changed: the total sum of fines from infringements of the Russian Administrative Code, and not infringements of regional laws, were considered. Figures for 2020 were recalculated with the updated method. In 2021 the total sum of fines was RUB 260,625,375; in 2020, RUB 178,957,576.



SASB Content Index

SASB code	Accounting metric	Reference	Page	Comments
Food Retailers & Distributors				
Fleet Fuel Management				
FB-FR-110a.1	Fleet fuel consumed, percentage renewable	The planet: Reduced climate impact and energy efficiency	59-64	
Air Emissions from Refrigeration				
FB-FR-110b.1	Gross global Scope 1 emissions from refrigerants	The planet: Reduced climate impact and energy efficiency	59-64	
Energy Management				
FB-FR-130a.1	(1) Operational energy consumed, (2) percentage grid electricity, (3) percentage renewable	The planet: Reduced climate impact and energy efficiency, TCFD disclosure	59-64 65-74	
Food Waste Management				
FB-FR-150a.1	Amount of food waste generated, percentage diverted from the waste stream	The planet: Waste management and sustainable packaging	54-58	Partially disclosed. Information provided is not broken down by hazardous and non-hazardous waste.
Data Security				
FB-FR-230a.1	1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of customers affected	SASB Context Index		In 2021, we did not received substantiated complaints concerning breaches of customer privacy
FB-FR-230a.2	Description of approach to identifying and addressing data security risks	SASB Context Index AR: The Company's principal risks		Ongoing monitoring of our processes, which includes assessment and monitoring of data security risk, continues to drive compliance throughout our business. We regularly report on the progress of our security and privacy programmes to management and oversight committees. (Annual Report 2021, p. 150–158)
Food Safety				
FB-FR-250a.1	High-risk food safety violation rate	Healthy lifestyles: Product quality and safety assurance; AR: How we manage risk	43-47	
Product Health & Nutrition				
FB-FR-260a.1	Revenue from products labeled and/or marketed to promote health and nutrition attributes	Healthy lifestyles: Promoting healthy lifestyles	48-49	
FB-FR-260a.2	Discussion of the process to identify and manage products and ingredients related to nutritional and health concerns among consumers	Healthy lifestyles: Promoting healthy lifestyles; Product quality and safety assurance; AR: How we manage risk	48-49 43-47	



SASB Content Index

SASB code	Accounting metric	Reference	Page	Comments
Product Labeling & Marketin	ng			
FB-FR-270a.1	Number of incidents of non-compliance with industry or regulatory labeling and/or marketing codes	Healthy lifestyles: Product quality and safety assurance, Promoting healthy lifestyles	43-47 48-49	
Labor Practices				
FB-FR-310a.2	Percentage of active workforce covered under collective bargaining agreements	Employees: Our approach and 2021 highlights	83-85	
FB-FR-310a.4	Total amount of monetary losses as a result of legal proceedings associated with: (1) labor law violations and (2) employment discrimination	SASB Context Index		
Management of Environment	tal & Social Impacts in the Supply Chain			
FB-FR-430a.4	Discussion of strategies to reduce the environmental impact of packaging	Healthy lifestyles: Our approach and 2021 highlights; The planet: Waste management and sustainable packaging; Responsible business conduct: Responsible supply chain	41-42; 54-58; 36-37	
Activity Metrics				
FB-FR-000.A	Number of (1) retail locations and (2) distribution centers	About the Company: Business model	10-12	
FB-FR-000.B	Total area of (1) retail space and (2) distribution centers	About the Company: Operational, financial, and sustainability highlights	17	
FB-FR-000.C	Number of vehicles in commercial fleet	SASB Context Index AR: X5 Transport		At the close of 2021 the number of vehicles in X5 Transport's fleet was 4,654.
Processed Foods				
Water Management				
FB-PF-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	The planet: Responsible water consumption	77	
FB-PF-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	The planet: Responsible water consumption	77	
E-commerce				
Employee Recruitment, Inclu	usion & Performance			
CG-EC-330a.1	Employee engagement as a percentage	Employees: Our Approach and 2021 Highlights, Engagement and feedback	83-85, 92	
CG-EC-330a.2	(1) Voluntary and (2) involuntary turnover rate for all employees	Employees: Our Approach and 2021 Highlights	83-85	
CG-EC-330a.3	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees	Employees: Our Approach and 2021 Highlights	83-85	

Compliance statement

X5 Group took into consideration the documents referred to in the updated guidance on Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures published in October 2021.

X5 Group complies with the following TCFD Recommendations and Recommended Disclosures:

- Governance (a) and (b);
- Strategy (a) and (c);
- Risk management (a), (b), (c);
- Metrics and Targets (b) and (c).

X5 Group partially complies with the following TCFD Recommendations and Recommended Disclosures:

- Strategy (b);
- Metrics and Targets (a).

In the table below, we include cross-references to disclosures made elsewhere within the Report and explain the reasons for partially complying with some of the TCFD Recommendations and Recommended Disclosures. X5 is set to cover most of the partially consistent disclosures in 2022.

TCFD Disclosure	Cross-reference for the disclosure in the Report	Summary of the climate-related financial disclosures	Comments for non-compliance	Future steps
		Governance		
Describe the board's oversight of climate-related	65	• The Supervisory Board meets at least four times per year and discusses climate-related issues within the framework of the Audit and Sustainable Development and Innovation Committees.		
risks and opportunities.		• The Executive Board is in charge of properly managing progress against the Company's strategy and the sustainable development strategy, as well as the associated risks, including all climate-related risks and opportunities.		
		 By analysing the detailed reports submitted by appropriate Committees, the Board keeps track of all key projects and activities, including progress measured against the sustainable development strategy, the implementation of climate-related mitigation measures, and project outcomes. 		
Describe management's role in assessing and managing climate-related	65	The Group set up a Committee on Sustainable Development at the Executive Board level. The Committee is responsible for implementing decarbonisation measures and developing action plans to mitigate climate risk, which are then submitted to the Committee on Sustainable Development and Innovation, as well as the Supervisory Board, for approval.		
risks and opportunities.		The representatives of business units implement the proposed measures and changes within the Group's sustainability agenda.		





TCFD Disclosure	Cross-reference for the disclosure in the Report	Summary of the climate-related financial disclosures	Comments for non-compliance	Future steps
		Strategy		
Describe the climate-related risks and opportunities the	67-71	• The Group's climate risk assessment is aligned in accordance with three time horizons: until 2023 - short-term horizon; 2023-2030 - medium-term horizon; 2030-2050 - long-term horizon.		
organization has identified over the short, medium, and long term.		 The Group analyzes its transition and physical risks for each business unit separately in order to have a comprehensive understanding of risk exposure to disparate business activities and geographies. The description of identified climate risks is on page 67-70. 		
Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	66,72	The description of identified climate risks is on page 67-70.		
Describe the resilience of the organization's strategy,	67,72	By analysing how climate risks affects us, we have a more comprehensive understanding of how the Group's strategy should be designed, as well as how we should mitigate the consequences of potential issues in the future.		
taking into consideration different climate-related scenarios, including a 2°C o lower scenario.		• The risk assessment used the following climate scenarios from IPCC's Sixth Assessment Report (AR6) are used: 1.5°C scenario (Scenario SSP1-2.6), 2.0°C scenario (Scenario SSP2-4.5) and the 4.0°C scenario (Scenario SSP5-8.5).		
		• X5 Group pays particular attention to materiality scores within the SSP2-4.5 scenario (Scenario ~2.0°C). We consider the SSP2-4.5 scenario the primary one for our industry, and we believe it will have a long-term effect on the Group's strategic resilience and estimated financial impacts.		





TCFD Disclosure	Cross-reference for the disclosure in the Report	Summary of the climate-related financial disclosures	Comments for non-compliance	Future steps
		Risk management		
Describe the organization's	72	Climate risks, including physical and transition, are incorporated within the general risk register and are review yearly.		
processes for identifying		Climate risk assessment process aligns with the Group's general risk assessment.		
and assessing climate- related risks.		The results are plotted on a scale, representing risk impact from the lowest possible impact (green) to the most significant possible impact (red).		
Describe the organization's processes for managing	72	Our decarbonisation initiatives are in line with measures to mitigate climate risk to ensure the sufficient and effective resilience of the sustainable development strategy.		
climate-related risks.		• The sustainable development strategy is based on cost-effective decarbonisation measures that are set to benefit X5's long-term value.		
Describe how processes for identifying, assessing, and	72	The climate risk assessment is in line with the Group's risk assessment and includes the following steps: Risk identification		
managing climate-related		Risk assessment		
risks are integrated into the organization's overall risk		Risk response (avoidance, mitigation, transfer or acceptance)		
management.		Development and implementation of measures to reduce risks		
		Control and monitoring		
		Risk management reporting		





TCFD Disclosure	Cross-reference for the disclosure in the Report	Summary of the climate-related financial disclosures	Comments for non-compliance	Future steps
		Metrics and Targets		
Disclose the metrics used by the organization to	72,74	In 2021, the Group reviewed qualitative results on climate risks and opportunities on a regular basis. Minute of the control of the con	X5 Group has set	X5 Group plans to disclose
assess climate-related risks and opportunities in line with its strategy and risk management process.	s	 When developing a decarbonisation pathway, X5 established a feasible internal carbon price to aid in strategic decision-making. X5 Group has set climate-related KPIs for management to motivate the implementation of the 30x30 agenda. The KPIs include the LTI program, which has a 10% indicator on decarbonisation by 2023 in comparison with 2019. The KPIs also include other sustainability indicators, such as the increase in the share of recycled packaging and waste management initiatives that are important for decreasing Scope 3 emissions. Overall, climate KPIs comprise 5% of the total management-team KPIs. 	price, however the inmethodology for establishing the	
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	60	• Since 2019, the Group has been assessing GHG emissions (Scope 1, 2 and 3) in accordance with the GHG Protocol. In 2021, this assessment included GHG emission sources at key business units that make up at least 95% of all GHG emission sources.		
Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	20-22	The long-term goal of the strategy is for the X5 Group to achieve carbon neutrality by 2050, in line with the Paris Agreement and national decarbonisation goals. As one of the steps to attain this objective, X5 has introduced the 30x30 agenda, which includes the following medium-term targets to be achieved by 2030: Reduce GHG emissions (Scope 1 and Scope 2) intensity per sqm of selling space by 30% compared with 2019 Increase share of renewable energy used in our operations to 30% Reduce the ratio of waste generated to retail sales by 30% compared with 2019		
		The Group has developed a decarbonisation roadmap, which includes intermediate short-term targets to be achieved by 2023: Reduce GHG emissions (Scope 1 and Scope 2) intensity per sqm of selling space by 10% compared with 2019 Increase the use of renewable energy in our operations Reduce the ratio of waste generated to retail sales by up to 10% compared with 2019		

UN SDGs content index

SDG		Relevant SDG Target	Our contribution disclosed in the Report	Page
		Primary SDGs		
2 ZERO HUNGER	Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture	 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round 	 About the Company: Our approach, values and goals; Sustainable development and the Company's business: Sustainable development strategy; Responsible business conduct: Care for our customers; Healthy lifestyles: Our approach and 2021 highlights; Local communities: Food assistance, Supporting people with disabilities, Our plans 	8-9 20-23 38 41-42 105-106, 108, 111
3 GOOD HEALTH AND WELL-SEING	Goal 3. Ensure healthy lives and promote well-being for all at all ages	3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	 About the Company: Our approach, values and goals; Sustainable development and the Company's business: Sustainable development strategy, COVID-19 response; Healthy lifestyles: Our approach and 2021 highlights, Product quality and safety assurance, Promoting healthy lifestyles, Our plans; Employees: Our approach and 2021 highlights, Motivation and fair compensation, Occupational health and safety, Our plans; Local communities: Supporting children in need, Supporting people with disabilities, Assistance for lost or disorientated people. 	8-9 20-23, 24 41-42, 43-47, 48-49, 50-51 83-85, 89, 94-100, 101 107, 108, 109
8 BEERT WORK AND ECONOMIC GROWTH	Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	 8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value 8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training 8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment 	 About the Company: Our approach, values and goals; Sustainable development and the Company's business: Sustainable development strategy; Responsible business conduct: Compliance and business ethics, Responsible Supply Chain, Care for our customers, Our plans; The planet: Our approach and 2021 highlights, Waste management and sustainable packaging, Reduced climate impact and energy efficiency, Responsible water consumption, Our plans; Employees: Our approach and 2021 highlights, Corporate culture and values, Motivation and fair compensation, Training and development, Engagement and feedback, Digitisation and efficiency, Occupational health and safety, Our plans 	8-9 20-23 31-35, 36-37, 39 53, 54-58, 59-64 77, 80-81 83-85, 87-88, 89, 90-91, 92, 93 94-100, 101



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SDG		Relevant SDG Target	Our contribution disclosed in the Report	Page
		Primary SDGs		
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Goal 12. Ensure sustainable consumption and production patterns	 12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse 12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle 12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature 	 About the Company: Our approach, values and goals; Sustainable development and the Company's business: Sustainable development strategy; Responsible business conduct: Responsible supply chain; The planet: Waste management and sustainable packaging, Reduced climate impact and energy efficiency, Promoting responsible consumption, Our plans; 	8-9 20-23 36-37 54-58, 59-64, 78-79, 80-81
			Local communities: Our plans	111
		Secondary SDGs		
5 GENDER EQUALITY	Goal 5. Achieve gender equality and empower all women and girls	 5.1 End all forms of discrimination against all women and girls everywhere 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life 	 Responsible business conduct: Compliance and Business Ethics; Employees: Our approach and 2021 highlights, Motivation and fair compensation, Training and development, Corporate culture and values 	31–35 83–85, 89, 90–91, 87–88
7 AFFORDABLE AND CLEAN ENERGY	Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	 Sustainable development and the Company's business: Sustainable development strategy; The planet: Our approach and 2021 highlights, Reduced climate impact and energy efficiency, TCFD disclosure 2021 	36-37 53, 59-64, 65-74
10 REDUCED INEQUALITIES	Goal 10. Reduce	10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating	Responsible business conduct: Compliance and Business Ethics;	31-35
♦	inequality within and among countries	discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	Employees: Corporate culture and values	87-88
11 SUSTAINABLE CITES AND COMMUNITES	Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management 11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities 	 The planet: Waste management and sustainable packaging, Reduced climate impact and energy efficiency, Promoting responsible consumption, Our plans; Employees: Our approach and 2021 highlights; Local communities: Supporting people with disabilities 	54-58, 59-64, 78-79, 80-81 83-85 108
13 CHMATE ACTION	Goal 13. Take urgent action to combat climate change and its impacts	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	 Responsible business conduct: Responsible supply chain; Sustainable development and the Company's business: Stakeholder engagement; The planet: Our approach and 2021 highlights 	36-37 25-28



UN SDGs content index

SDG		Relevant SDG Target	Our contribution disclosed in the Report	Page
14 LIFE BELOW WATER	Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans 	 Responsible business conduct: Responsible supply chain; The planet: Our approach and 2021 highlights, Waste management and sustainable packaging, Reduced climate impact and energy efficiency, TCFD disclosure 2021, Responsible water consumption, Promoting responsible consumption, Our plans 	36-37 53, 54-58, 59-64, 65-74, 77, 78-79, 80-81
15 UPE AND ON LAND	Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally 	 About the Company: Strategic highlights; The planet: Reduced climate impact and energy efficiency, Promoting responsible consumption 	15-16 59-64,78-79