Public Joint
Stock Financial
Corporation
Sistema

Sustainability Report

2022



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Address of the Chair of the Board of Directors

GRI 2-22

Dear colleagues and partners,

In the new geopolitical situation that emerged in 2022, Sistema continued to develop sustainability practices and remained committed to the provisions of the UN Global Compact, considering them as the basis for responsible business conduct. The Group's assets preserved their key production, social and environmental projects — we continued to fulfil our mission, creating strong, efficient and sustainable businesses.

In October 2022, Sistema presented its first ESG strategy that had been previously approved by the Corporation's Board of Directors. The medium-term strategy is aimed at improving the sustainability of Sistema's investment portfolio. The document complements the ESG management system and elaborates the provisions of Sistema's Sustainability Policy. The strategy draws on many years of experience in this area and consolidates a comprehensive approach to responsible business conduct. In mid-2022, Sistema adopted the Terms of Reference of the Strategy and Sustainability Committee of the Board of Directors, which provided for the committee's leading role in setting the Corporation's ESG agenda. Overall, the main outcome of the last three years was the integration of ESG principles into all stages of the investment process, from the exclusion of "toxic" industries and the assessment of assets to be acquired to the monetisation of investments.

In 2022, Sistema's key portfolio companies continued to improve their sustainability management systems in line with the principles set by the Corporation and relevant ESG practices. The Corporation's agricultural asset approved its Sustainability Strategy 2030, in which it paid special attention to the use of sustainable agricultural technologies. The telecommunications asset revised the priorities of its ESG initiatives, shifting its focus to social support for employees and customers; the fintech arm joined the ESG Banking project group of the Association of Russian Banks to develop a legal framework for promoting the principles of responsible banking in the national market; meanwhile, the Corporation's pharmaceutical asset joined the Social Charter of Russian Business of the Russian Union of Industrialists and Entrepreneurs.

Sistema Charitable Foundation, the main operator of Sistema Group's social investments, scaled up its programmes to develop human capital and create a favourable environment for doing business. The foundation signed a partnership agreement with the NGO ECA to work towards UN Sustainable Development Goals and spread awareness about environmentally friendly behaviours and lifestyles.

Sistema Charitable Foundation's social, career guidance and environmental projects are part of the overall sustainability strategy of the Corporation and its portfolio assets. Therefore, the foundation's projects are systematic social investments of the Group's companies, an effective way to build long-term relations between business, society and regions.

In the reporting year, Sistema Group invested over RUB 187bn in the Russian economy. The funds were used to improve the efficiency of Sistema's businesses in various sectors of the economy and to implement investment projects aimed at upgrading and increasing the capabilities of production assets. The Group's direct social investments in 2020–2022 totalled approximately RUB 5bn, with RUB 2.6bn spent on environmental protection.

Sistema attaches great importance to climate change. We actively study international experience and try to implement innovative approaches that will help us achieve carbon neutrality, including the development of hydrogen energy and wooden house-building.

In 2022, the effectiveness of our sustainability management system was confirmed by independent Russian assessment systems in terms of openness, responsibility and sustainability. Sistema was named among the three leaders in the ESG ranking of Russian public financial companies by the National Rating Agency, along with the country's largest banks. In addition, Sistema was again assigned an A rating in RAEX's ESG ranking of Russian companies, which indicates a consistently high level of sustainability of the Corporation's corporate governance and operations. The Corporation also improved its ESG rating from Sustainalytics, showing the best result among Russian companies.

Thanks to a proper sustainability management system, Sistema remains a stable business that is resilient to risks in the current economic environment. This would not be possible without our shareholders, employees, partners and all stakeholders who support our mission and make an invaluable contribution to achieving the strategic goals of the Corporation.

We believe that only through joint efforts can create a sustainable future economy for our country.

1993

Sistema Joint Stock Financial Corporation was established. In 1993–1995, Sistema actively consolidated assets in the key sectors of the Russian economy, including telecommunications, electronics, tourism, retail, construction and real estate.

1997

Sistema was the first Russian private company to introduce **independent directors**. Since then, the Corporation's Board of Directors has had at least three independent directors.

1998

The Corporation's representatives took part in the development of the **Code of Business Ethics** of the Chamber of Commerce and Industry of the Russian Federation.

2002

Sistema signed the UN Global Compact and started implementing global principles of sustainable development and corporate social responsibility (CSR).

2003

- Sistema's Board of Directors set up the **International Advisory Council** for the first time in Russia.
- Sistema participated in the development of the **Charter of Corporate Business Ethics** of the Russian Union of Industrialists and Entrepreneurs (RSPP).
- Sistema set up the **Investor Relations Department.**

2004

- **Sistema Charitable Foundation** was established.
- Sistema approved its **Code of Ethics** and **Code of Corporate Conduct.**

2005

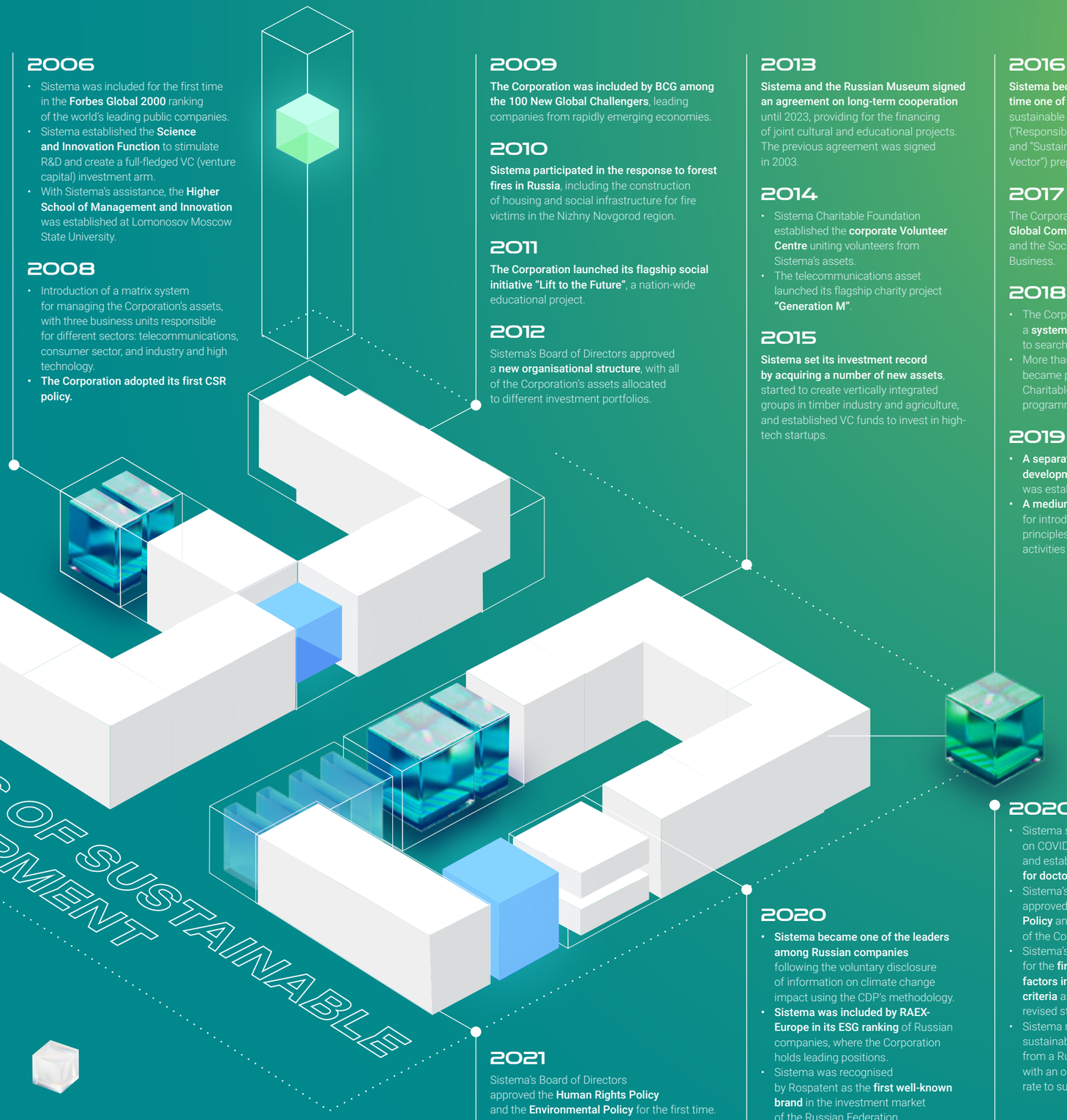
- Sistema had the **biggest-ever IPO** by a Russian company at the time.
- Sistema established a **joint recruitment centre**, enabling companies to minimise their recruiting costs.
- Expert RA, Russia's largest national rating agency, awarded Sistema a **national corporate governance rating of A.**

2006

- Sistema was included for the first time in the **Forbes Global 2000** ranking of the world's leading public companies.
- Sistema established the **Science and Innovation Function** to stimulate R&D and create a full-fledged VC (venture capital) investment arm.
- With Sistema's assistance, the **Higher School of Management and Innovation** was established at Lomonosov Moscow State University.

2008

- Introduction of a matrix system for managing the Corporation's assets, with three business units responsible for different sectors: telecommunications, consumer sector, and industry and high technology.
- **The Corporation adopted its first CSR policy.**



2009

The Corporation was included by BCG among the 100 New Global Challengers, leading companies from rapidly emerging economies.

2010

Sistema participated in the response to forest fires in Russia, including the construction of housing and social infrastructure for fire victims in the Nizhny Novgorod region.

2011

The Corporation launched its flagship social initiative "Lift to the Future", a nation-wide educational project.

2012

Sistema's Board of Directors approved a **new organisational structure**, with all of the Corporation's assets allocated to different investment portfolios.

2013

Sistema and the Russian Museum signed an agreement on long-term cooperation until 2023, providing for the financing of joint cultural and educational projects. The previous agreement was signed in 2003.

2014

- Sistema Charitable Foundation established the **corporate Volunteer Centre** uniting volunteers from Sistema's assets.
- The telecommunications asset launched its flagship charity project **"Generation M"**.

2015

Sistema set its investment record by acquiring a number of new assets, started to create vertically integrated groups in timber industry and agriculture, and established VC funds to invest in high-tech startups.

2016

Sistema became for the first time one of the leaders of two sustainable development indices ("Responsibility and Transparency" and "Sustainable Development Vector") prepared by the RSPP.

2017

The Corporation joined the UN **Global Compact Network Russia** and the Social Charter of Russian Business.

2018

- The Corporation introduced a **system of managing partners** to search for new projects.
- More than 1 million people became participants in Sistema Charitable Foundation's social programmes.

2019

- **A separate sustainable development function** was established.
- **A medium-term roadmap** for introducing sustainability principles into investment activities was developed.

2020

- Sistema spent **about RUB 1bn** on COVID-19 relief in Russia and established a support **centre for doctors** fighting the pandemic.
- Sistema's Board of Directors approved the **first Sustainability Policy** and a new version of the Corporate Governance Code.
- Sistema's Board of Directors for the **first time included ESG factors in the updated investment criteria** as part of the Corporation's revised strategy.
- Sistema raised its first sustainability improvement loan from a Russian bank for **RUB 10bn** with an option to link the interest rate to sustainability performance.

2020

- **Sistema became one of the leaders among Russian companies** following the voluntary disclosure of information on climate change impact using the CDP's methodology.
- **Sistema was included by RAEX-Europe in its ESG ranking** of Russian companies, where the Corporation holds leading positions.
- Sistema was recognised by Rospatent as the **first well-known brand** in the investment market of the Russian Federation.

2021

Sistema's Board of Directors approved the **Human Rights Policy** and the **Environmental Policy** for the first time.

2021

- Sistema became one of the founders of the **National ESG Alliance**.
- The educational platform **"Lift to the Future"** and the charitable project **"Generation M"** were recognised as UN SDG Good Practices.
- The National Rating Agency **included Sistema among the three leaders of the first ESG ranking** of public financial companies in Russia.
- Sistema's telecommunications and timber assets presented **their own ESG strategies**.
- Sistema established the **Hydrogen Energy Centre** in partnership with the Russian Academy of Sciences.

2022

- Sistema's Board of Directors assigned the **Strategy and Sustainability Committee** a leading role in defining the **Corporation's ESG agenda**.
- Sistema presented its first ESG strategy.
- Sistema's agricultural asset presented its **ESG strategy**.
- Sistema's telecommunications asset created the **ESG centre**. Russia's first multi-storey eco-friendly houses made of CLT panels were built.

2023

Sistema became the only Russian company among the leaders of the influential international ranking by Sustainalytics.

Sistema Charitable Foundation launched a scholarship programme and industry internships for young people across Russia as part of its nation-wide educational project "Lift to the Future".

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Participation in international and industry initiatives

Sistema today

GRI 2-1

Sistema PJSFC (hereinafter, "Sistema" or the "Corporation"), founded in 1993, is one of the largest private investors in Russia's economy. The Corporation's assets are represented across more than 20 high-potential sectors of the Russian economy and service some 150 million customers. The Corporation is one of the top 20 largest Russian companies, operating all across Russia and in more than 25 other countries.

RUB 2.1tn
total assets

0.6%
contribution to Russia's GDP

TOP 20
Russian companies by revenue (RAEX-600)

TOP 20
public Russian companies in Forbes Global 2000

The Corporation's shares are traded on the Moscow Exchange and global depositary receipts on the London Stock Exchange.

MOSCOW EXCHANGE

Moscow Exchange
- Ticker: AFKS
- Quotation list 1

London Stock Exchange

London Stock Exchange
- Ticker: SSA
- 1 GDR = 20 ordinary shares of Sistema

Sistema's investment portfolio includes Russian companies in telecommunications, timber processing, agriculture, private healthcare, residential property development, e-commerce and other industries.

Performance in 2022

UNCTAD A.1.1

	2022	2021	Change vs 2021, %
Economic performance			
Revenue, RUB bn	912.7	773.2	18.0
OIBDA, RUB bn	309.1	288.9	7.4
Adjusted OIBDA margin, %	28.5	31.4	–2.9 p.p.
Operating income, RUB bn	161.2	155	3.5
Net income (loss), RUB bn	19.4	16.8	15.8
Total investments in fixed assets, RUB bn	158.6	167.2	–5.2
Taxes and payments to social funds, RUB bn	149.4	131.5	13.6
Environment			
Environmental protection expenditures, RUB m	887	939	–5.5
Energy consumption, m GJ	74.5	44.1	68.9
Water withdrawal, m cu m	66.8	66.4	0.6
Personnel			
Total headcount, FTEs	173,551	139,524	24.4
Average labour productivity, RUB m per person	6.7	6.4	4.5
Society			
Social investments, RUB bn	1.5	1.8	–20
Number of individual charity beneficiaries	> 500,000[1]	> 85,000	> 500,000[1]
Sistema representatives listed among the Top 1 000 Russian Managers, persons	> 110	> 80	+37.5

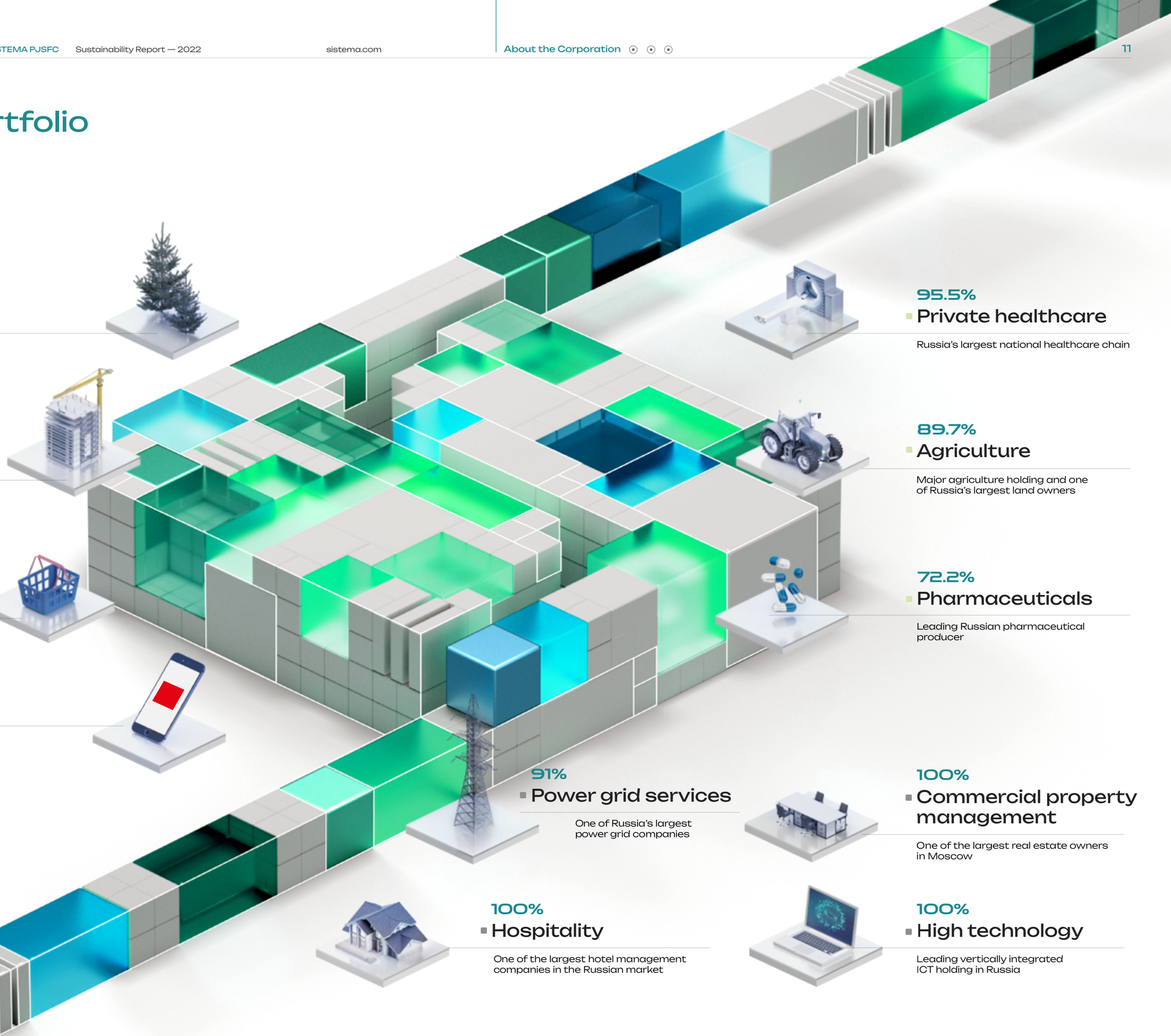
Generated and distributed direct economic value, RUB bn

GRI 201-1

	2022	2021	2020
Created value	948.75	844.58	718.43
Consolidated revenue	912.66	802.40	691.63
Financial and other incomes	36.10	42.18	26.81
Distributed value	906.47	796.04	680.13
Operating and other expenses	762.69	674.77	577.68
Including wages, social and other payments to employees	186.68	162.37	143.83
Taxes	32.54	43.78	12.47
Investment in communities	1.53	1.85	1.76
Financial expenses	113.05	71.50	71.47
Other expenses	–3.33	1.18	15.22
Accrued dividends to shareholders	0	2.95	1.22
Retained value	43.82	48.55	38.31

1 Including online participants.

Investment portfolio



62.2%
Timber industry

Largest vertically integrated forestry holding in Russia

48.8%
Residential property development

One of the Russia's largest public development and construction companies

31.8%
E-commerce

Leading multi-category online sales platform in Russia

49.7%
Telecommunications

Leading public telecommunications operator in Russia and CIS

95.5%
Private healthcare

Russia's largest national healthcare chain

89.7%
Agriculture

Major agriculture holding and one of Russia's largest land owners

72.2%
Pharmaceuticals

Leading Russian pharmaceutical producer

91%
Power grid services

One of Russia's largest power grid companies

100%
Commercial property management

One of the largest real estate owners in Moscow

100%
Hospitality

One of the largest hotel management companies in the Russian market

100%
High technology

Leading vertically integrated ICT holding in Russia

- Public assets
- Key non-public assets
- Other consolidated assets

Geographical footprint

GRI 2-6

Since 2008, Russia has maintained a list of systemically important enterprises that may receive support during a crisis to ensure their uninterrupted operations.

A systemically important enterprise is an enterprise whose goods or services are crucial for the functioning of the related territory or industry or the region's social and economic systems.

> 30%
of Sistema's assets are systemically important enterprises

Public assets | Key non-public assets | Other consolidated assets

Assets	Stake	Scale	Geographical footprint
Telecommunications	49.7%	**>88m** mobile subscribers in Russia, Belarus and Armenia **>80%** of Russia's population is covered by LTE **>5,300** retail outlets	Nationwide
E-commerce	31.8%	**>RUB 832bn** GMV[1] in 2022, including services **>80%** GMV growth in 2022 vs 2021 **35.2m** active customers **RUB 26bn** in ad revenue **230,000** sellers	Nationwide
Timber industry	62.2%	**9 regions** of operations in Russia **12 countries** across the world **21,000** employees **28** production facilities **>110 countries** of sales **72%** of revenue in foreign currencies	Karelia, Arkhangelsk, Vologda, Kirov, Krasnoyarsk, Rostov, Kostroma and Irkutsk regions
Residential property development	48.8%	**6.4m** sq m in NSA[2] **38 projects** in design and construction phases **423,000** sq m of new contract sales in 2022 **RUB 75bn** of cash collections in 2022	Moscow/Moscow region, St Petersburg, Omsk and Yekaterinburg
Pharmaceuticals	72.2%	**370m** medication packs produced in 2022 **13** export segments **5** production facilities **34** new marketing authorisations obtained in 2022	Moscow/Moscow region, Kurgan and Stavropol
Private healthcare	95.5%	**12 regions** of operation **>130** clinics **>12m** patient visits **4,700** doctors **No.1** among the 20 largest private clinics in Russia in 2022 according to Forbes	Moscow/Moscow region, Barnaul, Bryansk, Nizhnevartovsk, Perm, St Petersburg, Volgograd, Nyagan, Izhevsk, Rostov-on-Don and Ufa
Agriculture	89.7%	**2m t** of crops harvested in 2022 **No.1** in Russia by niche crop exports **No.6** in Russia by land area **149,000 t** in milk yield **14,300** lactating cows in 2022	Krasnodar, Stavropol and Rostov regions
Commercial property management	100%	**78** commercial properties **360,000 sq m** of commercial properties **100% of properties** in ownership	Moscow, St Petersburg
Power grid services	91%	**89,500 km** of power grids **13,880** new connections **80%**[1] of Bashkortostan's power transmission market	Republic of Bashkortostan
Hospitality	100%	**32 hotels** under management[2] **9,000 rooms** under management **57%** average occupancy rate in 2022	Moscow/Moscow region, Republic of Karelia, Izhevsk, Kazan, Sochi, Novosibirsk, Yaroslavl, Astrakhan, Volgograd, Voronezh, Republic of Altay and Kogalym
High technology	100%	**>5** implemented projects **>2,000** employees **11 regions** of operation **RUB 32.3bn** in 2022 revenue	Nationwide

1 Gross merchandise volume.
2 Net sellable area.

1 In terms of revenue.
2 The data includes the ten hotels acquired in March 2023.

Key events of 2022 in the area of sustainability

January

The **telecommunications asset** deployed Russia's largest dedicated industrial LTE network for a Russian coal mining group.

The **hospitality asset** launched a project to create a multi-purpose natural resort as part of the Baikal Harbour special economic zone on the eastern coast of Lake Baikal. The project is aimed at developing tourism on Lake Baikal and enhancing the region's attractiveness as one of Russia's key destinations for local and foreign tourists.

The **healthcare asset's** lab obtained an ISO 15189:2012 certificate evidencing compliance with high laboratory quality management standards.

The **timber asset's** enterprise successfully passed CE certification for its CLT panels. The CE certificate was obtained after a field audit performed by employees of HolzForschung Austria, the largest Austrian wood research and testing institute.

February

The **pharmaceutical asset** completed renovation of the section of its Kurgan plant that produces syrups and suspensions, increasing its production capacity threefold, to 6 million vials per year.

Sistema Charitable Foundation signed an agreement with Worldskills Russia to cooperate in preparing, organising and conducting joint work to develop new competences and train employees.

March

The **telecommunications asset** established an ESG Centre to implement the corporate ESG strategy, replicate best ESG practices and manage a portfolio of commercial projects addressing social and economic problems.

Sistema Charitable Foundation closed a partnership agreement with the NGO ECA to work towards UN Sustainable Development Goals and spread awareness about environmentally friendly behaviours and lifestyles.

April

The **telecommunications asset** launched the MONTE (Monitoring Events) service on the NB-IoT network, the first offering of its kind in Russia for enabling remote monitoring of subscriber devices over narrow-band Internet of Things connectivity.

The **high-tech asset** unveiled a digital transport management platform enabling smart traffic management in urban environments.

The **pharmaceutical asset's** plant in the Moscow region received a GMP (good manufacturing practices) certificate from the Eurasian Economic Union.

May

The **pharmaceutical asset** joined the Social Charter of Russian Business of the RSPP.

June

Sistema signed cooperation agreements with the governments of the Astrakhan region and the republics of Altay and Bashkortostan.

The Moscow Government and **Sistema** signed a Memorandum of Cooperation in the field of innovation and VC financing.

The **residential property development asset** signed an agreement with DOM.RF to pilot a project where housing will be evaluated for compliance with the national environmental safety standard (GOST R).

July

The **pharmaceutical asset** launched Alfaxim, the first Russian drug with rifaximin as the active pharmaceutical ingredient; it is used for the treatment of gastrointestinal infections.

The **timber asset** and the National Council for Corporate Volunteering signed a cooperation agreement.

August

The **property development asset** entered into a partnership agreement with the Novosibirsk region's Athletics Federation, under which the company supported the large-scale Raevich Siberian Running Festival (Novosibirsk Half Marathon) and launched a joint advertising campaign and a series of sporting events.

September

The fintech direction of the **telecommunications asset** joined the ESG Banking project group of the Association of Russian Banks.

October

Sistema presented its ESG strategy approved by the Board of Directors.

November

The **telecommunications asset** completed a new stage of 4G network construction in settlements and tourist sites of Kabardino-Balkaria, which doubled the internet speed on the slopes of Mount Elbrus, in the tourist village of Terskol and on the picturesque motorway leading to the region of Elbrus.

December

The **telecommunications asset** announced the deployment of a dedicated industrial LTE network for one of the world's largest nickel and palladium producers.

The **telecommunications asset** jointly with Rostelecom built three base stations in the Krasnodar region.

Events after the reporting date

January

The **telecommunications asset** under an agreement with the Ministry of Housing, Energy, Digitalisation and Communications of the Zabaykalsky region provided ten remote villages with a total population of almost 6,000 with mobile internet in 2022.

Seventy-five schoolchildren and students from 36 regions of Russia received a **Sistema Charitable Foundation** scholarship based on the results of the first scholarship competition held by the foundation.

February

Sistema and the government of the Tambov region signed a cooperation agreement.

The **telecommunications asset** together with its subsidiary bank launched a contactless payment service via the Pay Tag payment sticker, which will be available to holders of Mir cards issued by Russian banks.

The **biotech asset** developed a new type of targeted therapy — Forced Protein Association, which enables effective treatment of cancer and atherosclerosis.

Business model

Capital creation	Type of resources (capital)	2021	2022
Financial capital Raising — Allocating — Increasing the value of assets — Monetising — Reinvesting in new promising projects / development of current portfolio companies — Ensuring returns for shareholders in the form of dividends / distribution of profits from the sale (full or partial) or IPO/SPO of assets	Equity, RUB bn	126.3	–
	Aggregate asset value, RUB tn	1.8	2.1
Human capital • Building management teams in portfolio companies • Engagement, training and professional development of employees • Health and well-being of employees • Investments in education and human resource development for various industries	Average headcount, FTEs (GRI 2-7)	139,524	173,551
	Share of female workers across Sistema Group, % (GRI 405-1)	45.0	45.0
	Average ratio of entry-level wage to statutory living wage (GRI 202-1)	2.1	1.8
Social and reputation capital • Development in important social fields • Stakeholder engagement • Investments in communities, charity and volunteering	Number of consumers, m	>150	>150
	Number of agreements signed with local administrations	17	14
	Number of individual charity beneficiaries	>85,000	>500,000[1]
Production capital • Modernisation of production facilities • Investment programmes of portfolio companies	Number of industries	>20	>20
Intellectual capital • Innovations, new technologies and R&D • VC investments in tech startups	Number of new agreements signed with research institutes	4	>10
	Spending on IT, RUB bn	11.6	23.23
	Number of VC transactions	5	–
Natural capital • Environmental compliance and protection • Green tech and resource efficiency • Climate change risk management	Environmental protection expenditures, RUB m	939	887
	Energy consumed, m GJ (GRI 302-1)	44.1	74
	Water withdrawal, m cu m (GRI 303-3)	66.4	66.8

1 Including online participants.

Activity

Strategic focus

- Growing USD 1 bn+ businesses
- Generation of value in existing assets, including through the adoption of advanced technologies and digital solutions
- Stronger focus on investments in technology
- Realisation of unique investment opportunities in traditional industries in Russia
- Continuous improvement of the corporate governance system

Reinvestment

- Allocation of capital
- Search for investment opportunities
- Growth of equity value
- Monetisation

↓

Consideration for ESG factors at every investing stage

Key ESG aspects

- Accessibility and quality
- Smart environment
- Well-being

Results

Results	2021	2022
Total dividends, RUB bn (GRI 201-1)	2.9	–
Adjusted net income (loss), RUB bn	131	162
Revenue, RUB bn	773.2	912.7
Average annual labour productivity, RUB m/person	6.4	6.7
Average hours of training per year per employee (GRI 404-1)	15.3	16.6
Work-related injuries (GRI 403-9)	118	89
Taxes paid to budgets of all levels (social insurance funds included), RUB bn (GRI 201-1)	126.9	149.4
Social investments in communities, RUB bn (GRI 203-1)	1.8	1.53
Proportion of positive media stories reflecting the Corporation's strategic goals, %	53.3	58.2
Total investments in fixed assets, RUB bn (GRI 203-1)	167.2	158.6
Number of registered intellectual property assets	253	306
Number of patent & trademark applications	129	142
Greenhouse gas emissions, m t (GRI 305-1)	0.89	0.95
Water discharge, m cu m (GRI 303-4)	55.7	55.6
Energy intensity, GJ/RUB m of consolidated revenue	54.96	81.63

Awards and ratings of Sistema in 2022

Major projects and general

SUSTAINALYTICS	Sistema's **ESG risk was rated as negligible (9.6 points)** (April 2023)
RSPP MOSCOW EXCHANGE	Sistema is **among 19 leaders** (Group A) of the "Responsibility and Transparency" index. Sistema is **among 22 companies** with positive dynamics (Group A) of the "Sustainable Development Vector" index
RAEX RATING REVIEW	Sistema was assigned an **A rating** in RAEX's ESG ranking of Russian companies (April 2023)
Национальные приоритеты	Sistema ranked second among large businesses according to the non-profit National Priorities. Sistema was awarded the **status of Partner of National Projects**
ДаСтратегия	Sistema was assigned the **A+ level (Leader of Corporate ESG Practices in Russia)** as part of the ESG rating of sustainable corporate governance in Russia (a project of AKR Yes-Strategy and the University of Perugia (Italy))
The Chamber of Commerce and Industry of the Russian Federation	**Sistema made it to the list of nine companies** with the best approaches to reporting on their contribution to the National Projects according to a survey carried out by the Commission on Development of Corporate Social Responsibility and Social Entrepreneurship of the Sustainable Business Development, Corporate Social Responsibility and Volunteering Council of the Russian Chamber of Commerce and Industry
ESG AWARDS RUSSIA '22	The Lift to the Future charity project was recognised as **one of the best corporate projects in the social area of sustainable development** at the ESG Awards Russia 2022

Corporate governance, procurement and partner relations

	National Corporate Governance Index NCGI **at 8+**, "Advanced corporate governance practice" was awarded to Sistema
TopCompetence Центр Корпоративного Развития	National Corporate Governance Index Sistema is **among the leaders** (top 20) of disclosure of corporate governance information included in the MOEX index
Форум Доноров	Sistema was recognised as a **leader in corporate philanthropy** at the Leaders of Corporate Charity competition
ДЕЛО В ЛЮДЯХ АССОЦИАЦИЯ МЕНЕДЖЕРОВ	Sistema and Sistema Charitable Foundation ranked **first in the category "Building Relationships with Partners and Customers"** according to Sustainable Thinking Hub
ТОП 1000 РЕЙТИНГ РОССИЙСКИХ МЕНЕДЖЕРОВ	Sistema's Corporate Secretary became the **best corporate governance director** at the 20th award ceremony Top 1 000 Russian Managers. The Corporation also showed the **best aggregate result among conglomerates** (the ranking included over 110 representatives of Sistema Group, or about 11% of the list)
ПРЕМИЯ ЛУЧШЕЕ УПРАВЛЕНИЕ ЗАКУПОЧНОЙ ДЕЯТЕЛЬНОСТЬЮ	A representative of Sistema received a personal award as **one of the top ten managers of commercial companies** as part of the annual rating of procurement management quality

Charity

RAEX-НКО	Sistema Charitable Foundation was named one of the **top 10 corporate and private non-profits by RAEX**
	For the second year in a row, Sistema Charitable Foundation received the **highest rating in Social Navigator, a list of Russia's charitable organisations**
AK&M РЕЙТИНГОВОЕ АГЕНТСТВО	Sistema Charitable Foundation was included in the **ranking of corporate charitable foundations** by AK&M
собака.ru	The project "Beyond the Establishment" was recognised as the **inclusive project of the year** at the St Petersburg of the Future 2022 awards

Specific initiatives

ЭКА ЭКО ПОЗИТИВ	Sistema Charitable Foundation received a **special prize at the Ecopositive 2022 award** for organising a corporate quest EcoProsvet in partnership with the Green Movement of Russia
собака.ru	The Winter Garden to Every Home campaign was named "Collaboration of the Year" at the **St Petersburg of the Future 2023 award**
	Sistema's corporate charity run #ZaLes was recognised as the **best project in the category "Development of corporate charity and volunteering through sporting events"** within the framework of the contest "Investments in the development of a healthy country. Best corporate practices"
ЛУЧШИЕ СОЦИАЛЬНЫЕ ПРОЕКТЫ РОССИИ	Charity run #ZaLes became the **winner of the tenth annual programme "Best Social Projects of Russia"** in the category "Support of Sports and Healthy Lifestyles"
ТОчка ТСчета	Sistema Charitable Foundation's annual report for 2021 was recognised as the **gold standard** and also won in a special category at the Tochka Otscheta competition

Sustainability vision

GRI 3-3

Sistema aims to develop competitive and socially and environmentally responsible enterprises that contribute to sustainable development of industries and regions, progressive growth of socio-economic and technological potential, development of human capital, and improvement of the quality of life and social well-being.

Sistema aims

- to be a leader in the field of sustainability;
- to contribute to the increased responsibility, sustainability and competitiveness of its portfolio companies;
- to find and implement business opportunities that contribute to the achievement of global and national sustainable development goals.

Sistema abides by the principles of transparent and responsible business conduct and considers it important to introduce and promote such principles at the Group companies and among its key stakeholders: contractors, suppliers, partners, consumers and investors.

Sistema strives to ensure that all the Group companies adhere to the same principles of responsible business conduct, and makes reasonable efforts to induce the Group companies to implement these principles in their activities.

Guiding principles on responsible business conduct

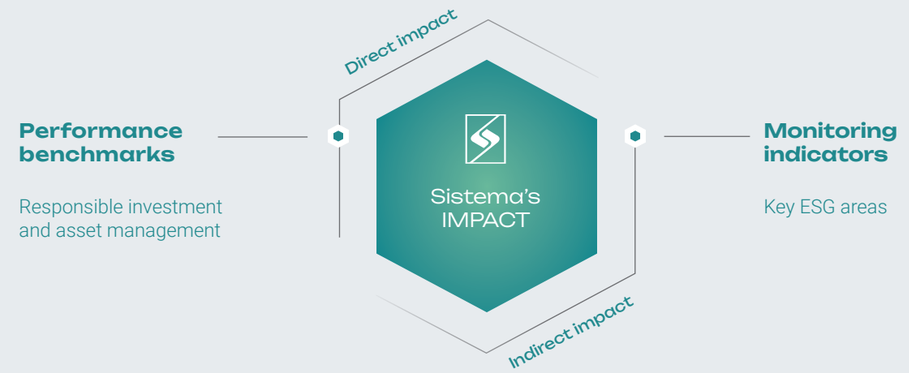


In 2022, Sistema presented an ESG strategy that had been approved by the Board of Directors. The strategy is aimed at increasing the stability of Sistema's investment portfolio, strengthening Sistema's positive influence on social development and decreasing its impact on the environment by means of effective asset management.

Sistema's ESG strategy is built around performance benchmarks and indicators for monitoring.

Performance benchmarks reflect Sistema's direct impact as an investment holding company, consisting in managing the portfolio's ESG risks and developing approaches to responsible investment and asset management.

Indicators for monitoring make it possible to keep track of the progress made by portfolio companies in the key ESG segments which the Corporation helps to develop through its investment activities and in which it may produce a lasting positive effect and create value for stakeholders.



Medium-term performance benchmarks

01 Elaboration of the ESG methodology for assessing potential investments by industry

02 Development of a tool kit for evaluating and implementing ESG practices at portfolio companies

03 Sustainability policies/strategies at portfolio companies

04 Disclosure of information on the Group's sustainability activities and results

05 Development of a climate strategy at the Group level

06 Development of methodology and criteria for assessing the share of "sustainable" revenue

The Corporation's ESG strategy is based on the fundamental assumption that high-quality corporate governance, account for social and environmental risks and opportunities increase the long-term value and stability of a business, especially amid high market volatility and economic turbulence.

At the new stage, the Corporation's strategic ESG priorities are still responsible investment and asset management with view to create value for its shareholders and a broad range of stakeholders. The next cycle of implementation of the Corporation's sustainability strategy envisages break down of approaches to the assessment of ESG profiles of potential investments and portfolio businesses by industry in order to avoid potential risks and identify additional business opportunities related to working on such socially important tasks as inclusion and mobility, healthy lifestyle and healthcare, affordable housing and accessible city infrastructure, clean energy, reduced waste and circular economy, public catering, etc.

Key ESG areas as a continuation of the investment strategy

Sistema identified three key ESG areas to cultivate through investing, with a view to achieving a meaningful positive impact:

- Accessibility and quality of products and services;
- Well-being of employees, customers and local communities;
- Smart, efficient and safe environment.



Responsible investment approach

Sistema's mission is to build Russia's leading investment company with diverse expertise and a strong track record, which will become an investment platform for managing both its own and third-party capital, while also providing access to unique investment opportunities in the most attractive industries and high-potential technologies and fuelling long-term growth in shareholder value.

Sistema's strategic goals and development areas

Long-term goals

- Ensuring steady growth of the Corporation's shareholder value
- Building profitable and growing companies that are leaders in their industries
- Maximising net asset value
- Paying dividends to the Corporation's shareholders
- Raising and managing outside capital and assets

Focus areas

- Building and continuously developing businesses worth over RUB 100bn
- Embracing unique investment opportunities in traditional and new sectors
- Seizing organic and inorganic (M&A[1], JV[2]) asset growth opportunities
- Constantly improving the quality of corporate governance
- Creating value in assets through team strengthening, strategic development, business transformation, operational improvements, equity structure optimisation, digitalisation, etc.



1 Mergers and acquisitions.
2 Joint ventures.

Portfolio strategy

GRI 3-3 SASB FN-AC-410a.2

Investments in existing assets: investments in own portfolio companies that have potential to become businesses worth over RUB 100bn and ensure steady growth of shareholder value.

Investment strategy

Investing in the Corporation's portfolio companies to increase their competitiveness and market share, entering adjacent segments, launching new products with a synergistic effect, enhancing operating efficiency, and increasing transparency and corporate governance quality.

Industries and business segments

Companies' industries and adjacent sectors/segments with a synergistic effect.

Shareholder returns

Above average for comparable companies and local/global benchmarks.

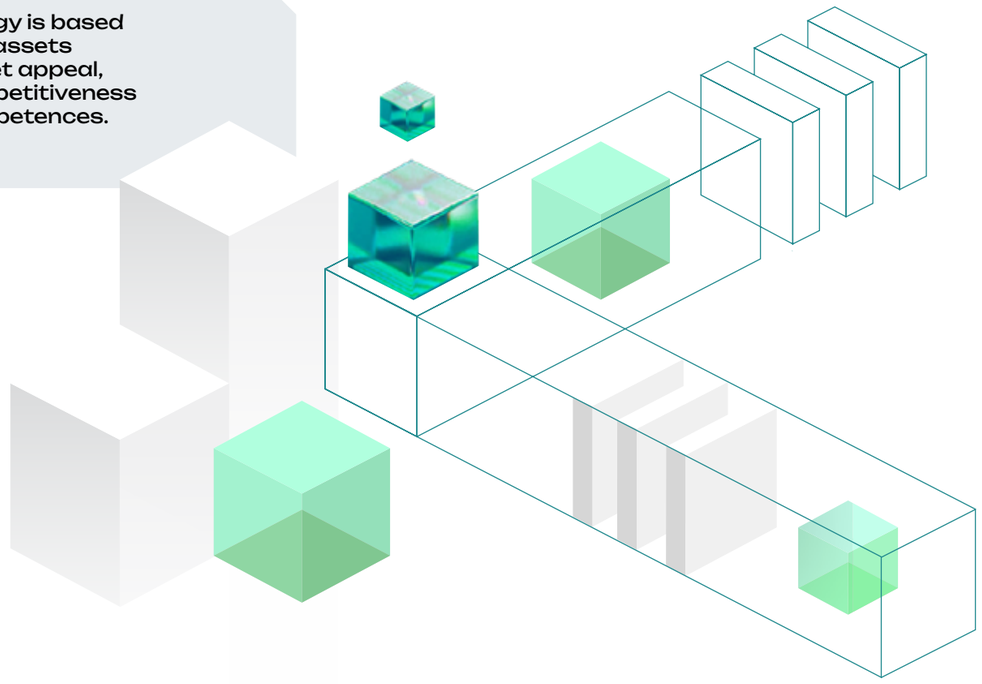
Investment geography

In accordance with the approved strategy for portfolio companies.

Discounted payback period (DPBP)

From three to seven years.

The portfolio strategy is based on classification of assets depending on market appeal, the company's competitiveness and the team's competences.



New investments: unique opportunities in traditional industries

01 Profitable undervalued assets

Investment strategy: acquisition of substantial and controlling stakes in large profitable assets in markets that are attractive in the long term with a possibility of increasing equity value and getting a premium in valuation. It also includes special situations involving the sale of stable and profitable assets in Russia by foreign investors.

02 Growing assets

- **Investment strategy:** acquiring and consolidating players in certain industries or market segments, enhancing the asset's competitive advantages, leveraging economies of scale and entering new market segments
- **Investment criteria:** stable financial position and positive operating cash flow, low debt burden, and attractiveness for other strategic and financial investors. Assets generate positive EBITDA, which can be increased by scaling the company's operations
- **Geography of investments:** mainly in Russia, with possible selected investments in assets and projects in the CIS and friendly or neutral foreign countries
- **Industries and business segments:** growing and stable sectors with large markets, high growth or transformation rates, significant potential for efficiency growth, digitalisation, ability to create technological advantages, import substitution or steady levels of exports to friendly and neutral countries

New investments in tech sector and technologies of the future

01 Technology assets

Investment strategy: direct investments in large stakes in technology companies, with an opportunity to create new modern digital fast-growing businesses, introduce new business models, make a breakthrough in the development of key technologies of the future and monetise them in three to seven years.

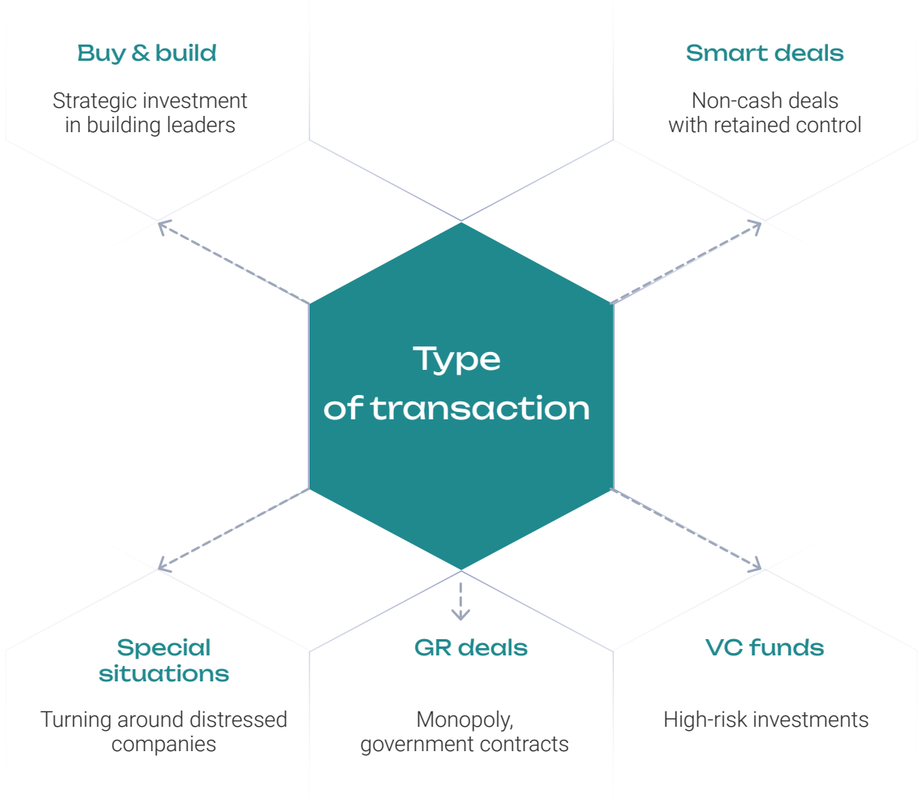
02 VC funds

- **Investment strategy:** investments by Sistema's existing and new VC funds; investment monetisation. Mandatory engagement of external investors as financial partners (the share of outside partners in new funds is at least 50%)
- **Investment geography:** Russia, the CIS, Asia and the Middle East
- **Industries and business segments:** e-commerce, internet of things, artificial intelligence, cloud and edge computing, machine learning and neural networks, autonomous vehicles, robotics, augmented and virtual reality (AR/VR), blockchain, etc.

For more information on management of portfolio assets, see Sistema's Annual Report for 2022, section "Strategy and Governance Model".

Investment process

Sistema relies on its practical experience and focuses on the following types of transactions when entering new assets.



Sistema's investment thesis: key criteria for selecting new investment projects and assets.

Transaction amount

> RUB 1,000,000,000

Stake

> 25%

Target

Cash-on-cash return > 2x

in 3–6 years

IRR > 30%

ESG criteria

Consideration for the ESG profile of companies when making investment decisions

No "sin stocks"

Sistema invests in knowledge- and technology-intensive projects.

RUB 0.12 bn

Sistema's investments in R&D[1] in residential property development and power grid services in 2022[2]

Adapting to the new macro environment

The macro environment changed significantly in 2022. As a result, many new investment opportunities for major M&A deals and partnerships emerged in the Russian market.

We also see more attractive terms for the purchase of new assets, higher volume of state support measures and preferential financing, and improved protection of the domestic market and its participants. Over a strategic horizon, the Corporation expects new opportunities for growth and consolidation of its current portfolio assets and emergence of new areas for investment.

For the Corporation's assets, there is increased importance of retaining and further increasing operational efficiency, resilience to new constraints of the micro environment and the long-term profitability of the chosen business models.

Due to the high diversification of its investment portfolio, the updating of strategic plans and investment projects, the reallocation of investment resources, and the timely adjustments and optimisations to operational and financial plans, the Corporation continued to improve profitability of its business.

In the long term, many of the Corporation's assets have a window of opportunity for import substitution, localisation of technologies and manufactured products, strengthening of market leadership, and growth of cooperation and integration with major Russian corporate and governmental customers. The Corporation and its assets actively initiate the development and implementation of new investment projects that take into account new market and macro conditions.

Governance model

The Corporation uses a partnership model allowing its key executives to share with shareholders the risks of and returns on investment activities. This model is based on Managing Partners' co-investment in portfolio assets they are responsible for. The incentive systems of partners are pegged on growing and monetising asset values.

Sistema's indirect ESG impact through activities of its portfolio assets is significantly larger than its direct impact.

Therefore, the Corporation takes effort to promote principles of responsible business conduct at Sistema Group companies via established corporate procedures and governance bodies.

↗ For more information on management of portfolio assets, see Sistema's Annual Report for 2022, section "Strategy and Governance Model".

1 Research and development.
2 The data is provided for assets in residential property development, power grid services, high technology and "other".

Responsible investment and ESG principles

Responsible investment is an integral element of Sistema's investment strategy and long-term success. It means that at all stages of its investment activities and asset ownership the Corporation takes into account not only financial and operating aspects but also significant ESG factors to create long-term value for shareholders and other stakeholders.

Since 2020, the investment criteria approved by the Corporation's Board of Directors has included ESG factors reflecting the Corporation's guiding principles on responsible business conduct and international ESG standards, which solidified Sistema's strategic approach to responsible investment.

When building asset portfolio

Sistema excludes "sin stocks", which is consistent with the Corporation's established investment culture, and also considers the ESG profiles of acquisition targets in other industries when making investment decisions

When managing assets

Through the governance bodies of the Group companies, Sistema endeavours to promote the following principles in them:

- Compliance with high standards of corporate governance and principles of responsible business conduct;
- Improvement of their sustainability management approaches and performance indicators;
- Minimisation of negative and maximisation of positive impact through innovation, services, products and investments in local communities

When exiting investments

- Ensuring the independence and reliability of sustainability management systems within the company;
- Issuing reference notes and guidelines on sustainability where necessary

For more information on implementation of sustainable development principles, see Sistema's official website.

Effect from investment programmes

Sistema heavily invests in the upgrades and development of the industrial and management potential of assets across a variety of industries and in so doing creates jobs, enhances the quality of products and services, and raises the living standards of local communities.

0.13%
the ratio of Sistema's total investment to Russian GDP

0.61%
the share of the Corporation's consolidated revenue in Russian GDP

20.84%
the ratio of Sistema's total investment to its total consolidated revenue

RUB 187.6 bn
of investments in the Russian economy from Sistema Group in 2022

RUB 158.6 bn
totalled the Corporation's capital expenses in 2022

Issue of social bonds

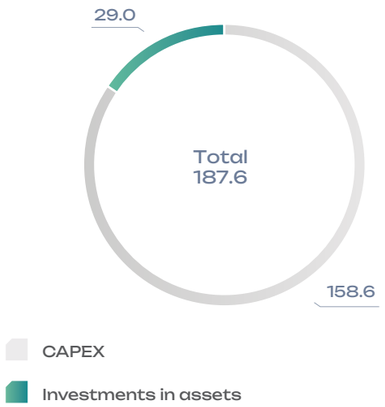
In 2022, Sistema's telecommunications asset continued to fulfil its obligations under the RUB 4.5bn social bonds issued in 2021. The bonds are included in the Social Bonds segment of the Sustainability Sector and Level 1 List of the Moscow Exchange.

Thanks to the social bonds, the company has already connected 4,995 facilities to the Internet. A total of 16 issues of telecom bonds with a nominal value of RUB 159bn were in circulation in 2022.

The funds from the social bond issue are used to implement a project on connection of socially important facilities to the Internet, which the company started as part of the Digital Economy national initiative. For instance, social bonds allow providing access to the Internet for schools, medical institutions, fire stations, police stations and public authorities. The company has established communication hubs in cities and ensured that socially important facilities can connect to them.

In March 2022, Expert RA rating agency confirmed that the series 001P-18 bond issue complied with the Social Bond Principles (SBP) of the International Capital Markets Association (ICMA): use of proceeds, process for project evaluation and selection, management of proceeds and reporting.

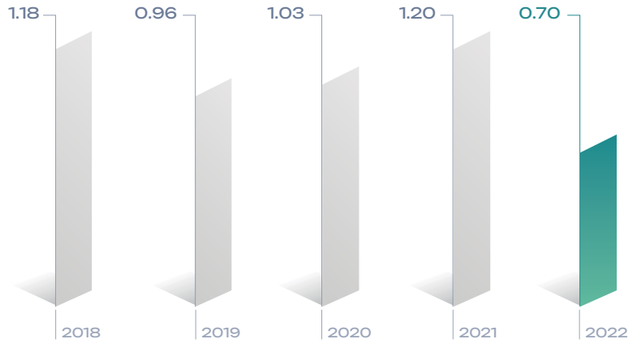
Sistema Group's investments, RUB bn



In 2022, Sistema Group invested RUB 187.6bn in the Russian economy. Its capital expenditures totalled RUB 158.6bn. The funds went towards greater efficiency of Sistema 's businesses in several industries, including investment projects aimed at upgrading and increasing the output and capabilities of production assets.

The Corporation's projects are designed to enhance the economic and environmental efficiency of assets while also raising local standards of living. The biggest share of capital expenditures in 2022 went to telecommunications.

Sistema Group's share in all private investments in Russia, %



84.5%
investments in fixed capital

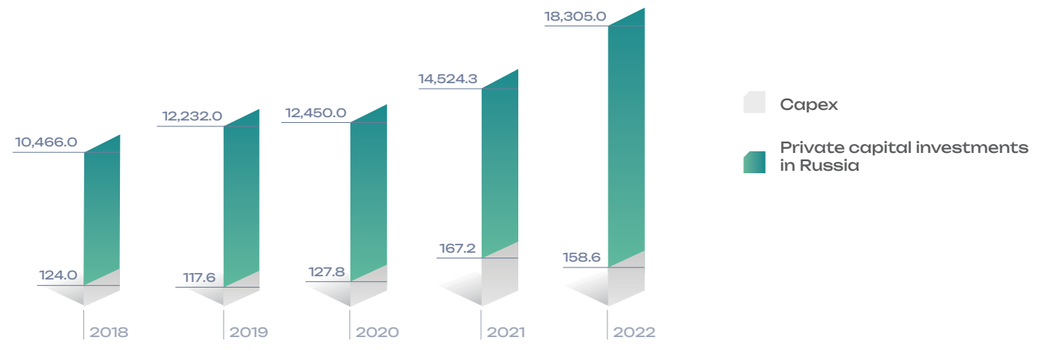
Investment in fixed assets broken down by industry



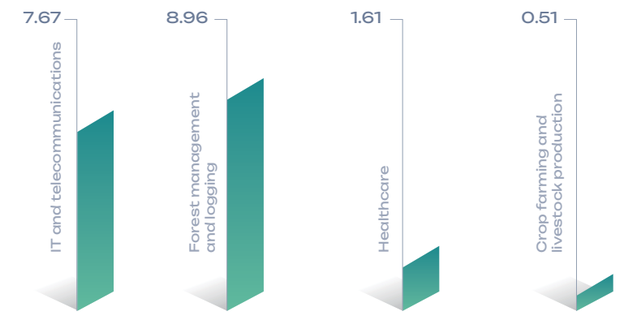
Share of Sistema Group's investments in the total volume of investment in the Russian economy by industry, RUB bn



Sistema Group's share in all private investments in Russia, RUB bn



Share of Sistema Group's investments in the total volume of investment in the Russian economy by industry, %



Participation in international and industry initiatives

GRI 2-28

Representatives of Sistema and the Group's companies participate in the activities of leading international and Russian organisations and business associations.

Global Compact Network Russia	In 2002, Sistema became one of the first Russian companies to join the United Nations Global Compact and the Association "National Network of the Global Compact".
Участник Социальной хартии российского бизнеса	In 2017, Sistema joined the Social Charter of Russian Business, a set of key principles of socially responsible business practices in the Russian Federation.
ESG Alliance	In January 2022, Sistema became one of the founders of the National ESG Alliance — the only major business association in Russia that focuses exclusively on the sustainability agenda and brings together companies that have already implemented these principles in their business models or are consciously embarking on the path of ESG transformation.

The Company also supports:

PRI Principles for Responsible Investment	Principles for responsible investment (PRI)
Sustainable Development Goals	UN Sustainable Development Goals
United Nations Guiding Principles on Business and Human Rights	United Nations Guiding Principles on Business and Human Rights
ISO 26000:2010	ISO 26000:2010 Guidance on Social Responsibility

Russian organisations and associations

RSPP	Russian Union of Industrialists and Entrepreneurs
All Russia Public Organization Business Russia	Russian non-governmental organisation Business Russia
The Chamber of Commerce and Industry of the Russian Federation	Chamber of Commerce and Industry of the Russian Federation
Moscow Exchange	Issuers' Committee of the Moscow Exchange
АНД	Independent Directors Association (IDA)
	Russian Institute of Directors (RID)
	Russian Managers Association
NCSA National Corporate Secretaries Association	National Association of Corporate Secretaries and Club of Corporate Secretaries
	Russian Risk Management Society (RusRisk)
Agency for Strategic Initiatives	Agency for Strategic Initiatives (ASI)
Объединение Корпоративных Юристов	Corporate Lawyers Association

International organisations and associations

- World Economic Forum
- Business Council for Cooperation with India
- Russian-Chinese Business Council
- Russian-Arab Business Council
- Russo-British Chamber of Commerce
- Belgian-Luxembourg Chamber of Commerce in Russia
- EU-Russia Industrialists' Roundtable
- Eastern Committee of the German Economy (OAOEV)
- Emerging Markets Private Equity Association (EMPEA)

Commissions

- India-Russia Intergovernmental Commission on Trade, Economic, Scientific, Technical and Cultural Cooperation
- High-Level Russia-Singapore Inter-Governmental Commission



ESG Banking project group of the Association of Russian Banks

In 2022, the fintech arm of Sistema's telecommunications asset joined the ESG Banking project group of the Association of Russian Banks to develop a legal framework for promoting ESG banking principles in the Russian market.

In accordance with the document entitled "Main areas for the development of the financial market of the Russian Federation for 2022 and the period of 2023 and 2024", the efforts of the group members are focused in the following areas:

- Taxonomy (a standard to help investors and companies make informed decisions in line with sustainability, environmental and social aspects);
- ESG governance structure and functions;
- Business models, strategy and planning;
- ESG risk and opportunity management;
- ESG reporting;
- ESG regulation and market infrastructure.

RSPP Social Charter of Russian Business

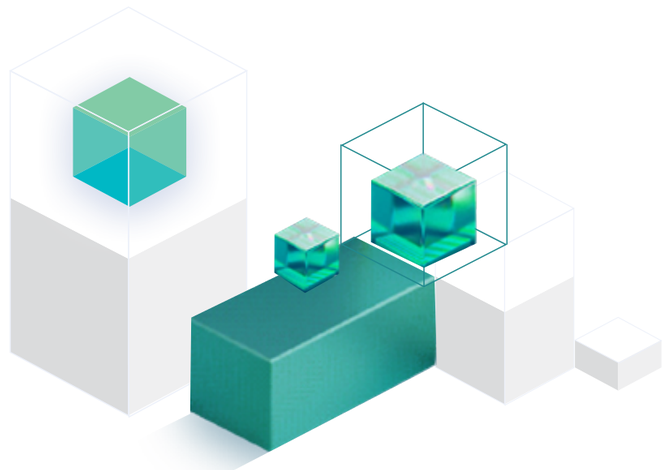
In 2022, Sistema's pharmaceutical asset joined the Social Charter of Russian Business of the Russian Union of Industrialists and Entrepreneurs.

The Social Charter is a voluntary initiative of Russian business and the country's business community in the area of corporate social responsibility, based on the understanding and recognition by its representatives of the active role of business in social development. The Social Charter is in line with key international documents in the field of sustainability, including the principles of the UN Global Compact.

Membership in the Managers Association for the development of Russia's agricultural industry

In 2022, Sistema's agricultural asset became a member of the Managers Association, where the company initiated the creation of a new unit — a commission for the development of the agricultural industry.

The main goal of the commission is to improve Russia's agricultural industry by creating a platform for intra-industry communication and development of effective solutions and practices.



APPROACH TO SUSTAINABILITY MANAGEMENT

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Strategic ESG priorities and sustainability management system

GRI 3-3 GRI 2-16 GRI 2-17 GRI 2-18 GRI 2-23 GRI 2-24

Sistema strives to ensure that all the Group companies adhere to the same principles of responsible business conduct and makes reasonable efforts to encourage them to implement these principles in their activities.

Sistema sets high standards in the area of corporate responsibility not only for itself and its assets but also for the Group's suppliers, contractors and other business partners.

In accordance with the ESG transformation road map for the medium term that was adopted in 2019, Sistema successfully carried out initiatives aimed at improving the sustainability management system in the Group and implemented relevant standards and practices at its portfolio companies.

In three years since the start of the transformation process Sistema has ensured the integration of ESG principles into all stages of investment process — from exclusion of "toxic" industries and assessment of assets to be bought to monetisation of investments. ESG matters have also been included in the agenda of the Strategy and Sustainability Committee of Sistema's Board of Directors.

Sustainable development management is an integral part of Sistema's corporate governance system. The Corporation's basic ESG principles are set out in the following constitutional documents:

- Code of Ethics;
- Code of Corporate Governance;
- Sustainability Policy.

These basic principles serve as a benchmark for ESG development at the Corporation and are described in greater detail in the following documents on specific ESG segments:

- Human Rights Policy;
- Environmental Policy;
- Corporate Social Responsibility Policy;
- Risk Management Policy;
- Anticorruption Policy;
- Charity Policy.

These documents apply to Sistema PJSFC and are recommended for adoption and compliance by Sistema Group companies based on their profile, size and geography.

In 2002, Sistema became a signatory to the UN Global Compact to promote shared values and responsible business practices, and in 2017, to the Social Charter of the Russian Business, a set of fundamental principles of responsible business practices adopted by the Russian Union of Industrialists and Entrepreneurs.

In December 2021, Sistema was one of 28 major Russian companies that initiated the establishment of the National ESG Alliance.

At present, the National ESG Alliance is the only major business association in Russia that focuses exclusively on the sustainability agenda and brings together companies that have already implemented these principles in their business models or are consciously embarking on the path of ESG transformation. The organisation has become a tool for promoting dialogue between all stakeholders, and a platform for exchange of knowledge and experience in the area of sustainable development between different business sectors, the government and society.

Governance structure

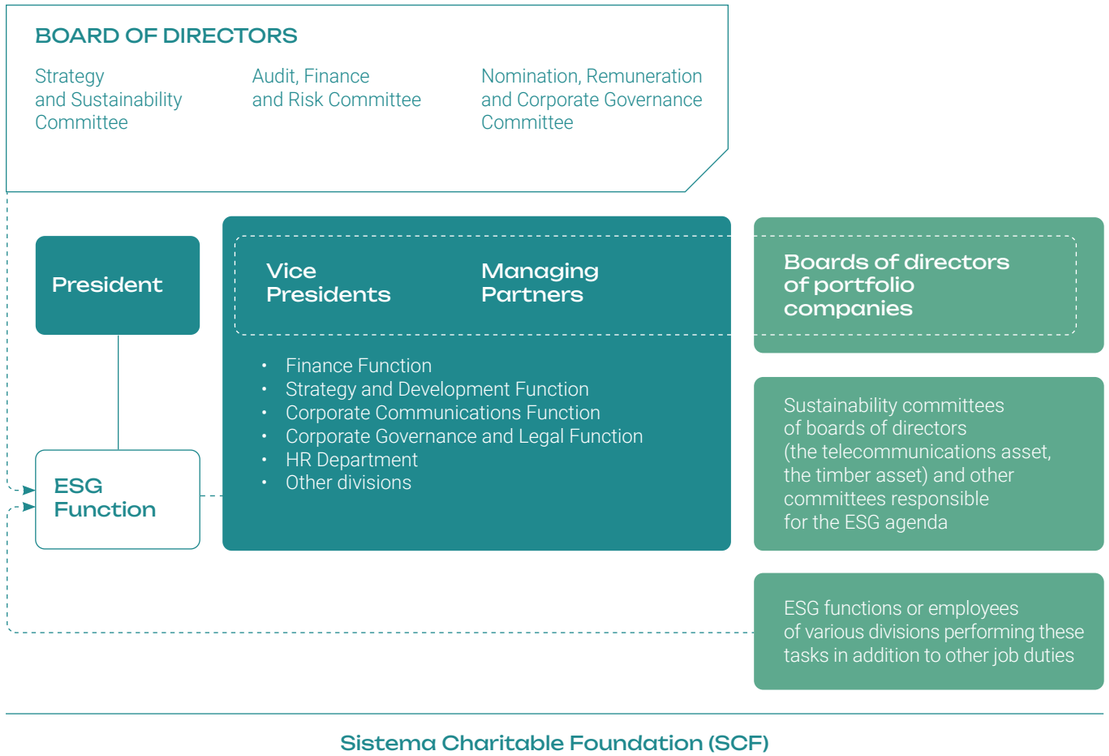
GRI 2-12 GRI 2-13 GRI 2-14

Sistema's Board of Directors plays a key role in determining the strategic areas of the Corporation's sustainable development activities and overseeing their results. The Board of Directors performs two key functions in managing material aspects of sustainable development:

- strategic management involving the approval of strategic documents and material transactions;
- oversight of executive bodies.

The key principles and approaches are translated to the Group companies through their boards of directors, where Sistema is represented by its key managers (managing partners and vice presidents).

Sustainability management structure[1]



1 In July, the structure of the Board of Directors was changed.

Sistema's Board of Directors plays a key role in determining the strategic areas of the Corporation's activities in the area of sustainable development and overseeing its results.
In the middle of 2022, Sistema's Board of Directors approved Terms of Reference of the Strategy and Sustainability Committee of the Board of Directors. The updated Terms of Reference provide for the Committee's leading role in setting the Corporation's ESG agenda.

The key functions of the Committee are:
- discussion and analysis of strategic matters of Sistema Group management and control over the strategic planning cycle;
- preliminary consideration of M&A transactions and major investment projects;
- assistance in the shaping and implementation of the Corporation's strategy in the area of sustainable development.

In 2022, as many as 20% of members of the Strategy and Sustainability Committee of Sistema's Board of Directors were independent directors that had vast professional knowledge in various areas and extensive experience of management and board work at leading international and Russian companies.

For more information on the Committee see the Terms of Reference of the Strategy and Sustainability Committee.

Managing sustainable development across the Group

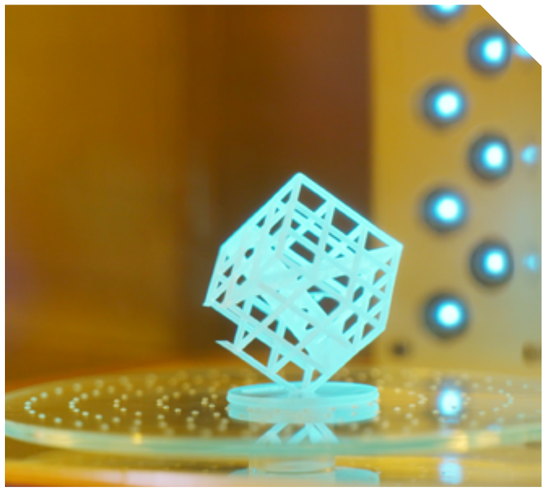
More than ten Group companies have approved top-level documents on social and environmental responsibility setting out their specific development priorities and goals, as well as certain steps to be taken towards progress in corporate responsibility.

In the reporting year, the **agricultural asset** approved its Sustainability Strategy till 2030. According to the Strategy, the company will focus on 5 out of the 17 UN Sustainable Development Goals: zero hunger, decent work and economic growth, responsible consumption and production, climate action and life on land. Within these global goals, the agricultural asset identified priority focus areas, such as assisting innovative development of the agricultural sector, developing climate-smart agriculture, ensuring well-being of employees and improving living standards in regions of operation, as well as building a responsible supply chain. Aiming to preserve terrestrial ecosystems and restore soil fertility, the company pays special attention to the use of sustainable agricultural technologies. The document also envisages broader use of the no-till technology that protects soil from water and wind erosion.

The **timber asset** has a Sustainability Strategy till 2025 in place. When determining its key focus areas, the company took into account its strategic priorities, the social and environmental impact of its activities, the risks and opportunities, interests of the stakeholders and priorities of social and economic development of its regions of operation and the UN SDG. Each focus area has a target set for 2025.

In 2022, the **telecommunications asset** reviewed the priorities of its ESG initiatives, shifting focus towards social support to employees and customers. The company actively expanded education programmes, introduced elements of inclusive culture and encouraged a healthy lifestyle. It ensured uninterrupted access to modern digital services and high-quality communications services for all categories of citizens regardless of their location, ethnicity, age and health conditions.

The **power grid asset** adopted a new version of the Terms of Reference of the Strategy Committee of the Board of Directors, which lists assistance to shaping, developing and implementing the company's sustainability strategy as a matter falling within the committee's remit.



Assurance of the non-financial report by the Russian Civic Chamber

Sistema and its portfolio companies organise public assurance of their non-financial reports. For example, Sistema's Sustainability Reports receive external expert assurance from the Non-Financial Reporting Board of the Russian Union of Industrialists and Entrepreneurs every year.

Also in October 2022, the **telecommunications asset** was the first Russian company to receive assurance of its non-financial report from the Civic Chamber.

Projects with synergistic effect within Sistema Group

Telecommunications

Agriculture
The assets conducted a test of a new development — a corrective signal technology that ensures an object's movement along the intended course with an accuracy of 2 cm

Private healthcare
- A clinical psychologist of the Children's Clinic delivered a lecture titled "How to adjust to the new reality."
- Check-up rooms were set up at locations of entertainment events and theatre productions organised by the telecommunications asset

Residential property development
A partnership agreement was signed for provision of digital services to residential compounds

Sistema Charitable Foundation
The Russian Museum presented a tactile image of Mikhail Vrubel's Demon: now blind and visually impaired visitors can feel the piece of art they previously could only read or hear about.

Agriculture

Sistema Charitable Foundation
The parties organised an internship for agricultural students, AgroCamp

Private healthcare

Sistema Charitable Foundation
An art therapy project, Art of Opportunities, was launched to support severely ill patients

Pharmaceuticals

Sistema Charitable Foundation
An education programme for residents of the Kurgan region was launched

Hospitality

Timber industry
The assets held a joint foresight session to discuss the tourist potential of the Segezha district in Karelia

High technology
142 kW and 44 kW charging stations were installed at the parking of a hotel in the Moscow region

Sistema Charitable Foundation
Eleven hotels of the chain joined the Kind Room project that helps orphans with university admissions and employment

Power grid services

High technology
Charging stations were installed in Ufa, Nizhny Novgorod and Ulyanovsk

Managing social investments and charitable activities

Sistema's social investments aim to address the most acute social issues and bring lasting benefits to stakeholders, such as corporate staff, consumers and local communities. Social investments are expected to form a stable favourable social environment and provide a comfortable standard of living to people in the regions where Sistema operates in the long term.

Sistema's Board of Directors reviews the company's strategy in the area of charitable activities and its priorities in social investments. The Corporate Communications Function of Sistema helps to forward the corporate philanthropy and community initiatives and makes sure that the corporate Charity Policy is complied with. A specialised CSR Expert Council chaired by the President meets as necessary and issues recommendations as to enhancing charitable and social projects and making them more effective.

Sistema's charity and community activities are primarily organised through Sistema Charitable Foundation. In 2022, SCF carried out its activities in accordance with its Development Strategy till 2023 that was adopted in 2020.

In 2022, Sistema Charitable Foundation was one of the first seven organisations to be awarded a partner status by the non-profit National Priorities of Russia and became a finalist in the national ranking “Our Contribution” for implementation of social programmes and national projects in Russia.

Sistema Charitable Foundation developed a guide for creation and assessment of impact projects

In 2022, Sistema Charitable Foundation together with the Help Needed foundation that supports underprivileged groups of population developed a guide for creation and assessment of impact projects.

Impact projects/impact investments imply achievement of a positive and measurable social or environmental effect along with business results.

In order to develop the guide, the partners conducted research that included studying of the experience and best practices of Russian and foreign companies, in-depth interviews with experts and a strategy session with representatives of Sistema Group companies.

The resulting document will accelerate transition from traditional charity, which does not generate any profit for businesses, to impact investing. The guide formulates criteria that help users to understand whether a project is an impact investment or not.

Methodological materials and recommendations help Sistema's assets to make motivated decisions at the stages of initiating, selection, monitoring and assessment of impact projects.

The guide for creation and assessment of impact projects is available on SCF's official website

Sistema Charitable Foundation develops an ecosystem of corporate initiatives

In February 2022, Sistema Charitable Foundation held another annual meeting of Sistema's assets. The online conference was attended by 60 representatives of 20 Group companies.

Each Group company has projects aimed at achievement of certain UN Sustainable Development Goals. These were presented at the meeting.

SCF as an operator of Sistema's social investments became the Group's centre of sustainable thinking. In line with its new role, it will build a charity ecosystem. It will also help companies to merge local initiatives into umbrella programmes and offer collaborations to achieve synergies.

The Board of Trustees supervises SCF's activities, its use of funds and implementation of charity programmes. The Board of Trustees meets at least once a year and is authorised to issue recommendations to the Council and the President of SCF with regard to any matters related to its activities. In 2022, the Board of Trustees held one meeting.

For more information about SCF's work, see “Social and Economic Development of Local Communities”.

77.6%
level of engagement in joint CSR projects (participation of the Group companies in integrated programmes and projects)

3.26%
activity-to-media conversion ratio (i.e., the percentage of CSR projects that received coverage in public and social media)

Sistema's contribution to the global and national sustainability agenda

The Corporation's diversified portfolio enables it to link its positive impact to all of the UN SDGs and many national projects and priorities.

International agenda

National agenda

Sistema Charitable Foundation: partnership for achievement of UN Sustainable Development Goals

In February 2022, Sistema Charitable Foundation and the ECA inter-regional public environmental organisation signed an agreement on cooperation for the development and implementation of environmental projects aimed at achievement of the UN SDGs.

In accordance with the document, the partners organised exchange of information and started joint educational and outreach activities in the area of environment protection and promotion of an eco friendly lifestyle. Notably, they developed training programmes on future environmental competences for school and university students and adults and organised campaigns promoting an eco friendly lifestyle.

SCF was a winner of the annual environmental award EcoPositive, receiving a special prize for the EcoProsvet corporate quest it organised for Sistema Group employees in partnership with the ECA movement.

Sistema's contribution to the national projects of the Russian Federation

	1	2	3	4	5	6	7	8
Demography	+		+				+	+
Education	+	+		+				
Culture	+	+						
Safe and quality roads					+			+
Housing & urban environment		+		+	+			+
Environment	+	+		+				+
Science & universities	+							+
Digital economy	+	+						+
Labour productivity		+		+	+	+		
International cooperation & export				+		+		

1 — Sistema Charitable Foundation
2 — Telecommunications asset
3 — Healthcare asset
4 — Timber asset
5 — Property development asset
6 — Agricultural asset
7 — Pharmaceutical asset
8 — High-tech asset

Sistema's contribution to the achievement of the UN Sustainable Development Goals

UN SDGs	UN SDG targets	The Corporation's contribution to the achievement of the goals[1]
1 NO POVERTY	1.2. Reduce at least by half the proportion of men, women and children living in poverty	• The average entry-level wage across the Group is **1.8 times** higher than the minimum wage (GRI 202-1) ↓ • Social investments in 2022 exceeded **RUB 1.5bn** (UNCTAD A.3.2) ↓
	1.3. Implement appropriate social protection systems and measures	• About **RUB 140bn** was paid in taxes and payments to social insurance funds in 2022 (GRI 207-4; UNCTAD A.2.1) ↑
2 ZERO HUNGER	2.3. Double the agricultural productivity and incomes of small-scale food producers	• **2 m t** was collected by the agricultural asset in gross harvest across crop types ↑ • **150,000 t** is the milk output of the agricultural asset ↑ • **14,300** lactating cows were owned by the agricultural asset[2] ↑
	2.4. Ensure sustainable food production systems and implement agricultural practices that increase productivity and production	• Land holdings of the agricultural asset total **578,000 ha**
	2.a. Increase investment in rural infrastructure, agricultural research and extension services, and technology development	• **RUB 4.1bn** was the amount of capital investment of the agricultural asset in 2022 ↓
3 GOOD HEALTH AND WELL-BEING	3.4. Reduce by one third premature mortality from non-communicable diseases through prevention, treatment and promotion of mental health and well-being	• Five cases of occupational diseases among the Group's employees (GRI 403-10) ↑
	3.8. Achieve universal health coverage and access to essential medicines and vaccines for all	• **12m** patient visits were recorded at the healthcare asset's clinics in 2022 ↑ • **RUB 1.6bn** spending on occupational health and safety (UNCTAD A.3.1) ↑
	3.b. Support the research and development of vaccines and medicines for all	• Expenses on voluntary health insurance and social programmes at Sistema Group companies totalled **RUB 1.9bn** in 2022 ↑
	3.c. Substantially increase health financing and the recruitment, development, training and retention of the health workforce	• **> 17,000 employees** in the healthcare and pharmaceutical industries ↑

1 The contribution indicators were selected based on the following documents: Guidance on Core Indicators for Entity Reporting on Contribution Towards Implementation of the Sustainable Development Goals; Linking the SDGs and the GRI Standards, Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development.

2 Lactating cows receive additional fodder to increase milk yields.

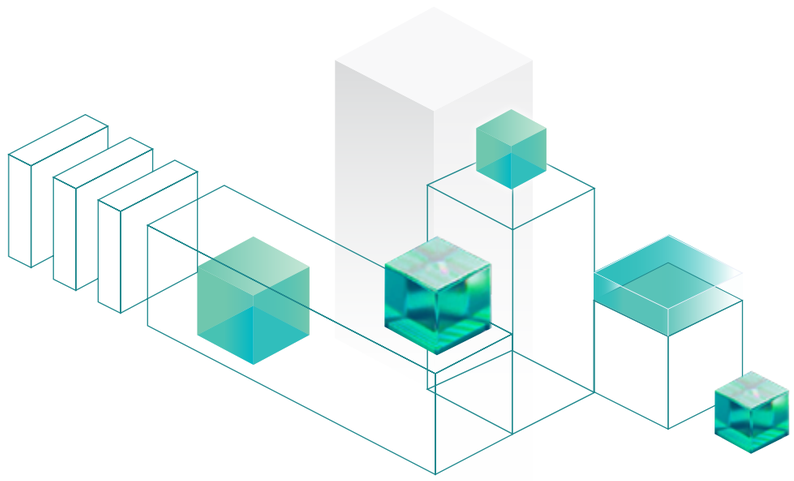
UN SDGs	UN SDG targets	The Corporation's contribution to the achievement of the goals
4 QUALITY EDUCATION	4.3. Ensure equal access to affordable and quality technical, vocational and tertiary education, including university	• **16.6 hours** is the average number of learning hours per Sistema Group employee (GRI 404-1; UNCTAD C.2.1) ↑
	4.5. Eliminate gender disparities in education and ensure equal access for the vulnerable, including persons with disabilities and children in vulnerable situations	• The high-tech asset of Sistema in partnership with the non-profit Digital Economy presented a career guidance project for women called "Join IT."
	4.a. Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	• Sistema Charitable Foundation launched the first pilot stream of a scholarship programme; over **46,000** school and university students across Russia became its participants
5 GENDER EQUALITY	5.5. Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making	• **45%** of the Group's employees in 2022 were women • **22%** was the average share of women on boards of directors of Sistema's key assets in 2022 (UNCTAD D.1.2) ↑ • Basic salaries of women and men for work of equal value do not differ at Sistema Group's assets. (GRI 405-2)
6 CLEAN WATER AND SANITATION	6.3. Improve water quality by reducing pollution, halving the proportion of untreated waste water and substantially increasing recycling and safe reuse globally	• **55.6m cu m** was the aggregate volume of waste water produced at Sistema's assets (GRI 303-4 2018) ↓ • **9.6m cu m** of water was discharged for treatment. (GRI 303-4 2018) ↑
	6.4. Substantially increase water-use efficiency	• **66.8m cu m** was the total water withdrawal by the Group companies in 2022. (GRI 303-3 2018) ↑
	6.6. Protect and restore water-related ecosystems	• The power grid asset together with a partner in the oil industry in the Republic of Bashkortostan released about 20,000 young sterlets (an endangered species) in the Belaya river. • The timber asset released over **12,000** young Siberian sturgeons, sterlets, whitefish and tuguns

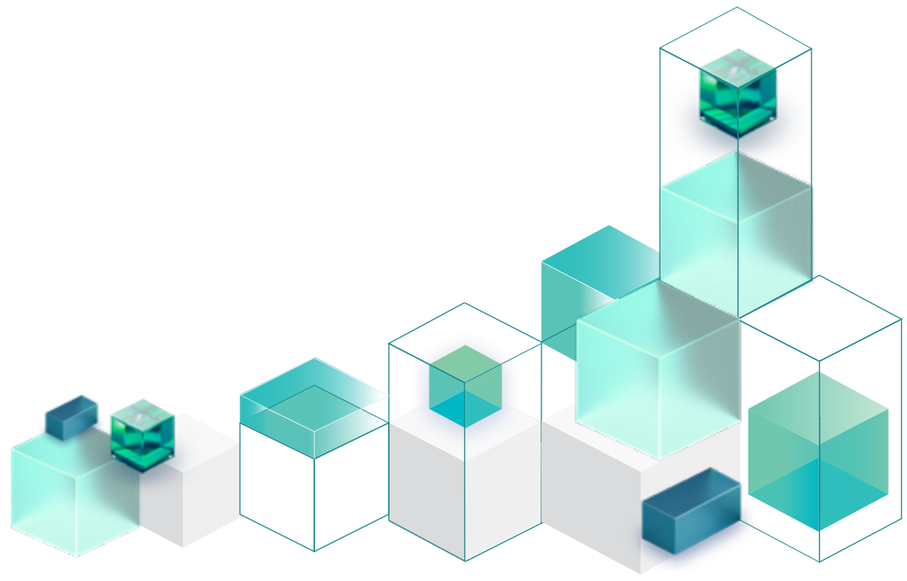
UN SDGs	UN SDG targets	The Corporation's contribution to the achievement of the goals
7 AFFORDABLE AND CLEAN ENERGY	7.1. Ensure universal access to affordable, reliable and modern energy services	• In 2022, the power grid asset connected to grids over **3,200** new consumers of electricity and **10,600** benefit-entitled users (GRI EU7). ↑
	7.2 Increase substantially the share of renewable energy in the global energy mix	• In 2022, Sistema's timber asset increased the share of bio fuel in the production cycle of its plywood mill in the Kirov region by utilising wood waste • Sistema's telecommunications asset began using solar power in remote sparsely populated villages situated in hard-to-access areas • The high-tech asset continued to expand its network of EV charging stations for both passenger cars and public transport
	7.3. Double the global rate of improvement in energy efficiency	• Total grid losses of the power grid asset in 2022 stood at **2.18%** (GRI EU 12) ↓ • Energy intensity at the Group companies was **81.63 GJ/RUB m** (GRI 302-3) ↑
	7.a. Enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	• **RUB 4.5bn** was the investment of the power grid asset in the development of Bashkortostan's energy sector (GRI 203-1) ↓ • Sistema signed a cooperation agreement with the Institute of Problems of Chemical Physics of the Russian Academy of Sciences to set up a national hydrogen energy R&D centre
8 DECENT WORK AND ECONOMIC GROWTH	8.3. Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation	• The Group companies employ **over 173,000 people** (GRI 102-8) ↑ • **More than 53,980** new employees were hired in 2022 (GRI 401-1) ↓ • Sistema's e-commerce asset and the My Business entrepreneurship support centre launched a free education programme for entrepreneurs
	8.5. Ensure full and productive employment and decent work, including for young people and persons with disabilities, and equal pay for work of equal value	• The employee turnover at Sistema was **12.69%** in 2022. (GRI 401-1) ↑ • **895 employees** with disabilities ↑
	8.8. Protect labour rights and promote safe and secure working environments for all workers	• **24.5%** of employees are covered by collective bargaining agreements ↑

UN SDGs	UN SDG targets	The Corporation's contribution to the achievement of the goals
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9.4. Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes	• GHG emissions intensity is **1.04 t/RUB m** of consolidated revenue ↓
	9.5. Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, including encouraging innovation and substantially increasing the number of R&D workers and R&D spending	• **RUB 120m** was Sistema's investment in R&D in residential construction and power grid services ↓ • Sistema's high-tech asset joined the national AI Ethics Code developed by the AI Alliance
	9.c. Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet	• In 2022, the telecommunications asset expanded its presence to the Amur region, the Republic of Sakha (Yakutia) and the Republic of Bashkortostan; it also launched a joint broadband internet network together with regional operators in 15 new regions of Russia
10 REDUCED INEQUALITIES	10.2. Empower and promote the social, economic and political inclusion of all	• **More than 500,000 people** became participants of the Group's charitable programmes • **Over 3,000 employees** of the Group took part in the events of Sistema Charitable Foundation • **47** is the total number of volunteer events organised by SCF • About **1,000 employees** of the Group took part in the corporate run #ZaLes aiming to promote a healthy lifestyle and protect the environment
11 SUSTAINABLE CITIES AND COMMUNITIES	11.6. Reduce the adverse per capita environmental impact of cities, paying special attention to air quality and municipal and other waste management	• **1,461.70 t (4.97%)** — particulate matter emissions ↓
	11.7. 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 timber asset invested **RUB 155.7m** in **36 large projects** to improve the urban infrastructure of the city of Segezha in 2022. • The telecommunications asset launched video control of air emissions from industrial enterprises in three districts of Chelyabinsk. (GRI 203-2)
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.4. Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment	• 0.03% was the share of hazardous waste at Sistema Group
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.5. Substantially reduce waste generation through prevention, reduction, recycling and reuse	• The timber asset's flagship enterprise — producer of laminated wood structures — transitioned to waste-free production
	12.6. Adopt sustainable practices and integrate sustainability information into reporting cycle	• Five of the Group companies publish their sustainability reports
13 CLIMATE ACTION	13.2. Integrate climate change measures into national policies, strategies and planning	• Greenhouse gas emissions by Sistema Group companies totalled **0.95m t** in 2022 (GRI 305-1; UNCTAD B.3.1) ↑
15 LIFE ON LAND	15.1. Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services	• The timber asset reforested **69,000 ha** of woodland in 2022. ↑ • **RUB 778m** was spent by the timber asset on reforestation. (UNCTAD A.3.1) ↑
	15.2. Promote the implementation of sustainable management of all types of forests, halt deforestation and substantially increase afforestation and reforestation	• **77%** of the timber asset's forest resources is certified under international voluntary forest certification ↓
	15.b. Mobilise significant resources to finance sustainable forest management, including for conservation and reforestation	• **RUB 887m** was spent by the Group on environmental protection. (UNCTAD A.3.1) ↓
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	16.5. Substantially reduce corruption and bribery in all their forms	• **214** incidents of corruption were identified and confirmed at the Group companies (GRI 205-3) ↑ • **Over 76,000 employees** of Sistema Group companies completed anticorruption training (GRI 205-2) ↓
	16.6. Develop effective, accountable and transparent institutions at all levels	• **18 meetings** of the Board of Directors of Sistema. (UNCTAD D.1.1) ↓ • **13 meetings** of the Audit, Finance and Risk Committee of Sistema. (UNCTAD D.1.4) ↓
17 PARTNERSHIPS FOR THE GOALS	17.1. Strengthen domestic resource mobilisation to improve domestic capacity for tax and other revenue collection	• **RUB 117.8bn** was paid in taxes to the federal and regional budgets (GRI 207-4; UNCTAD A.2.1) ↑ • **RUB 31.7bn** was the amount of social security contributions ↑
	17.16. Enhance the global partnership for sustainable development to support the achievement of the sustainable development goals	• The pharmaceutical asset joined the Social Charter of Russian Business drafted by the Russian Union of Industrialists and Entrepreneurs • The agricultural asset became a member of the Managers Association • The financial asset joined the ESG Banking project group of the Association of Russian Banks

Sustainable development practices at Sistema and portfolio companies

	ESG strategy	Top-level documents on sustainable development	Bodies in charge of sustainable development	Non-financial/integrated annual report	External assurance of the report	Certification				
						Energy management	Environmental management	Occupational safety management	Compliance management	Quality management
Sistema	+	+	+	+	+					
Telecommunications	+	+	+	+	+	+		+	+	
Timber industry	+	+	+	+		+	+	+		+
Agriculture	+	+	+							
Private healthcare		+	+					+		+
Pharmaceuticals										+
Residential property development	+	+	+	+			+	+		
Hospitality										+
Power grid services	+	+	+	+		+	+	+		+
High technology	+		+					+		
Commercial property management	+									
E-commerce	+									





Sustainable corporate governance

Description of the corporate governance system

A crucial element of Sistema's strategy is maintaining a high level of corporate governance and information transparency. The Corporation aims to meet the best standards in these areas and consistently enhances its corporate governance practices.

In its corporate governance practices Sistema abides by applicable legislation, the Listing Rules of Moscow Exchange and the recommendations of the Corporate Governance Code recommended by the Bank of Russia.



Sistema's corporate governance principles

01

Clear and effective procedures for taking investment decisions

02

Reasonable transparency of management processes taking into account external circumstances

03

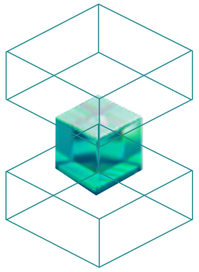
A dividend policy that takes into account both reasonable expectations of investors and Sistema's financial resources

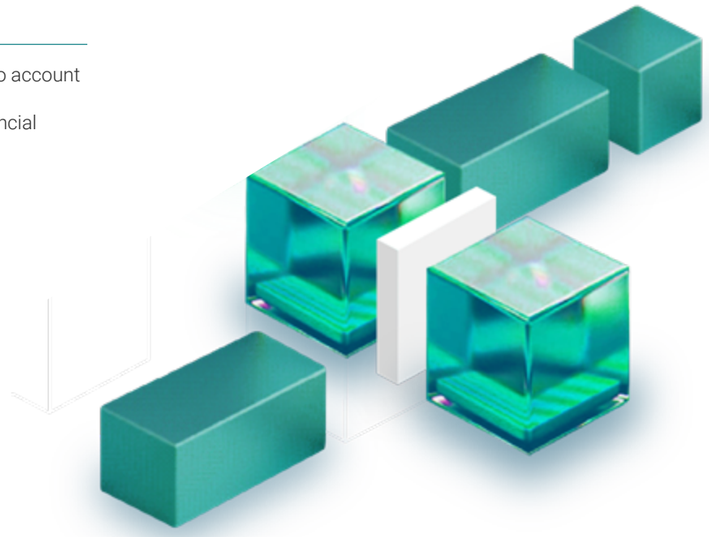
04

Professionalism of the Board of Directors and its active involvement in strategic planning and the management and oversight of business processes

05

Special focus of the Board of Directors on related-party transactions and potential conflicts of interest





GRI 2-9 UNCTAD D.1.4

Description of corporate governance bodies and their work in 2022

General meeting of shareholders

The supreme governance body of the Corporation. The activities and powers of the Annual General Meeting of shareholders are governed by the laws of the Russian Federation, the provisions of Sistema's Charter and the Terms of Reference of the General Meeting of shareholders

» The Annual General Meeting of shareholders was held in August 2022. 67.2% of voting shareholders attended the meeting

Board of Directors

A collective body managing the Corporation's operations and responsible for its strategic management

» 18 meetings

(12 in-person meetings and six — in the form of absentee voting). In 2022, the Board of Directors optimised the work of Board Committees taking into account the available resources and tasks. The functions of the former Ethics and Control Committee and the Sustainability and Investor Relations Committee were distributed between the other committees

Strategy and Sustainability Committee of the Board of Directors

Discussion and analysis of strategic matters of the Group's management, review of M&A transactions and large investment projects; assistance with shaping, developing and implementing the Corporation's sustainability policy

» 6 meetings

Audit, Finance and Risk Committee of the Board of Directors

Assistance with and oversight over preparation and audit of the Corporation's financial statements; organisation of interaction with external auditors of the Corporation; development of the Corporation's risk management system and internal control system

» 13 meetings

Nomination, Remuneration and Corporate Governance Committee of the Board of Directors

Facilitation of the development of an effective corporate governance system meeting high standards at the Corporation and its portfolio companies

» 10 meetings

President

Reports to the Board of Directors and the General Meeting of shareholders of Sistema PJSFC. The President chairs the Management Board of Sistema

Management Board

The Management Board determines methods for the implementation of the Corporation's development strategy, formulates development plans, determines and oversees investment processes and previews strategic matters to be subsequently submitted to the Corporation's Board of Directors

» 7 meetings

Advisory bodies and their functions

The following bodies under the President and the Management Board contribute to the improvement of managerial decision-making.

Finance and Investment Committee	
Review of investment projects; approval of the financial model, business plan and required rate of return for each investment project; recommendations on rationality of project implementation, sources of financing and review of financing terms	>> 43 meetings
Risk Committee	
Risk assessment; formulation of proposals on the acceptable risk level (risk appetite); approval of the risk management strategy and action plans	>> 5 meetings
Tender Committee	
Ensuring procurement of goods, works and services on the most favourable terms; ensuring transparency of procurement procedures and prevention of corruption, fraud and other malpractices in procurement activities	>> 22 meetings

Equity structure as of 31 December 2022, %



Nomination and election of supreme governance body

GRI 2-10

Shareholders who own at least 2% of the Corporation's voting shares are entitled to propose items for the agenda of the General Meeting of shareholders and nominate candidates for election to the Corporation's Board of Directors.

Overview of Sistema's Board of Directors[1]

GRI 2-11 GRI 405-1 UNCTAD D.1.2 SASB FN-AC-330a.1

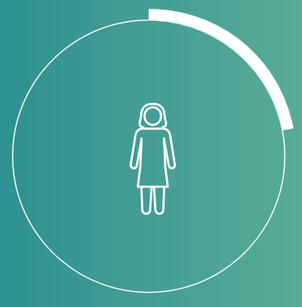
9 Board members
incl. 5 independent directors



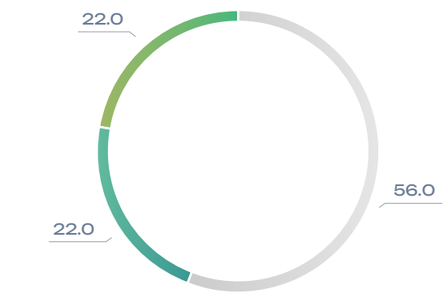
4.4 years
average tenure on the Board of Directors

63 years
average age

22%
share of women on Sistema's Board of Directors in 2022



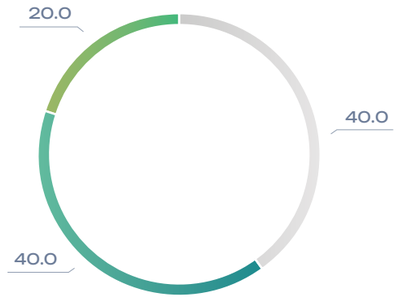
Composition of the Board of Directors, %



1 As of 31 December 2022.

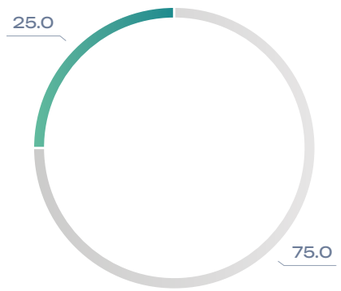
Composition of Sistema's Board Committees as of 31 December 2022

Strategy and Sustainability Committee, %



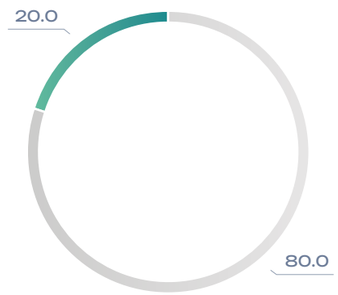
- Executive directors
- Non-executive directors
- Independent directors

Audit, Finance and Risk Committee, %



- Independent directors
- Non-executive directors

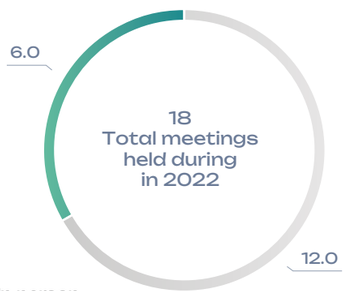
Nomination, Remuneration and Corporate Governance Committee[1], %



- Independent directors
- Non-executive directors

Meetings of the Board of Directors, %

UNCTAD D.1.1



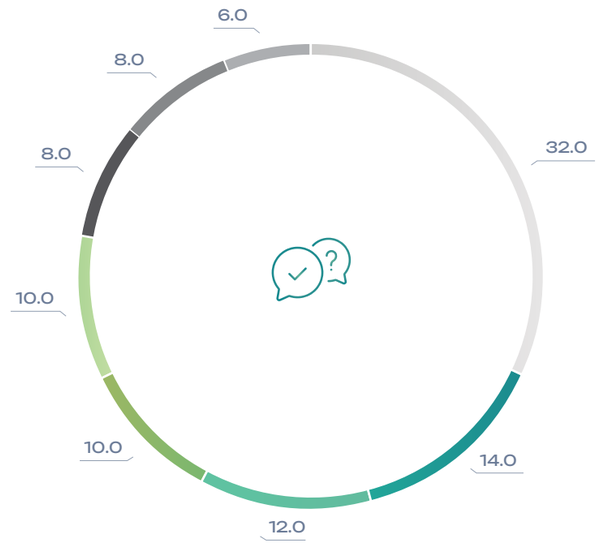
- In person
- By letter ballot

50
Total items reviewed in 2022

The Board of Directors considered the following key items in the reporting period

1. Sistema's development strategy and investment policy.
2. Potential investment projects.
3. Management of and value creation for Sistema's investments in portfolio assets operating in various industries.
4. Sistema's results and performance against budget.
5. Budget planning, approval of the consolidated budget of Sistema and key performance indicators of the management.
6. Management of the Corporation's risks.
7. Activities of the internal audit department.
8. HR matters and employee incentive systems.
9. Assessment of the quality of corporate governance.
10. ESG strategy of the Corporation.
11. Mandatory corporate procedures, including convening of the Annual General Meeting of shareholders and developing of the work plan of the Board of Directors.
12. Composition of Board Committees and determining the status of Board members.
13. Approval of transactions, including acquisition of equity stakes in various companies.

Items considered by the Board of Directors in 2022, %



- Corporate governance and securities
- Financial statements, planning, audit
- Business strategy
- Approval of transactions
- Appointments and HR policy
- Shareholding in portfolio companies, groups, JVs, branches
- Functional strategies
- Approval of internal regulations

Dividend policy

The Corporation announces the amount of dividends recommended by the Board of Directors and the record date in advance to give shareholders an opportunity to make informed decisions with respect to disposing of their shares.

When deciding on recommended dividends for 2021, the Board of Directors took into account the remaining market volatility and the need to prioritise the Corporation's financial stability and sufficient liquidity and recommended that the Annual General Meeting not distribute dividends for 2021.

1 The President of Sistema attends Committee meetings in the capacity of a permanent invitee and does not vote on matters submitted for consideration of the Committee.

Corporate governance across Sistema Group



The Corporation carries out the strategic management of its key portfolio companies by ensuring that their boards of directors work efficiently. The boards of the key portfolio companies include professional independent members with knowledge of relevant industries, as well as expertise in strategy, finance, audit and corporate governance.

The board of directors of portfolio companies and their relevant committees make strategic managerial decisions, build efficient management teams and oversee compliance with standards for the purpose of improving the quality of corporate governance.

Overview of the boards of directors of Sistema's key assets in 2022[1]

9
average number of members on the boards of directors

18
average number of board meetings per year

17.6%
Average share of women on the boards of directors

54 years
average age of board members

1 | The data is provided for assets operating in the sectors of telecommunications, property development, timber industry and power grid services.

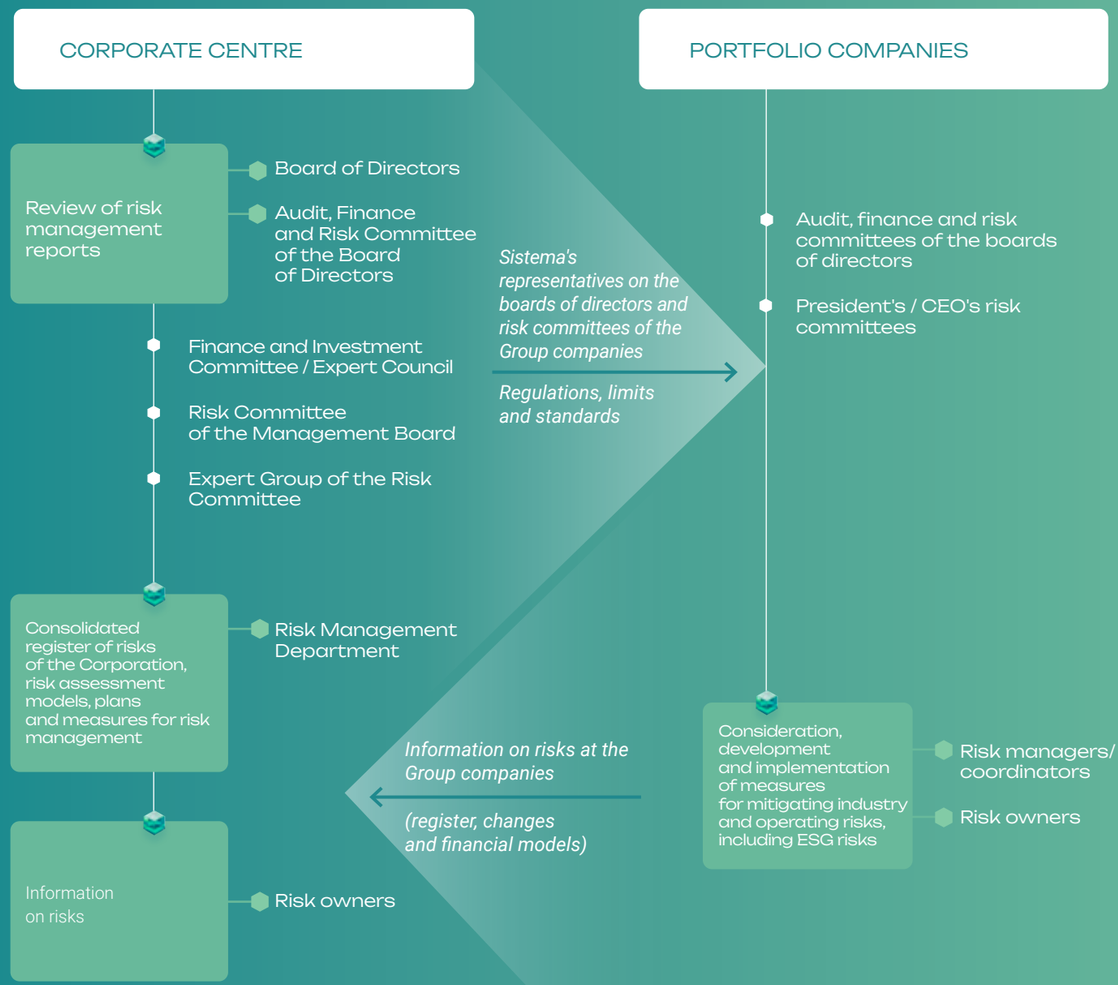
ESG risk management

Effective risk management is one of the important prerequisites for the stability of the Corporation's business. The main role of Sistema, as a responsible investor, is to implement the principles and build a risk management system at portfolio companies with subsequent monitoring.

The Corporation and its key portfolio companies have an integrated risk management system (IRMS) in place based on international standards, recommendations and best practices in risk management.

In August 2022, Sistema established a new structural division — Risk Management Department. It is headed by Executive Vice President for Risk Management, who reports directly to the President of Sistema. Before that, risk management was the responsibility of the Finance Function. Establishment of a separate risk management division aims to develop and enhance the Corporation's experience in risk management, strengthen its expertise and improve the quality of risk analysis, assessment and monitoring with regard to investment projects.

Participantsof risk management system at the Corporation



Sustainability risks

TCFD risk management a TCFD risk management b

The Corporation's long-term success depends on its ability to manage risks and opportunities associated with sustainable development. ESG risks are identified, evaluated and managed based on the degree of their impact on the implementation of the Corporation's overall strategy (top level) and the operating activities of its portfolio companies as part of regular risk management procedures. Sistema's portfolio assets are significantly more exposed to ESG risks compared to the Corporation due to the scale of their impact on stakeholders and the nature of their activities.

List of key sustainability risks

Reputation risks and brand risks	>>	Sistema's reputation may suffer from any unethical business practices, professional errors, negligence, failure to comply with human rights, dissemination of inside information and any corruption offence, should any of the above take place anywhere within the Group
Risks related to human rights	>>	Any instances of violations of human rights may have an adverse effect on reputation and lead to court disputes, loss of confidence of investors, customers and employees, cause resistance from local communities, trade unions and non-profits
Climate risks	>>	All companies of the Group take into account the risks of climate change and extreme weather conditions that may impact crop yields, people's health, and the operation of infrastructure. These risks may have a material impact on the Corporation's agricultural assets, especially those situated in the southern part of Russia. Steppe AgroHolding monitors such risks and takes into consideration the natural and climatic factors associated with soil freezing, heavy rains, drought, storms, hail, fires, floods, plant diseases, pests, etc.
Social and environmental risks	>>	The social and environmental risks faced by the assets differ materially across the Group depending on the industry. To manage social and environmental risks, Sistema Group companies implement advanced technological solutions, improve management systems in the area of environmental protection, energy efficiency, occupational health and safety, and develop measures aimed at prevention and mitigation of accidents and emergencies
Risks related to the COVID-19 pandemic	>>	In March 2020, the World Health Organisation (WHO) declared the rapid spread of the novel coronavirus disease (COVID-19) a pandemic. The magnitude of the pandemic's impact on Sistema Group's operations will largely depend on the duration and extent of its effect on the global and national economies
Risks related to management and key personnel	>>	Failure to hire a sufficiently competent and motivated management team may jeopardise Sistema's business, performance, financial position and development prospects
Risks related to compliance with laws and regulations	>>	Sistema's activities are regulated by the anticorruption laws of the jurisdictions where it conducts its business or where its securities are listed. Any investigation into potential violations of anticorruption laws of the US, UK or other jurisdictions may adversely affect the reputation, business, financial situation and performance of Sistema and the Group companies

Risks related to business digitalisation, IT development and personal data protection	>>	With digitalisation of businesses and widespread penetration of the Internet, risks related to cybersecurity and personal data protection are becoming a major threat to the business of Sistema Group companies. Risks associated with the protection of personal data are most relevant for assets in telecommunications, online services, finance and e-commerce. Sistema's portfolio companies implement their own programmes, projects and measures that make it possible to reduce the likelihood and potential negative consequences of their industry-specific risks
Competition risks	>>	All business segments where Sistema operates are exposed to competition from other companies. An inability of any company of the Group to compete efficiently may have a material negative effect on the business, performance, financial situation and development prospects of the Corporation

Industry-specific ESG risks

Material ESG risks for Sistema Group companies are environmental and occupational risks, as well as risks related to the state of the infrastructure and the threat of accidents, which are critical for telecommunications and power grid companies.

Risk area	Specific risks
Telecommunications	Violation of "digital rights" of subscribers (spam and fraud in communication networks, dangerous content, personal data leaks)
High technology	Motivation and retention of the key personnel, formation of the succession pool, recruitment of new employees and transfer of knowledge
Private healthcare, pharmaceuticals	Quality of professional training, accuracy of diagnoses and risks of medical errors
Consumer sector	Quality of products, comprehensive security of leased store premises and customers
Agriculture	Crop losses as a result of adverse climate and environmental conditions
Hospitality	Safety of infrastructure and guests
Timber industry	Shortage of high-quality raw materials due to the inefficient use of forest resources and negative impact on the environment due to a significant amount of water consumption and air emissions

For each of these areas, portfolio companies implement relevant programmes, projects and measures that reduce the likelihood and possible negative consequences of their industry risks.

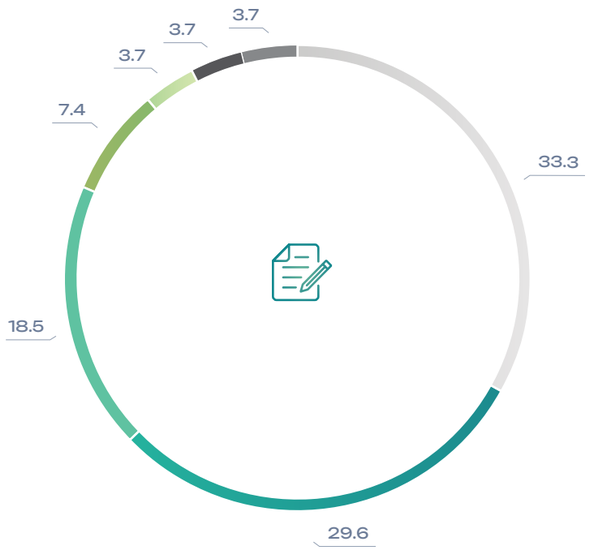
For more information about asset-specific ESG risk management, see the section "Key Sustainable Development Activities".

Identifying material risks and trends in sustainable development

During the preparation of the Report, a survey of internal and external stakeholders was carried out to identify significant sustainability risks and trends. A total of 38 forms were completed, including 11 by the Corporation's management and employees, 11 by representatives of Sistema Group companies and 16 by external stakeholders.

38 questionnaires
were received in the course of work on the Report

Respondents' structure, %

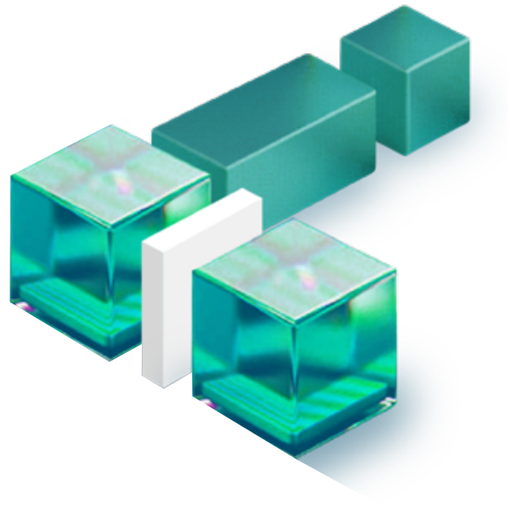


- Business and professional associations
- Management of the Corporation
- Personnel (incl. representatives of trade unions)
- Business partners
- Shareholders, investors and investment analysts
- Scientific community
- Public environmental organisations

The analysis of the survey results showed that 18 ESG trends and risk events should be recognised as the most probable and having the greatest impact on the Corporation. These trends can be grouped by ESG aspects, namely:

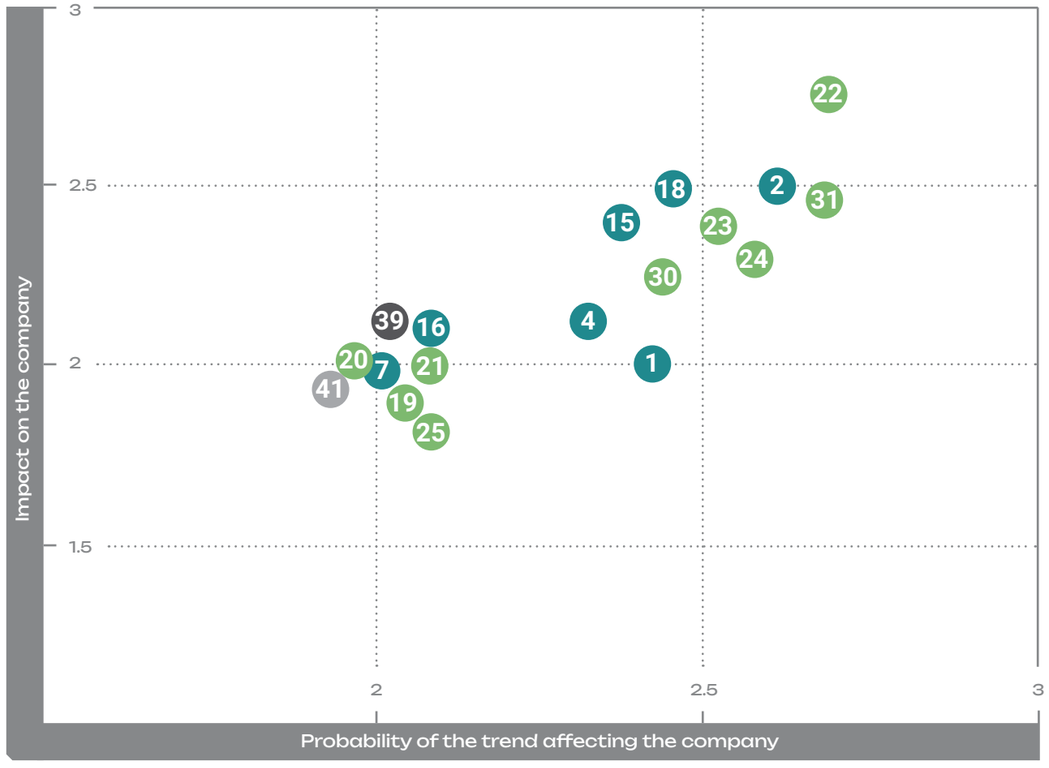
- social trends;
- economic trends;
- environmental trends;
- corporate governance trends.

The previous survey of ESG trends and risk events was conducted when preparing the Sustainability Report for 2019; change vs the previous survey is shown beside each significant risk.



Sustainability risk map

- Social trends
- Economic trends
- Environmental trends
- Corporate governance trends



As part of the survey, representatives of Sistema Group companies checked the trends and events that are taken into account in the strategies of their companies.

Trend / risk event	Share of representatives of Sistema Group companies who checked "Taken into account" in their forms, %
1. The younger generation of employees have drastically new expectations from their employers **–0.04 p**.	64
2. Qualifications gap and labour shortage (due to changes in the labour market and employers' requirements, digitalisation) **+1.91 p.**	91

Trend / risk event	Share of representatives of Sistema Group companies who checked “Taken into account” in their forms, %
4. Brain drain due to the geopolitical events of 2022 **(New)**	82
7. Increased role of the work environment and corporate culture to ensure employee motivation and productivity **–0.33 p.**	73
15. Deteriorating standards of living and potential growth of social tensions in the regions where the company operates, rising economic and social inequality **+0.81 p.**	73
16. Global and regional terrorism threats **+1.79 p.**	73
18. An increase in the number of incidents related to confidentiality and personal data protection, online security **+0.65 p.**	100
19. Development of green manufacturing and construction technologies, smart cities, etc. **–0.61 p.**	82
20. Social and environmental incompliance and incidents, related fines and non-financial penalties **+0.19 p.**	64
21. Toughening of corporate customers' requirements to supply chains **+0.05 p.**	73
22. Risk of disruption of existing supply chains due to the geopolitical events of 2022 **(New)**	91
23. Import substitution and localisation of production (including government programmes aimed at increasing the competitiveness of Russian companies by subsidising export-oriented projects) **+0.65 p.**	100
24. A decrease in real disposable household incomes and consumer spending **+0.79 p.**	64
25. Introduction of protective foreign trade barriers related to sustainable development (for example, carbon duties) **+0.08 p.**	36
30. Breaking of existing economic ties, disruptions in the supply and acceptance of goods **+1.16 p.**	91
31. Influence of geopolitical events on economic stability, including restriction of export opportunities **(New)**	82
39. Environmental accidents at the Group's facilities **(New)**	64
41. Increased transparency, speed of dissemination and accessibility of information **–1.15 p**.	82

Events and trends not listed as material

TCFD Strategyla

3. Job cuts at companies due to automation and digitalisation

5. Mass migration to remote working

6. Increased requirements to employee competences, the need to adapt corporate training accordingly

8. Increased attention to prevention of discrimination in the workplace and promotion of social and cultural diversity

9. Instances of violation of human rights (employees, local communities, customers, patients and consumers, partners)

10. Higher expectations in the area of occupational health and safety, social and psychological support of employees

11. Change of consumer preferences in favour of environmentally friendly and socially responsible producers (responsible consumption)

12. Increased life expectancy, a higher retirement age, changing needs of the ageing population

13. Pandemics

14. A growing demand for corporate charity and engagement with local communities

17. Social/environmental incidents in supply chains

26. The spread of new economic models (circular / sharing / platform economy of short-term contracts)

27. Formation of the green finance market and issue of green bonds

28. Development of responsible investing, increased attention of investors to sustainable development issues

29. Violation of anti-monopoly regulations and unfair competition

32. Reputation risks related to product quality

33. Higher expectations from companies with regard to emissions and impact of business operations on climate change

34. Extreme weather conditions and natural disasters (fires, floods, hurricanes, extreme heat, pest outbreaks) resulting in infrastructure disruptions, overloaded healthcare facilities, poor harvests, etc.

35. A deficit of fresh water in the regions of the company's operations

36. Transition to renewable energy

37. Irrational use of natural resources (land, water, materials), including the resulting threats posed to the preservation of biodiversity

38. Higher expectations from companies with regard to waste treatment, including waste reduction, repeated use, recycling, disposal, etc.

40. Tightening of regulations (mandatory compliance) in the area of sustainable development and reporting, imposition of new duties and payments (for example, carbon tax)

42. Conflicts of interest

43. Violation of the rights of minority shareholders

44. Tightening of listing requirements in the area of sustainable development

45. Instances of corruption, fraud and violation of business ethics

46. Inaccurate or incomplete data in financial statements that may lead to legal expenses or reputational damage

Contribution to improving the quality of risk management in Russia

Sistema's risk managers, as highly skilled professionals, share their experience with colleagues and make significant contributions to improving the quality of risk management in Russia by participating in the activities of relevant organisations:

- The board of the Russian Risk Management Society (RusRisk);
- Technical Committee ISO/TC 262, Risk management.

The Corporation's risk managers participate in training of young professionals in the area of risk management and insurance, including for voluntary certification. In 2022, Sistema Group's risk managers appeared as speakers and moderators at various risk management events organised by the Russian Union of Industrialists and Entrepreneurs, the Moscow State Institute of International Relations, Emperor Alexander I St Petersburg State Transport University, the Russian Risk Management Society and other organisations with which the Corporation actively cooperates.

Plans for development of the risk management system in 2023

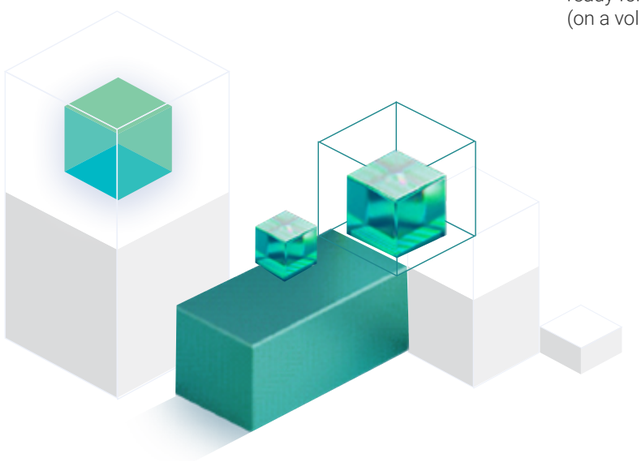
Measures scheduled for the development and improvement of the risk management function in the Corporation in 2023 include

01

Improving the quality of risk analysis, assessment and monitoring with regard to the Corporation's investment projects

02

Introducing the IRMS or its elements at new assets of the Corporation



03

Reformatting the risk management processes at assets that are undergoing transformation and merger

04

Increasing the maturity of existing risk management systems at portfolio assets, assistance with organisation of trainings and seminars on risk management for the management, including as part of IPO preparations; getting risk managers of the Corporation and its assets ready for national risk management certification (on a voluntary basis)

Sustainable supply chain. Localisation and import substitution

Approach to procurement management

Sistema is one of the major consumers of goods and services in Russia. It builds transparent and honest relations with partners based on mutual benefit and trust, selects the best suppliers on the market using competitive tender procedures and implements mechanisms of interaction with suppliers and contractors that ensure that its business partners comply with the standards of responsible business practices in the supply chain throughout a product's life cycle.

The responsible supply chain makes it possible to reduce financial and ESG risks, enter new markets and increase operating profit.

Procurement management at Sistema is regulated by the following internal documents:

- Tender Procedures and Procurement Code of Sistema PJSFC;
- Code of Ethics of Sistema PJSFC;
- Anticorruption Policy of Sistema PJSFC.

The key role in ensuring the transparency and efficiency of procurement belongs to the President's Tender Committee, a collective body in charge of procurement.

Procurement at portfolio companies

GRI 308-1, GRI 308-2

In 2022, the **telecommunications asset** began updating its key policies, Counterparty Selection and Procurement. In the reporting year, it organised mandatory anticorruption training for counterparties, introduced a questionnaire and a procedure for compliance screening of sub-counterparties, consolidated procurement procedures for companies within its perimeter, began introducing a commercial contract management system that automatically checks counterparties based on contract execution and implemented the 3Click Independent Procurement system where employees can independently initiate and make minor purchases. Equipment, including subscriber equipment, comprises the bulk of the telecommunications asset's procurement. Thanks to a prompt increase of inventory in March 2022 the reduction in procurement of equipment was not particularly noticed.

In 2022, the **timber asset** fully updated the set of internal documents related to procurement: it identified additional controlling events, defined mechanisms for using new procurement tools (options, additional volumes of works and services) and gave a more detailed description of work with low-cost procurement. The main challenge for the company in the reporting year was deficit of technological equipment, spare parts and expendables that it had previously bought from foreign suppliers or from Russian suppliers that use a significant share of foreign parts in their equipment and materials. In the reporting year, the company worked to replace foreign equipment by transition to procurement from Russian suppliers and use of such methods as parallel imports, reverse engineering and assembly replacement. It also managed to lower investment risks by initially determining the minimum amounts of advance payments under contracts for equipment supply and by taking steps to have them repaid or offset.

In 2022, the **agricultural asset** brought its Procurement Code in line with its actual procurement procedures. The Code describes labour practices, methods of corruption prevention and occupational safety. The supply chains changed significantly in the reporting year. Procurement is now organised via friendly countries, such as Turkey, China, Southeast Asia and the CIS, excluding Kazakhstan. Since cargoes cannot be delivered directly to Russia, transit terminals in other countries are used.



In March 2022, the **property development asset** began systematic work to build new logistical chains for supply of materials and equipment. It established a working group for approving changes to the asset's existing project designs in order to replace materials with more easily accessible ones. Also in the reporting year, the company developed and adopted codes of business ethics for suppliers and contractors, which envisage that its partners should comply with sustainable development principles. Offenders are subjected to penalties stipulated by contracts, up to exclusion from the register of accredited suppliers/ contractors. The company also continued developing a new procurement regulation. Moreover, the asset buys materials only from environmentally responsible suppliers, which is confirmed by environmental certificates.

In 2022, the **pharmaceutical asset** approved a Procurement Code that is applied to all of its companies. Supply chains were changed, with the focus shifting to Asian countries; an international procurement division was established. The share of procurement from Europe and the United States fell from 10% to virtually 0.

An enterprise of the **high-tech asset** updated some of its regulatory documents: the Selection of Suppliers Regulation, the Procurement Policy, etc.

Procurement results in 2022

RUB 344.99bn
Sistema Group's procurement volumes in 2022

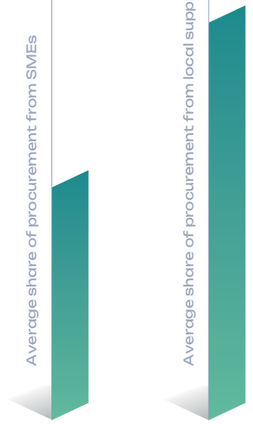
~ 40,000 suppliers
worked with Sistema Group in 2022

100%
of procurement procedures in the telecommunications asset and the agricultural asset are electronic

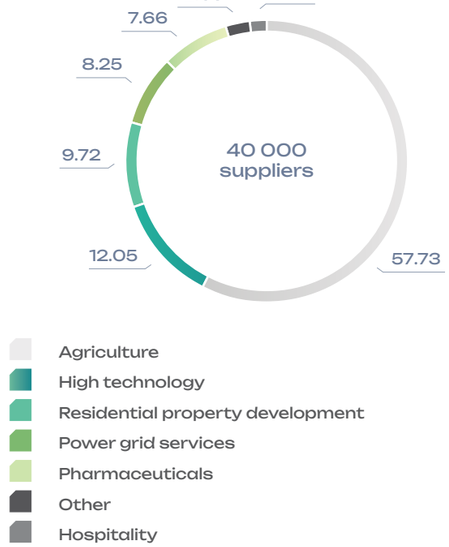
2.13%[1]
was the average savings from procurement procedures across the Group and 13.1% at Sistema

GRI 204-1 UNCTAD A.4.1

Procurement from local suppliers and SME in 2022[2], %



Share of suppliers working with each Group company in 2022[3], %

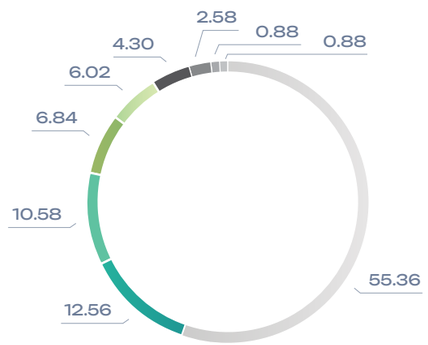


1 The data is provided for Sistema and its assets operating in the sectors of property development, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and "other".

2 The data is provided for Sistema and its assets operating in the sectors of telecommunications, property development timber industry, agriculture, pharmaceuticals, commercial property management, power grid services and high technology.

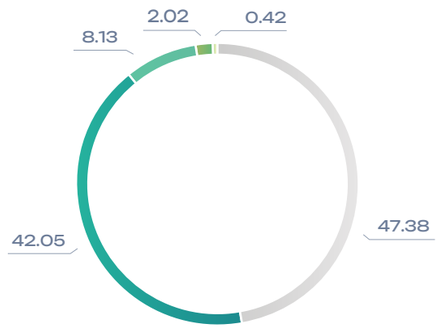
3 The data is provided for Sistema and its assets operating in the sectors of property development, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and "other".

Share of individual companies in Sistema Group's aggregate procurement volumes in 2022[1], %



- Telecommunications
- Residential property development
- High technology
- Timber industry
- Agicultural
- Pharmaceuticals
- Power grid services
- Hospitality
- Other

Breakdown of Sistema Group's procurement in 2022[2], %



- Equipment and materials procurement
- Other
- Construction and assembly
- Consulting services
- Education/certification services

Domestic developments and equipment

Due to the need to accelerate import substitution, Sistema Group companies have been actively introducing Russian developments and IT solutions at their production facilities.

In 2022, the **telecommunications asset** transferred its IoT Hub platform to proprietary software, which will fully replace foreign solutions for development of IoT products and will guarantee their stable functioning. The main goal of the platform is to provide the Corporation's B2B and B2C products with tools for quick connection of smart devices, receiving their telemetrics, managing them and analysing their data. The upgraded platform increases the system's security and reduces time to market sixfold. As a result, revenue from sales of equipment supporting NB-IoT and services on the basis of IoT Hub grew by 70%. At the end of 2022, over 10,000 devices were operating on the platform.

The telecommunications asset also began selling Russian operating systems Alt on the basis of the Linux core. Alt has been included in the single register of Russian software.

Corporate customers of the telecommunications asset's cloud provider already have access to virtual infrastructure and to licences of this operating system.

The cloud provider together with a Russian company specialising in digital risk management created a new solution for SD-WAN network infrastructure management, an alternative to products of vendors that had left Russia. The solution is soft- and hardware for centralised management of corporate communication networks in geographically distributed locations. The technology can be useful for thousands of big, medium-sized and small companies across Russia, from industrial enterprises to retail chains and banks. In the reporting year, the cloud provider also launched a new mail service for corporate customers on the basis of Russian software CommuniGate Pro. The product is suitable for both small and big businesses, offering them a full range of services: from development of the migration plan to integration of the solution with the customer's resources.

The telecommunications asset also launched sales of 5G Development Kit, the first in Russia set of equipment that will help developers and researchers to create different devices for 5G networks, from robots and UAVs to solutions for IoT, smart city and smart home. The set includes a 5G DevKit Board debug board with a casing, a 5G and LTE radio module, a set of antennas, a SIM chip, cable assemblies, a power source, documentation, 5G traffic and software. 5G Development Kit will make a significant contribution to training of engineers and other professionals for the development of the Russian digital economy.

Sistema's **high-tech asset** continued focusing on the development of proprietary solutions for digital transformation of some key sectors of the economy, making import substitution part of its strategy. In order to achieve the Digital Transformation national development goal till 2030, the asset participates in working groups for implementation of the federal projects "Information Infrastructure", "Personnel for Digital Economy", "Digital Technologies", and "Digital State Administration" of the Russian Digital Economy national programme.

In the reporting year, the high-tech asset produced the first batch of servers on Russian-made processors Elbrus. The new server is specifically designed for high-load data storage systems and big data processing. Since the solution supports a protected computing mode, it ensures a high level of information security for software. The equipment supports certified Russian software that can be pre-installed according to specific requests.

The asset also developed a virtualisation platform for computing systems and centralised IT infrastructure management. The platform is deployed on a group of servers that don't have an operating system, includes a single access environment in architectural layers and will make it possible to manage division of a physical server's resources among several logically isolated virtual machines. The platform is being successfully implemented in a pilot mode by several big clients.

The **power grid asset** developed a new generation auto-type 125 MVA transformer that is cheaper and 28% lighter than its analogues, including foreign ones. It will be installed at a substation in the Republic of Adygeya.

Sistema's **agricultural asset** has been working on an import substitution programme for several years. At present, 60% of the asset's agricultural equipment is made in Russia. As many as 80% of plant protection products used is produced domestically. Seeds of the main crops are also Russian. To improve crop yields, the company also uses Russian agrochemical developments. In partnership with domestic producers, it developed its proprietary high-yield sort of wheat, Sistema, and plans to bring five new sorts of wheat and three of soya to the market in the next few years.

60%
of the asset's agricultural equipment is made in Russia

80%
of plant protection products used is produced domestically

The agricultural asset uses Russian-made agricultural vehicles in its operations: its farms are equipped with Tuman and Bars mobile sprayers, Tom and Don seeders, Kirovets energy-packed tractors and Rostselmach harvesters. Russian machines have proved to be of high quality; their important advantage is speed of technical maintenance and availability of spare parts. In November 2022, the asset tested a modernised soil injector developed together with a partner. It is equipped with nozzle needles from medical-grade stainless steel, eliminating needle corrosion and improving the protection of pumps, pipelines and moving parts. The injector performs targeted root application of liquid fertilisers, ensuring their 100% absorption by crops. Industrial production of the modernised soil injector has already begun.

The asset also created its own machine and tractor station with a repair depot, which significantly reduced use of third-party agricultural equipment and cut spending on agrotechnological services. The station meets the needs of the company's farms and even offers agrotechnological services to third-party agricultural producers. In 2022, machines were sent to the Republic of Bashkortostan and the Penza, Oryol and Kursk regions for a harvesting campaign.

In the reporting year, the company also introduced a system for adjusting movement of unmanned agricultural vehicles with a precision of up to 2 cm that had been developed by Sistema's telecommunications asset.

1 The data is provided for Sistema and its assets operating in the sectors of telecommunications, property development, timber industry, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and "other".

2 The data is provided for Sistema and its assets operating in the sectors of agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and "other".

Plans for 2023

Telecommunications

- Development of a service-oriented model and transition to interactions with customers as business partners.
- Further optimisation of the procurement process up to payment in order to achieve seamlessness

Residential property development

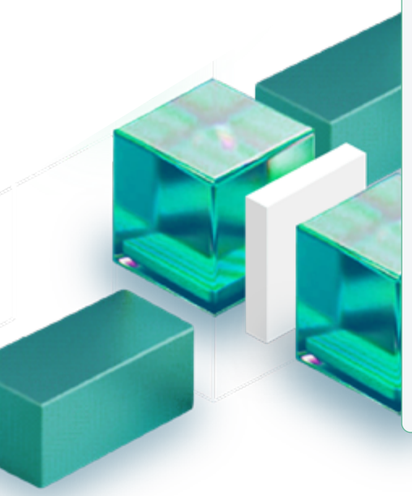
- Increasing the share of electronic document flow to 75%–80%.
- Increasing the share of procurement on electronic platforms to 80%.
- Adopting the new Procurement Regulation.
- Creating a new digital procurement ecosystem

Timber industry

- Further work on import substitution, finding new partners in Asia and Latin America, developing cooperation with Russian vendors to create new models of machines and equipment.
- Improving inventory management, including more active use of uncommitted inventory and sale of unclaimed stock

Agriculture

- Mass use of information systems at the asset's subsidiaries.
- Improvement of competences of employees of the Procurement Department.
- Contract work in 1C: Holding Management. 1C: Holding Management has been implemented and is used for procurement operations from RUB 100,000. The plan is to reflect all procurement in 1C: Holding Management.
- Development of a concept for accounting for emergency repairs of agricultural equipment.
- Redesign of the interface of the supplier's personal account to make it more user friendly and reduce the number of communications from third-party users.
- Automation of routine procurement processes: opening of envelopes with bids, creating contracts from procurement procedures, specifications and orders for suppliers. Introducing the possibility of electronic signing of agreements.
- Optimisation of the forms for proposals from suppliers for each procurement segment: crop farming, animal breeding, mechanisation and major construction



Property management

Changing the approach to project management of properties: signing agreements without a fixed price and requiring that the general contractor provide information on procurement of materials in an “open book” mode

Power grid services

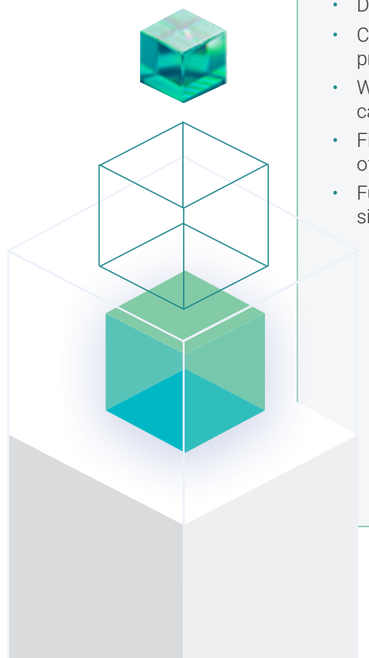
- Studying options of using alternative electronic trading platforms in order to increase the effectiveness of competitive procurement procedures.
- Launching the updated website for procurement activities.
- Optimising (simplifying) business processes in procurement.
- Increasing the share of contracts signed via the electronic document flow system.
- Continuing ESG assessment of participants of procurement procedures.
- Working on a concept of lean production in warehouse activities

Hospitality

Introducing electronic trading platforms at regional subsidiaries

High technology

- Developing KPIs for the procurement division.
- Developing and adopting a training programme for customers.
- Creating a list of minimum stored inventory, conducting procurement procedures, introducing a block in Navision.
- Working with framework agreements by category, long-term contracts, catalogue procurement for determining areas and signing lucrative contracts.
- Finetuning and enhancing the automated procurement system on the basis of the Navision corporate accounting system.
- Further working with the classifier (product cards): eliminating doubles, simplifying individual blocks, consolidation of positions



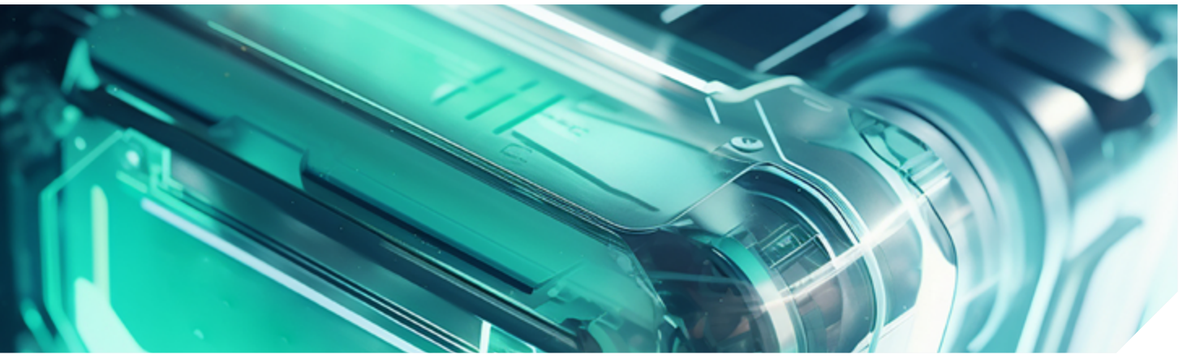
Innovation management. Digitalisation

Innovative activities

GRI 3-3

Innovation and digital transformation are the focus of the Corporation's investment strategy. Sistema invests in building intellectual potential: science and education, advanced research, tech startups, new developments and digitalisation. The Corporation cooperates with innovation support institutes, creates its own R&D centres and facilitates the adoption of advanced technologies and organisational innovations at its portfolio companies.

Russia developed and approved the programme "Digital Economy of the Russian Federation" and began developing sectoral programmes for the digital transition. Sistema contributes to the development of the country's intellectual and scientific database, thus helping to unlock its digital potential and accelerate digitalisation. The Corporation's portfolio includes a number of large Russian research and production enterprises conducting diverse research, development, production and educational activities.



Development of digital competences in the timber industry

At the beginning of 2023, Sistema's timber asset opened an IT subsidiary in Kirov in order to develop digital competences in the sector.

The enterprise analyses and implements information technologies, develops software, and looks for ways to grow business through introduction of digital solutions and automation of business processes.

Since the timber asset's digital competences were brought together in one enterprise and a single knowledge and methodology database of project management was created, this will reduce the company's dependence on external contractors, while proprietary solutions will enable it to develop cooperation with peers from Russia and friendly countries.

Joining the AI Ethics Code

In February 2022, Sistema's high-tech asset joined the national AI Ethics Code developed by the AI Alliance.

AI technologies drastically transform activities of companies and people's customary way of life. The Code is a mechanism of self-regulation for the community of AI tool developers in the absence of strict legal regulations. It provides for the protection of people's rights and interests and demands that developers ensure safety of AI solutions. Also, the Code provides for cooperation between developers and underscores the importance of provision of reliable information on use of AI technologies.

By joining the Code, a company creates trust in its innovations and ensures the ethical nature and propriety of its developments.

For the AI Ethics Code, visit the website of the AI Alliance.

Memorandum of cooperation for the development of Kazakhstan's cloud services market

In summer 2022, a subsidiary of Sistema's telecommunications asset and a telecom operator of the Republic of Kazakhstan signed a memorandum of cooperation for the development of cloud services on the Kazakh market.

As part of cooperation, the partners merged resources located in Kazakhstan: communication channels, capacity of data processing centres, IT infrastructure, expertise in development and launch of cloud products and services, sale channels for cloud solutions and competences in the development of national IT marketplaces.

For Sistema, the partnership opens a broad sale channel and enriches its product portfolio with cloud services that enjoy demand from local companies.

The main criterion for selecting the most promising technologies for investment is the possibility of testing them at Sistema Group's largest companies based on the value and potential risks of such technologies for the assets themselves and their stakeholders.

The most attractive technologies for investment

THE MOST ATTRACTIVE TECHNOLOGIES FOR INVESTMENT[1]		THE CORPORATION'S PRIORITIES AND APPROACHES TO INVESTMENT *Technologies that can be tested at Sistema Group's companies to improve the product and/or reduce the development time*
LARGE-SCALE TECHNOLOGIES DRASTICALLY CHANGING THE DEVELOPMENT OF THE ECONOMY AND SOCIETY	OPEN-END TECHNOLOGY, POSSIBILITY TO USE IN A BROAD RANGE OF INDUSTRIES	01 SELECTION CRITERIA: • technologies that are at an early stage of practical application in individual industries; • expected to reach the stage of wide industrial use in the medium term
• Virtual assistants • Machine learning and IoT neural networks • Industry 4.0 • Augmented reality • MedTech • Cybersecurity	• Blockchain • PropTech[2]	02 SELECTION CRITERIA: • technologies at the stage of development and search for promising spheres for product use; • achievement of the industrial use stage is expected in the long term
	• Autonomous vehicles and robots • Carbon nanotubes • Digital twins • CRISPR silicon batteries[3] • Biochips	03 Continuous market monitoring and analysis
Ability to create a long-term competitive advantage for the company	*Technologies that will have the biggest impact on business models of companies in the next five years*	

1 According to analysts at Morgan Stanley, Russell Reynolds and Gartner.
2 Digital projects in the real estate market.
3 Genome editing technology.

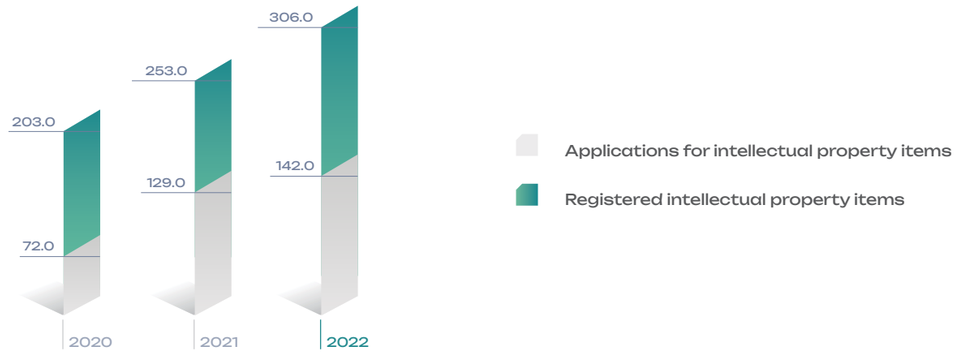
GRI 203-1 GRI 203-2 UNCTAD A.3.3

RUB 0.12bn
Sistema's investments in R&D in residential construction and power grid services in 2022[1]

RUB 23.23bn
Sistema Group's investments in information technologies in 2022[2]

The results of Sistema's innovative activities are also expressed in the form of patents and applications for intellectual property.

Intellectual property items of Sistema Group companies[3]



R&D and innovation centres

Innovation and R&D play an important part in even economic development of the country's regions and increase of their economic potential. The research activities of Sistema Group are aimed at developing sustainable solutions for the customers of the Corporation and its portfolio companies and preserving Sistema's competitiveness in the long term.

Among Sistema's key R&D assets is a chain of innovative centres of its **telecommunications asset** located in Moscow, St Petersburg, Nizhny Novgorod and Astana, the capital of Kazakhstan. In summer 2022, the first R&D centre appeared in the eastern part of Russia, in Novosibirsk. The centre serves as a platform for the development of tech businesses in the region for companies operating in cloud technologies, VR/AR, fintech and other sectors. Residents can receive technological, expert and grant support for finetuning their products and for upscaling their businesses on the regional and national levels.

At the end of 2021, Sistema's **timber asset** completed the construction of its R&D centre. In H1 2022, the centre conducted over 250 successful durability tests of industrial paper sacks. It also developed eco-friendly water resistant paper packaging that protects contents from water, air, oils and fats and can be used for gypsum-containing construction mixes and other loose dry products. The packaging can be recycled and disposed of without harming the environment.

1 The data is provided for assets in residential property development, power grid services, high technology and "other".
2 The data is provided for assets in e-commerce, property development and power grid services.
3 The data is provided for assets in residential property development, power grid services, high technology and "other".

In 2022, Sistema's **pharmaceutical asset** continued the construction of its R&D centre that had begun in 2021. Investments in the project amounted to some RUB 5bn. The innovative centre will become a platform for development and trial production of drugs. It will include a pharma development centre and a production facility for solid and soft dosage forms. Later, a centre for the development of biotech drugs and trial production will be launched.

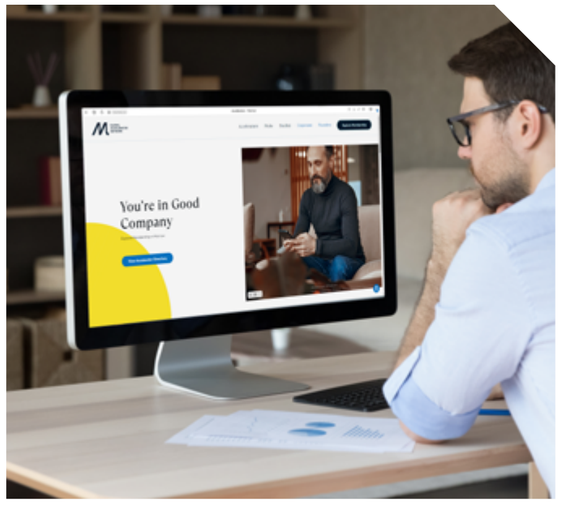
250
successful durability tests
of industrial paper sacks were conducted at the timber asset's R&D centre in H1 2022

RUB 5bn
was invested in the construction of the pharmaceutical asset's R&D centre in 2022

Support for startups

Sistema is aware of the importance of supporting startups to drive the development of the Group companies and the Russian economy as a whole. Support to young and ambitious innovators seeks to promote sustainable development of technologies.

The **telecommunications asset's** accelerator became the only Russian company to join the GAN international community of IT accelerators and startup studios that unites over 100 accelerators in 120 cities around the world. The participants received benefits and discounts from the best IT services providers to an aggregate worth of over USD 1m, and also opportunities to develop their AI projects. In 2022, the telecommunications asset's accelerator organised two acceleration programmes. Experts helped startups to build processes in marketing, sales and mechanics of developing high-tech solutions. The best startups were offered financing from Russian and Chinese investors. Also, the accelerator announced the launch of an acceleration programme for the development of metaverse[1] technologies.



1 A constant virtual space where people can interact with each other and with digital objects via their avatars with the help of VR technologies.

In spring 2022, Sistema's **agricultural asset** established an accelerator for startups in agriculture and food production. The accelerator offers mentorship, testing of new solutions at the asset's facilities and also gives entrepreneurs access to infrastructure and other agricultural tools. The first event in the format of speed dating[1] attracted 11 investors that watched presentations of 22 projects in the following sectors: wind power, solar power, bio fuel, geothermal and hydrogen power and also infrastructure-related solutions.

11 investors
took part in the accelerator's first event

22 projects
were presented

In 2022, the Group's **healthcare asset** established its own accelerator to select and pilot startups in the sphere of digital medicine and biotechnology. The accelerator gives entrepreneurs an opportunity to get their projects assessed by business and healthcare experts, to pilot their projects at the asset's private clinics and clinical centres and to get investment and financial support for projects.

Sistema's healthcare asset also became a partner of the Future Healthcare accelerator of medical startups organised by the Moscow Centre of Innovative Technologies in Healthcare. The accelerator received a total of 224 applications. Based on the results of pilot projects and project assessment five winners were selected: startups developing AI-based digital services for pathomorphological diagnostics of cancer, forecasting risks of disease development and improving the quality of disease progress monitoring. The selected solutions will be further improved and will later be introduced to the Moscow city healthcare system.

VC funds

VC funds are an efficient tool for promoting the development of high-tech companies in Russia.

In the reporting year, the VC fund of Sistema's **telecommunications asset** invested RUB 200m in a Russian IT company that specialises in optimisation of technological and business processes based on big data analysis and artificial intelligence: it helps to automate the analysis of demand, pricing and control over the technological process and to personalise client communications. The telecommunications asset plans to launch a number of products with this IT company that will help to reduce the cost and time for businesses by using recommendation engines and geo and product analytics.

For more information on innovation projects of Sistema Group companies, see section “Smart Environment”.

1 A meeting where participants communicate one on one for four minutes and then move on to the next candidate.

Ethics and anticorruption efforts

Business ethics

GRI 3-3 SASB FN-AC-510a.1

Sistema adheres to the principles of ethical business operations, ensures transparency of its activities and takes effort to prevent corruption and illegal use of insider information. The basic documents regulating the Corporation's ethics-related activities are the Anticorruption Policy, the Code of Ethics of Sistema PJSFC and the UN Global Compact.

Charter of Ethics for classifieds services

At the end of 2022, Russian companies, including Sistema's e-commerce asset, signed a charter of ethics for classifieds services in order to ensure socially responsible self-regulation of the sector.

The document aims at developing and improving a mutually beneficial and safe environment for interaction between customers and businesses.

Special attention is paid to personal data protection, lawfulness and transparency, cooperation, exchange of experience and enhanced content moderation.

Before August 2022, Sistema's bodies responsible for compliance with business ethics standards and anticorruption provisions were the Management Board and the Ethics and Control Committee of the Board of Directors of the Corporation.

In H1 2022, the Ethics and Control Committee met two times and reviewed the following matters:

- assignments issued by the Ethics and Control Committee: execution status;
- findings of the effectiveness assessment of internal control systems;
- planned measures to increase the effectiveness of internal control systems at Sistema's property development asset, timber asset, power grid asset and high-tech asset;
- results of implementation of Sistema's functional strategy in the area of corporate security in 2021 and objectives for 2022;
- report of the Internal Audit Service for 2021;
- assessment of the performance of heads of security in 2021;
- team reinforcement proposals;
- ways to increase the effectiveness of the security system at the pharmaceutical asset;
- results of audits of the power generation asset and other Group companies.

In August 2022, the functions of regulating compliance with ethical standards and regulatory requirements, including anticorruption efforts, were transferred to the Audit, Finance and Risk Committee of the Board of Directors.

Organisational structure

Audit, Finance and Risk Committee

- Assisting with the process of preparation and audit of the Corporation's financial reports and supervising it
- Facilitating interactions with the Corporation's external auditors
- Facilitating the evolution of the Corporation's risk management and internal control systems
- Facilitating in the budgeting process and financial modelling of the Corporation
- Facilitating the evolution of the internal audit function
- Facilitating compliance with ethical standards and regulatory requirements
- Facilitating the design, development and implementation of the Corporation's investor relations strategy, including its dividend policy
- Appraising related party transactions and major transactions
- Ensuring anticorruption management

Board of Directors

President Chair of Management Board

Management Board

- Control of employees' compliance with labour law, internal regulations and resolutions of Sistema's governance bodies
- Judgements on whether there are grounds for disciplinary sanctions for violations of human rights, ethical and anticorruption requirements, etc.

Ethics assessment and conflicts of interest

GRI 2-15 GRI 2-25

Matters related to conflicts of interest are governed by the Corporation's Code of Ethics as well as the laws of applicable jurisdictions. The Corporation has an ethics assessment procedure: all top managers complete Ethics and Conflict of Interest Declarations annually or as conflicts of interest arise.

Moreover, all new employees are introduced to the requirements of the Code of Ethics and the procedure for completion of Declarations and are required to report relevant conflicts of interest (if any) before starting to perform their duties.

In 2022, the results of the ethics declaration campaign were reviewed by the Audit, Finance and Risk Committee of Sistema's Board of Directors. Conflicts of interest that were declared at Sistema Group were insignificant and did not create risks for the Corporation's interests; nevertheless, certain steps were taken against several persons to eliminate such conflicts in compliance with best corporate governance practices.

30,488
employees
participated in ethics assessment in the reporting year

765
conflicts of interest
were identified

Reporting channels[1]

GRI 2-26

To inform Sistema's senior management about possible facts of abuse of authority, corruption and other violations, employees of the Group and stakeholders can use several channels:

- the Audit, Finance and Risk Committee;
- their direct supervisor;
- the Hotline of the Corporation or Sistema Group companies;
- the Internal Audit Service or the Corporate Governance and Legal Function of Sistema.

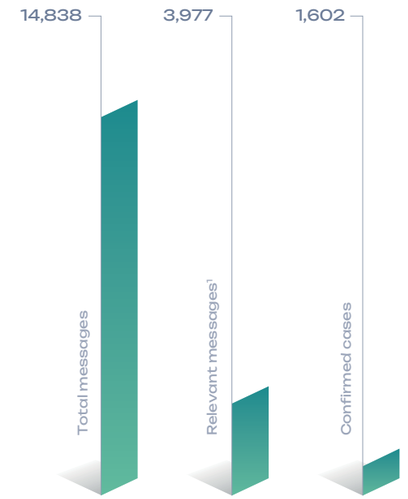
The Internal Audit Service checks all reports received via the Hotline.

Sistema Group companies have their own hotlines. If a report is not reviewed, then the author can submit it again via the Corporation's Hotline. The archive of received messages is maintained in Sistema's cloud system.

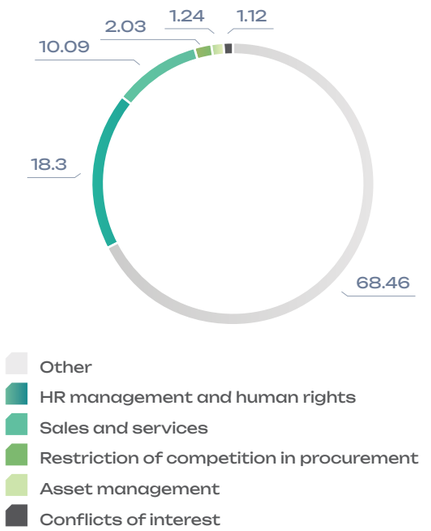
In 2022, the hotlines of Sistema and the Group companies received 14,838 messages, a sevenfold increase from 2021, which was due to the inclusion of statistics of the e-commerce asset.

1 The data were provided by Sistema and its assets operating in the sectors of telecommunications, e-commerce, property development, timber industry, private healthcare, agriculture, commercial property management, power grid services, hospitality, high technology and "other".

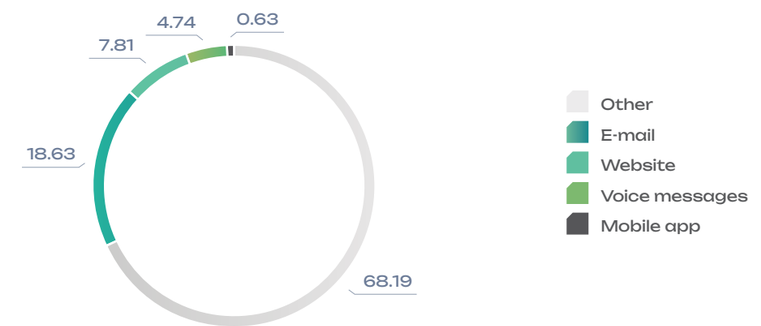
Messages received through the hotlines of Sistema and the Group companies in 2022



Messages received through the hotlines of Sistema and the Group companies in 2022 by subject, %[2]



Messages received through the hotlines of Sistema and the Group companies in 2022 by reporting channel, %



1 Relevant messages are messages that can be checked.
2 Without the e-commerce asset.

Anticorruption

Sistema has zero tolerance for corruption in any of its forms and manifestations.

Anticorruption activities are carried out in accordance with:
- laws of the Russian Federation;
- the Charter of Sistema PJSFC;
- the Security Code;
- the Anticorruption Policy of Sistema PJSFC;
- the Corruption Prevention Concept of Sistema PJSFC;
- the Code of Ethics of Sistema PJSFC;
- the UK Bribery Act (UKBA).

The anticorruption controls in place at the Corporation enable it to efficiently fight corruption.

The Corporation's Anticorruption Policy defines the key principles and requirements aimed at preventing corruption and complying with applicable anticorruption laws. Methods aimed at the prevention of corruption, fraud and theft are defined in the Corruption Prevention Concept. Both documents are binding on both employees and counterparties of the Group.

Conformity of the compliance management system to international standards

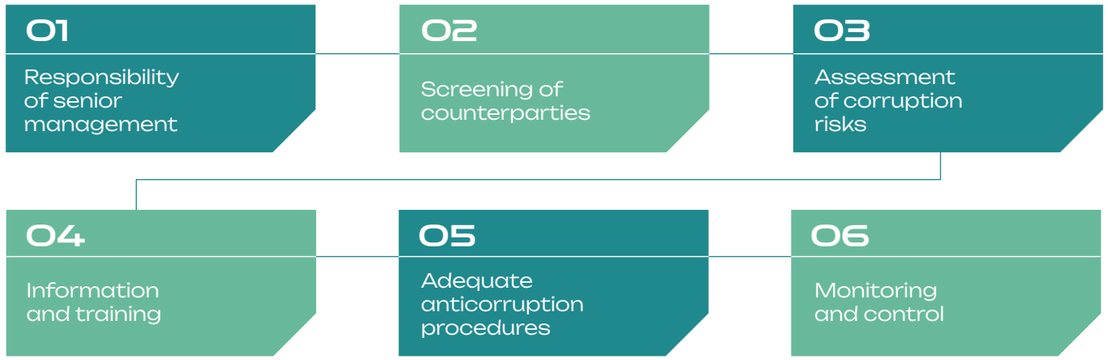
In June 2022, an independent audit by the International Compliance Association confirmed that risk management at Sistema's **telecommunications asset** was conducted in line with the updated international standards of compliance management — ISO 37301:2021 "Compliance Management Systems."

ISO 37301:2021

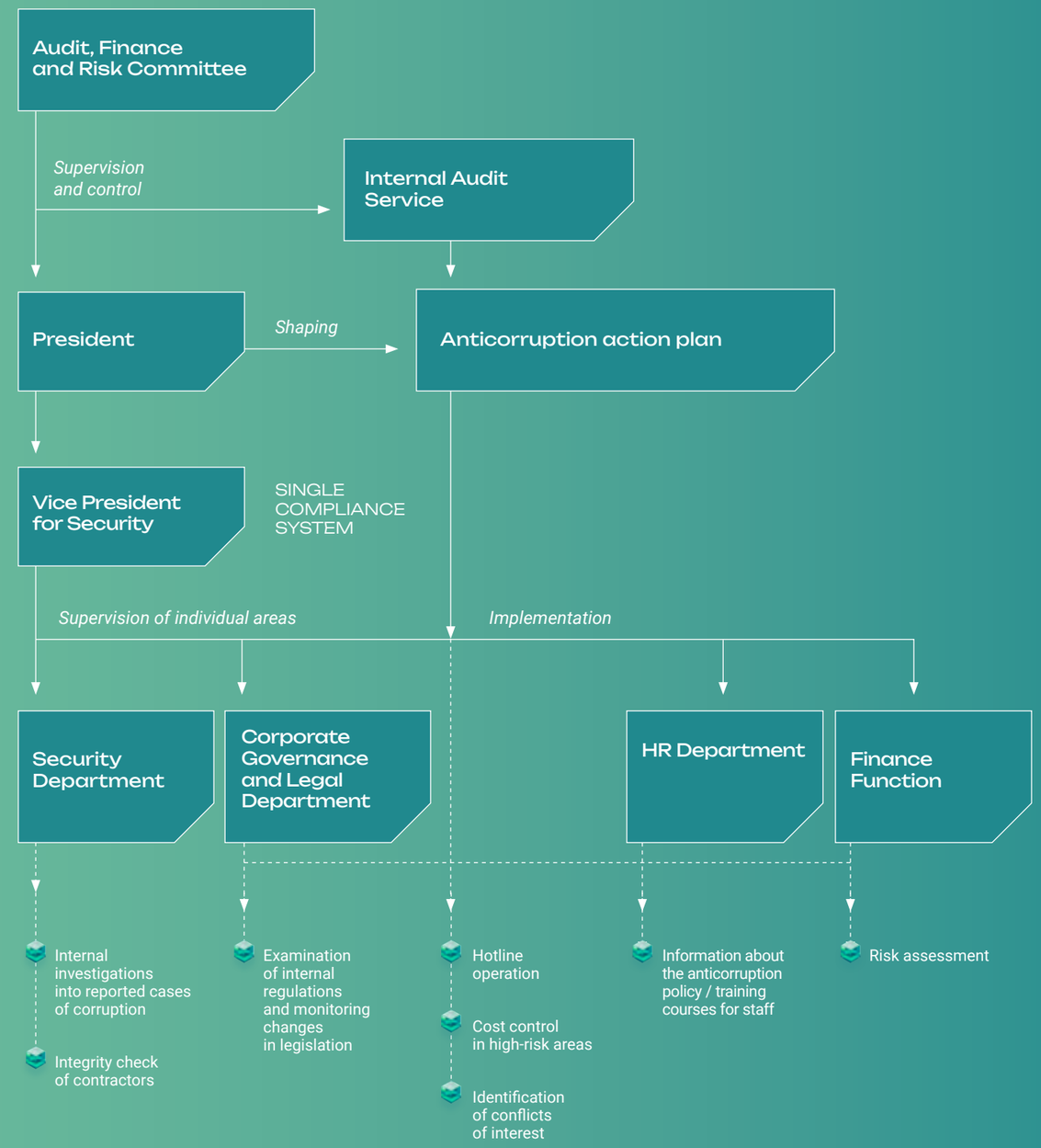
In accordance with the compliance development strategy, the company will continue enhancing the single compliance system, including its anticorruption compliance programme.

The fact that the effectiveness of the compliance management system was confirmed by the influential international association testifies to the telecommunication asset's determination to adopt best international practices.

Principles of the Anticorruption Policy



Anticorruption management chart



Assessment of effectiveness of anticorruption procedures and assessment of corruption risks

Sistema's portfolio companies updated their anticorruption policies to take into account the new threats to the Corporation's economic interests and best international anticorruption practices.

In 2022, an updated version of the fraud and abuse incident management system was put into operation, with an integrated programme for counterparty screening. The project will ensure an effective response to identified violations and can be used to develop and implement incident management processes in advance, to minimise abuse-related risks, bring offenders to justice and compensate for damage.

In the reporting year, Sistema Group companies conducted an annual internal assessment of the effectiveness of their anticorruption procedures. The results demonstrated a high level of organisation of anticorruption work. Some portfolio companies received recommendations on ways to improve their anticorruption efforts. Risk assessment was conducted at 92% of the Group's assets.

92%
of the Group companies underwent risk assessment

The assessment procedure for corruption-related risks includes three key components

01

Identification of corruption-related risks — identifying episodes of corruption and business processes that make such illegal activities possible

02

Analysis of corruption-related risks — identifying possible ways for committing corruption-related offences taking into account organisation of business processes at the company

03

Determination of importance of corruption-related risks — assessing the probability of a corruption-related offence at a certain stage of some or other business process and potential damage to the company and society

At their annual strategy session in 2022, heads of security of Sistema Group companies reviewed items related to the development of corporate culture, zero tolerance for corruption and shaping of anticorruption mentality.

The Group companies ensured implementation of the following anticorruption measures:

- employees reporting episodes of corruption
- reporting conflicts of interest
- assessment of corruption-related risks

Identified significant cases of corruption are publicised on the corporate website.

Confirmed cases of corruption

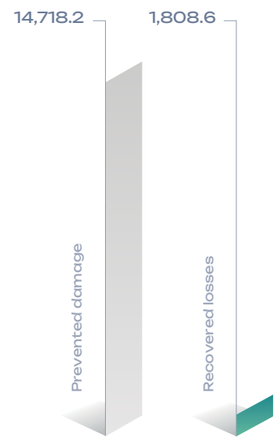
GRI 205-3

Total number of confirmed cases of corruption	214
Total number of identified perpetrators	220
Total number of disciplinary penalties imposed	107
Total number of dismissals for corruption/violation of the Anticorruption Policy	77
Total number of corruption-related lawsuits brought against the company or its employees in the reporting period	29
Total number of cases of non-renewal or termination of contracts with business partners due to corruption-related violations	6
Number of fines and penalties for violations in the area of corruption	0
Amount of fines and financial penalties related to corruption	0

The increase in the number of confirmed cases of corruption by 23% and identified offenders by 38% was due to the improvement of corruption identifying methods.

38%
was the increase in the number of identified offenders

Key results of anticorruption efforts[1], RUB m



The amount of prevented damage increased by 37% from 2021 due to addition of new portfolio assets and effective measures taken to manage business process risks by security units of Sistema Group companies.

In 2023, the Group will continue improving its anticorruption measures; notably, it plans to organise annual monitoring of the effectiveness of anticorruption procedures at the portfolio companies, update related internal regulations and assess corruption-related risks.

37%
was the increase in the amount of prevented damage compared to 2021

1 Aggregate amounts of prevented damage and recovered losses, including the key results of anticorruption efforts.

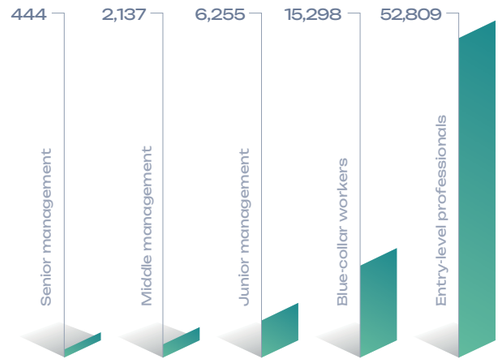
Educating and informing employees and counterparties

All employees, including new hires, familiarise themselves with the provisions of the Anticorruption Policy.

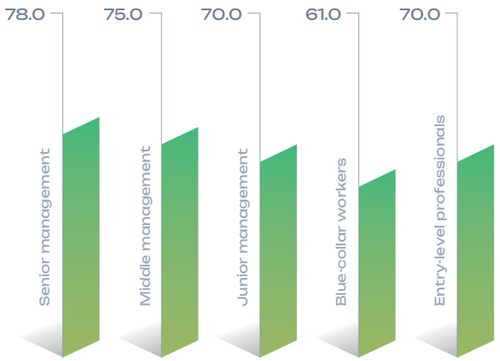
GRI 205-1 GRI 205-2

Employees of the Group that underwent anticorruption training in 2022

Amount, persons



Share, %

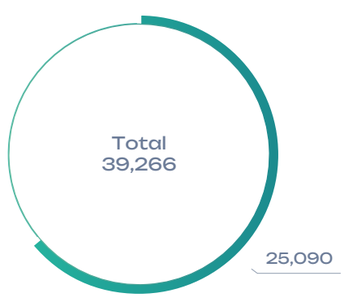


In 2022, the Corporation informed its counterparties about its anticorruption policies and methods. A total of 94% of counterparties were informed in the reporting period.

In 2023, the Corporation will continue organising trainings and seminars for employees to increase the effectiveness of its anticorruption efforts and prevent corruption within the Group.

Informing the Corporation's counterparties about its anticorruption policies and methods in 2022

The number of business partners and/or suppliers (including new ones) that were informed



The share of business partners and/or suppliers that were informed, %



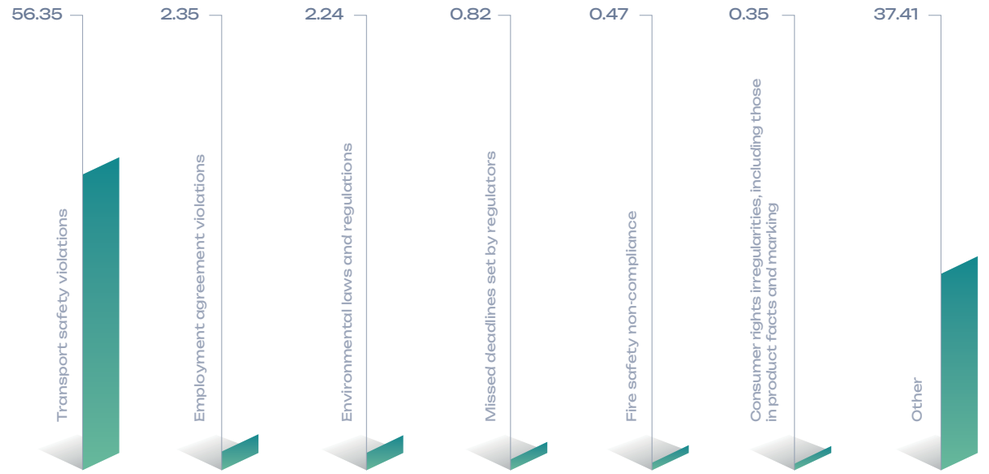
Compliance

GRI 2-27 SASB FN-AC-510a.1 UNCTAD D.2.1.

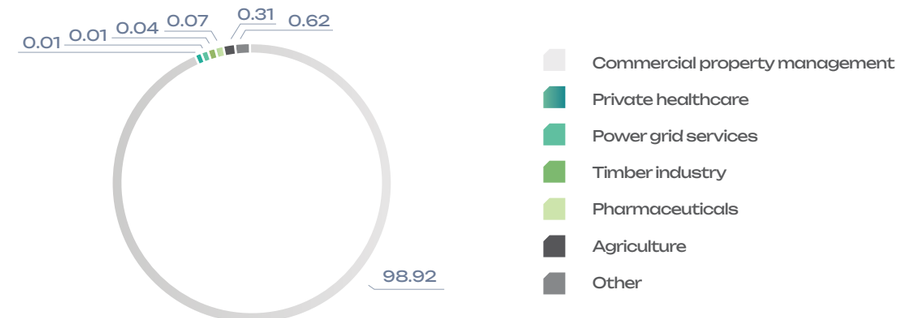
Sistema considers it mandatory to comply with the requirements of legislation and international law in order to create an ethical business environment and ensure stable and mutually beneficial relationships with partners.

The total amount of fines for Sistema Group amounted to RUB 1,913.6m in 2022.

Main types of violations at Sistema Group in 2022, %



Fines for non-compliance with regulations in 2022, by Sistema's assets , %



Fines and non-financial penalties imposed on Sistema Group companies in 2022

	Number of fines	Amount of fines, RUB thsd	Number of non-financial sanctions imposed	Financial fines as share of revenue, %
Total, including:	**850**	**1,913,626.49**	**41**	**0.20967**
Environmental laws and regulations	19	1,342.12	2	0.00015
Labour law violations	20	307.5	30	0.00003
Occupational safety violations	–	–	2	–
Consumer rights irregularities, including those in product facts and marking	3	120.0	2	0.00001
Missed deadlines set by regulators	7	7,918.5	–	0.00087
Fire safety non-compliance	4	1,350.0	–	0.00015
Transport safety violations	479	395.0	–	0.00004
Other	318	1,902,193.4	5	0.20841

Human rights and stakeholder engagement

Human rights management approach

GRI 3-3

Sistema acknowledges the significant influence and responsibility of business in the area of human rights. As part of their business activities portfolio companies may have direct and indirect impact on the observance of rights of workers, local communities, customers and consumers. Therefore, the Group adopts a responsible approach to the observance of human rights and aims to promote its values in all aspects of its operations.

In May 2021, the Corporation adopted a Human Rights Policy. The Policy sets forth the provisions of the Sustainability Policy of Sistema, creates guidelines for portfolio companies in terms of enhancing the efficiency of human rights management thus lowering the investment portfolio's exposure to social risks, and complements the ESG management system described in other corporate documents, including the following:

- Code of Ethics;
- Sustainability Policy;
- Environmental Policy;
- Anticorruption Policy;
- Internal regulations on HR management;
- Policy on personal data processing and protection.

In addition to internal corporate documents setting high ethical standards of business operations and corporate culture, protection of human rights and prevention of discrimination of employees and counterparties are ensured in accordance with Russian and international best practices:

- the Universal Declaration of Human Rights;
- the International Covenant on Economic, Social and Cultural Rights;
- the International Covenant on Civil and Political Rights;
- the Declaration on Fundamental Principles and Rights at Work and the Eight Fundamental Conventions of the International Labour Organisation;
- the Constitution and the Labour Code of the Russian Federation;
- the UN Guiding Principles on Business and Human Rights;
- the OECD Guidelines for Multinational Enterprises;
- the UN Global Compact;
- the Social Charter of Russian Business.

↗ The full text of the Human Rights Policy is available on Sistema's website.

Career guidance project for women "Join IT"

The high-tech asset of Sistema in partnership with the nonprofit Digital Economy launched a career guidance project for women called "Join IT". The project aims to help women acquire core digital competences and to promote computer literacy among the general population.

The project is implemented on the basis of IT training resources and occupational guidance programmes. For example, project participants are invited to join a free online career guidance course to enable them to choose their future occupation in IT. The project is supported by a grassroots movement of women interested in building their careers in IT.

Particular attention is given to senior students and young graduates, as well as women on maternity leave who want to try a new career.

The project is consistent with the goals and objectives of the national project "Talent for the Digital Economy" and the government programme "Digital Economy of the Russian Federation". By attracting women to IT education, the project's founders expect to create up to 1 million new IT specialists. The share of women in the IT industry will be growing, in particular in such roles as analysts, testers, designers, product managers and developers.

Procedures for monitoring human rights observance

GRI 2-25

Sistema acknowledges that human rights violations are unacceptable. In addition to damaging specific individuals, they would adversely affect the Corporation's reputation and lead to court disputes, loss of investors', customers' or employees' trust, or backlash from local communities, trade unions and non-profits. If the Corporation establishes that is has caused or contributed to a human rights violation, it is always willing to employ legal procedures, cooperate with stakeholders and engage in a dialogue to resolve the situation.

GRI 412-1

The Corporation acknowledges the importance of regular identification, analysis and assessment of potential human rights impacts and timely measures before any adverse consequences. The Corporation ensures the integration of criteria related to human rights into a comprehensive ESG assessment of investment projects. Sistema continuously monitors relevant risks and the performance of portfolio companies as regards the observance of human rights.

Reporting mechanisms

The Group's portfolio companies have formalised and accessible channels in place for submitting and reviewing reports, which ensure confidentiality, unbiased consideration, absence of negative consequences for the applicant, and feedback.

Each report is thoroughly investigated.

In 2022, 18.3% of reports received on the Hotline of the Corporation or the Group companies were related to abuse of office, personnel management and observance of employees' rights in the workplace. All of the reported problems were resolved in due course.

Sistema educates its employees in the area of human rights as part of training in ethics and sustainable development.

In 2021, the **telecommunications asset** introduced a training course entitled "Human Rights in the Workplace" for all its employees. The course covers various aspects of the applicable labour law and provides clear guidance on addressing the instances of violations of employee rights.

For more information on the functioning of hotlines, see section "Ethics and Anticorruption Efforts".

Reports can be submitted through Sistema's Hotline on the corporate website or through the hotlines of individual companies of the Group.

Sistema's Hotline:

email: report@sistema.ru;
Tel: +7 (495) 228-15-02

Protection of personal data

There were no data leaks identified in 2022.

The Corporation safeguards the privacy and personal data of its employees, shareholders, partners and consumers. This aspect is also covered in the Policy on Personal Data Processing and Protection, which applies to all Sistema employees and should be complied with.

For more information on activities in the area of information security and personal data protection, see sections "Confidentiality and Personal Data Protection" and "Ethics and Anticorruption Efforts".

Stakeholder engagement

GRI 2-29

Sistema believes that the enhancement of transparency and openness of information about its activities creates a foundation for developing a mutually beneficial dialogue with a broad range of stakeholders.

Documents governing interaction with stakeholders include:

- Code of Ethics;
- Corporate Social Responsibility Policy;
- Sustainability Policy;
- Charity Policy;
- HR Management Code.

Map of stakeholders[1]



Communication with key groups of stakeholders in 2022

Interests	Communication mechanism	Examples of communication and results
Shareholders and investors		
• Growth of equity value and stable dividend income • Higher transparency of non-public assets • Dividend policy	• Annual meetings of shareholders and meetings of the Board of Directors • Participation in investment conferences • Disclosure of financial results and material non-financial information • Conference calls • Individual and group meetings of investors and shareholders with the top management	• The Annual General Meeting of shareholders was held on 12 August 2022 • A revised Policy on Remuneration and Compensations for Members of the Board of Directors of Sistema PJSFC was adopted • 18 meetings of the Board of Directors were held ↗ For more information, see Sistema's Annual Report for 2022 and section "Investors and Shareholders" on the corporate website
Customers, consumers, clients		
• High quality of products and services • Responsible business conduct	• Direct interaction on the premises of Group companies • Better customer service • Response to requests	• The pilot system of voluntary certification of housing according to the green standard was tested • A unified database with information on sellers working with counterfeit goods was created for the benefit of all trading platforms ↗ For more information, see section "Accessibility and Quality" of this Report
The Corporation's management, employees of Sistema Group companies and trade unions		
• High quality of corporate governance • Economic efficiency • Adequate working conditions and wages • Occupational safety • Social support • Development of the human resources potential • Corporate volunteering • Achievement of strategic goals	• Management decision-making • Holding annual strategy sessions • Shaping a corporate culture • Implementation of an HR and social policy • Volunteering opportunities for employees of the Corporation and the Group companies in existing projects • Posting information on Sistema's corporate resources • Interacting with trade unions • Organising professional competitions and corporate contests	• 20+ strategy sessions of portfolio companies were held • Employees of the Group companies received 108 psychological consultations • The high-tech asset's subsidiary developed a system of precise positioning of transport vehicles, goods and personnel to ensure occupational safety at its production facilities • Contributions to trade unions totalled RUB 41m at the power grid asset, RUB 2.2m at the timber asset and RUB 0.4m at the hospitality asset. • Employees that were members of trade unions received additional benefits, such as partial financing of trips to health resorts for employees and their families, financial aid in case of the birth of a child, a death in the family, financial problems, emergencies and other circumstances, discounts for medications, opportunities to visit cultural and sport events, etc. ↗ For more information, see Sistema's Annual Report for 2022 and section "Human Capital" of this Report
Non-profit social and environmental organisations and charities		
• Reduction of negative impact on the environment • Involvement in the global environmental agenda • Restoration of the environment and natural habitats • Implementation of social and charity projects	• Transparency in terms of environmental impact • Introduction of sustainable technologies and a responsible production model • Membership in trustee boards of organisations • Donations to charities	• A training session on ensuring environmental safety at production facilities was held for the environmentalists of the timber asset • 11 Group companies in 13 regions of Russia joined a waste paper collecting campaign to support Lift Without Failure, an educational project for orphaned children • The high-tech asset's subsidiary in the Chelyabinsk region launched a video system for controlling emissions. The system was developed for the Environmental Monitoring Centre of the Chelyabinsk region ↗ For more information, see section "Smart Environment" of this Report

1 The map of stakeholders was prepared in accordance with the meaning of the term "stakeholder" given in the updated GRI Standards 2021.

Interests	Communication mechanism	Examples of communication and results
Federal and regional bodies of executive power and state supervisory bodies		
• Contribution to implementation of national projects • Reduction of negative impact on the environment • Import substitution • Implementation of social and investment projects • Environment protection • Creation of jobs and comfortable social environment • Taxes • Compliance	• Participation in discussions of legislative initiatives • Participation of the Corporation's representatives in meetings of committees, commissions and hearings of the Russian parliament • Support to government policies • Signing of agreements with regional governments • Corporate programmes for the development and support of social infrastructure • Submission of reports to controlling and supervisory bodies and information on mergers and acquisitions to the Federal Antimonopoly Service	• Four agreements with the governments of Russian regions were signed in 2022. As of the end of 2022, the Group had a total of 14 agreements with regions • The telecommunications asset launched a spam complaints service for its customers in partnership with the Federal Antimonopoly Service ↗ For more information, see sections "Accessibility and Quality" and "Social and Economic Development of Local Communities" of this Report
Research and educational facilities		
• Innovative activities • Digitalisation • Participation in the development of secondary and higher education • Joint educational programmes	• Participation in the development of smart city infrastructure • Joint projects with research and development organisations • Development of the human resources and scientific potential • Membership in trustee boards of colleges and universities • Offering of internships to students	• At least 10 new agreements were signed by the Corporation's subsidiaries with research and educational institutions • More than 5,000 students completed internships at the companies of Sistema Group in 2022 ↗ For more information, see section "Innovation Management. Digitalisation", "Human Capital" and "Smart Homes, Cities and Production" of this Report
Professional associations, expert community		
• Creation of a transparent and competitive business environment • Compliance with high standards of business ethics • Joint work on industry-specific and public initiatives	• Participation in the work of business unions • Factoring in interests of the business community in government policies • Participation in forming national risk management standards	• The pharmaceutical asset joined the Social Charter of Russian Business drafted by the Russian Union of Industrialists and Entrepreneurs • The agricultural asset became a member of the Managers Association • The financial asset joined the ESG Banking project group of the Association of Russian Banks ↗ For more information, see section "Participation in International and Industry Initiatives" of this Report.

Interests	Communication mechanism	Examples of communication and results
Local communities and population in regions of operations		
• Security • Jobs • Implementation of social and charity projects	• Expansion of local labour markets (creating jobs) • Participation in regional social, environmental and charity projects	• The timber asset implemented a large-scale charity project to renovate the Segezha district of the Republic of Karelia • The Lift to the Future programme, combining career guidance and education initiatives, was conducted in 16 regions of Russia • A New Year fundraising initiative was conducted as part of the Lift Without Failure project to hire tutors for children from children's homes and help them prepare for exams ↗ For more information, see section "Social and Economic Development of Local Communities" of this Report and SCF's website
Business partners, suppliers and contractors		
• Accessibility, transparency and competitiveness of procurement procedures	• Development of strategic partnerships • Implementation of advanced procurement management practices at portfolio companies • Holding of business meetings	• The timber asset updated its regulatory documents on procurement • The pharmaceutical asset approved a procurement code ↗ For more information, see section "Sustainable Supply Chain" of this Report
Mass media		
• Comprehensive coverage of the Corporation's activities • Awareness of the public about social projects	• Posts in social networks and on the websites of Sistema Group companies	↗ For more information about communications with the media, see section "Information Disclosure" on Sistema's website.

KEY SUSTAINABLE DEVELOPMENT AREAS IN THE ACTIVITIES OF SISTEMA GROUP COMPANIES

100
Well-being of employees, customers and local communities

174
Accessibility and quality

154
Smart homes, cities and manufacturing

Well-being of employees, customers and local communities

3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
8 DECENT WORK AND ECONOMIC GROWTH
10 REDUCED INEQUALITIES

people

173,551

average headcount at Sistema Group

RUB per person

6.7m

average labour productivity

RUB

1.6bn

occupational safety expenses in 2022

The UN Global Compact principles

Principle 1

Businesses should support and respect the protection of internationally proclaimed human rights

Principle 2

Businesses should make sure that they are not complicit in human rights abuses

Principle 3

Businesses should uphold the freedom of association and the effective recognitio of the right to collective bargaining

Principle 4

Businesses should uphold the elimination of all forms of forced and compulsory labour

Principle 5

Businesses should uphold the effective abolition of child labour

Principle 6

Businesses should uphold the elimination of discrimination in respect of employment and occupation

Human capital

0.24%
of the total workforce in the Russian Federation are employed by Sistema Group

GRI 3-3

Sistema is building a team of professionals able to achieve strong results and make difficult decisions. The Group companies encourage their employees to continuously learn and develop, providing them with opportunities for improving qualifications and career growth.

However, personnel management is not only about setting the right ambitious goals and developing a system of financial incentives, it is also about dealing with the emotional state, physical and mental health and social well-being of employees. The Group companies provide their employees with modern work space and strive to maintain their health and well-being. Sistema's portfolio assets believein work/life balance, so some of them offer flexible schedules and support programmes for family and personal needs.

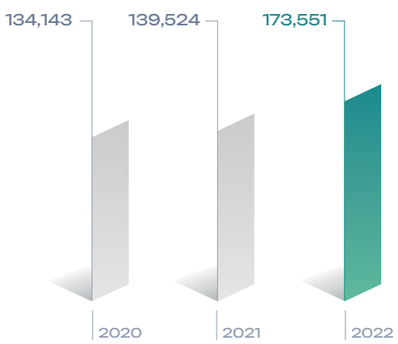
Sistema's HR Department determines the methodology and general principles of personnel management and ensures transparent recruitment, motivation and organisational development. Sistema's activities in the area of HR management are regulated by the Code of Ethics, the HR Management Code and other regulatory documents. Sistema abides by labour legislation and personnel-related standards of business ethics in regions of operation.

Staff composition[1]

GRI 2-7

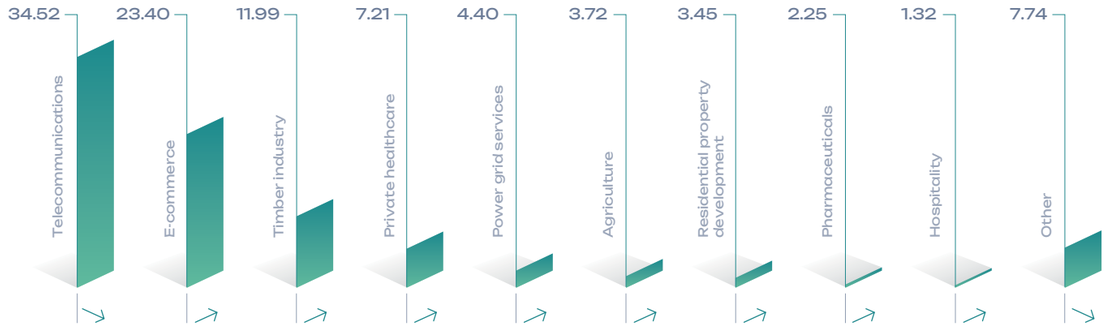
Sistema Group is a large employer in every region where its facilities and enterprises are present. The Group's total headcount in 2022 was approximately 173,000 people. The increase came from development of logistical and warehouse infrastructure and acquisition of new assets by some portfolio companies.

Average headcount at Sistema Group, persons





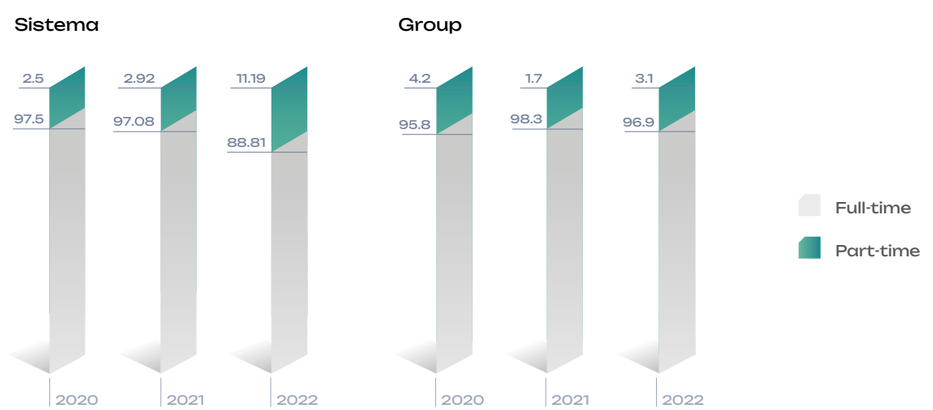
Headcount by industry, %



Personnel structure at Sistema Group by category, %

	2022[1]	2021[1]	2020
Senior management	0.5	0.4	0.5
Middle management	3.8	2.8	3.2
Junior management	9.0	10.2	8.3
Non-management	86.8	86.6	88.0

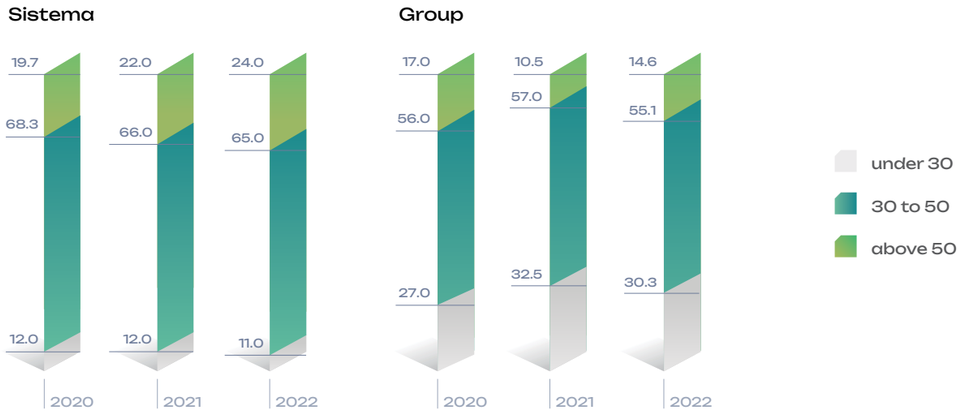
Personnel structure by type of employment, %



1 The data for 2022 is provided for Sistema and its assets operating in the sectors of telecommunications, timber industry, property development, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and "other".

1 Without the e-commerce asset.

Personnel structure by age group, %



SASB FN-AC-330a.1

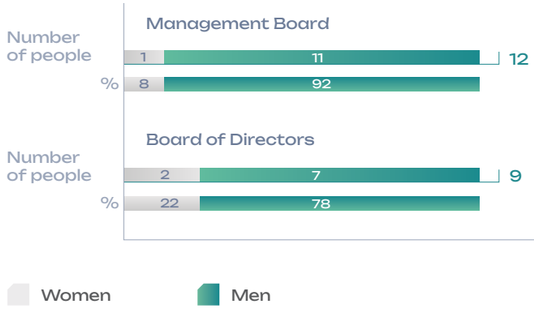
Sistema guarantees equal opportunities for men and women. Gender, age, ethnicity and other characteristics not related to professional qualities are not taken into account when making a recruitment decision.

GRI 405-1

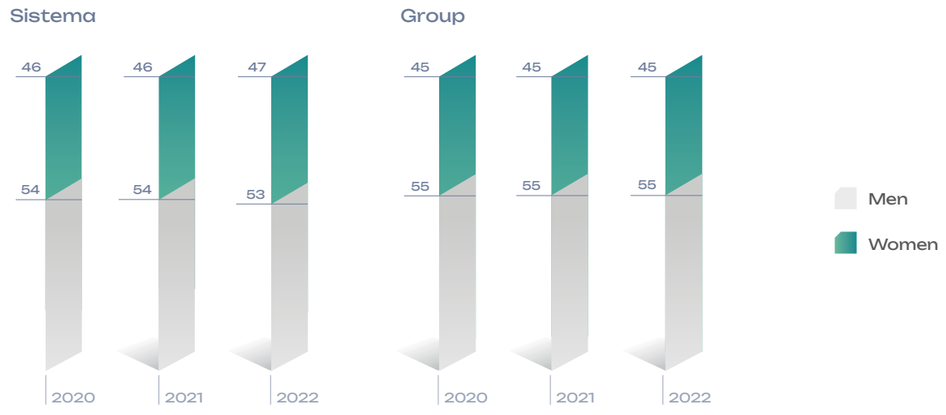
UNCTAD D.1.2 UNCTAD C.1.1

SASB FN-AC-330a.1

Structure of senior governance bodies by gender



Personnel structure by gender, %



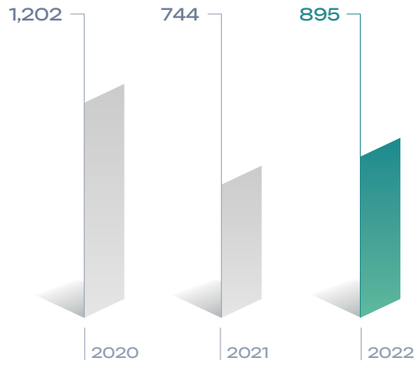
Structure by type of employment agreement and by gender, %

	Permanent contracts		Term contracts	
Year	Men	Women	Men	Women
Sistema				
2020	53.2	45.8	0.4	0.7
2021	52.9	44.6	0.7	1.8
2022	52.6	45.9	1.1	0.4
Group				
2020	51.04	41.9	3.1	3.9
2021	51.8	42.1	3.2	2.99
2022	50.15	41.05	4.94	3.86

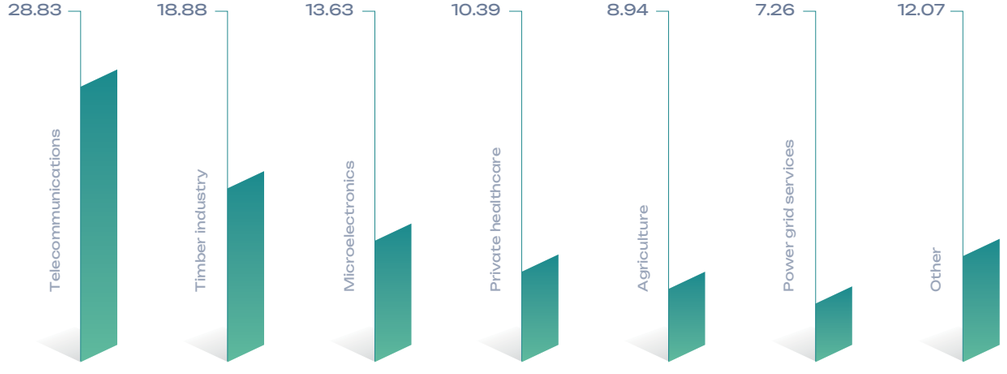
Sistema's portfolio companies ensure equal recruitment opportunities for all people, including disabled persons. Companies equip workplaces meeting their needs and abilities. The Group had 895 such employees in 2022, or 0.5% of the average headcount.

895 persons
total number of employees with disabilities in 2022

Total number of employees with disabilities at Sistema Group[1], persons



Disabled employees by industry[1], %



1 Without Sistema and the e-commerce asset.

In October 2022, Sistema's telecommunications asset joined the National Inclusive Agreement.

The company undertook to develop inclusive programmes and create barrier-free environment. The company's policy "Diversity, equality and inclusivity" adopted in 2021 served as the basis for signing of the agreement. In accordance with the document, the company will expand its outreach programmes aimed at overcoming digital inequality: it will increase integration of IT solutions for remote learning; prolong support for social entrepreneurship; upscale HR projects related to inclusive employment; continue creating accessible and barrier-free environment at its offices and organise tourist routes accessible for people with limited mobility. Over 70% of the company's employees are in favour of hiring older candidates and disabled persons. In 2022, the telecommunications asset together with partners launched an employment initiative for people on the autistic spectrum. The company plans to consider introducing a minimum quota of 2% for such employees.

In December 2022, the telecommunications asset launched Russia's first free online course on data annotation for special needs persons, including those on the autistic spectrum and with impaired hearing. The course takes three months and includes 22 hours of video lectures and 28 hours of lessons with teachers. Afterwards, the best students will be offered internships. In 2023, the telecommunications asset plans to develop Russia's first course in software testing for special needs persons.

Personnel recruitment and retention

53,982
people
the Group companies hired in 2022

The Group companies actively work to recruit and retain talent. Recruitment is done using various communication channels available, including new formats. In 2022, the Group companies hired a total of 53,982 people.

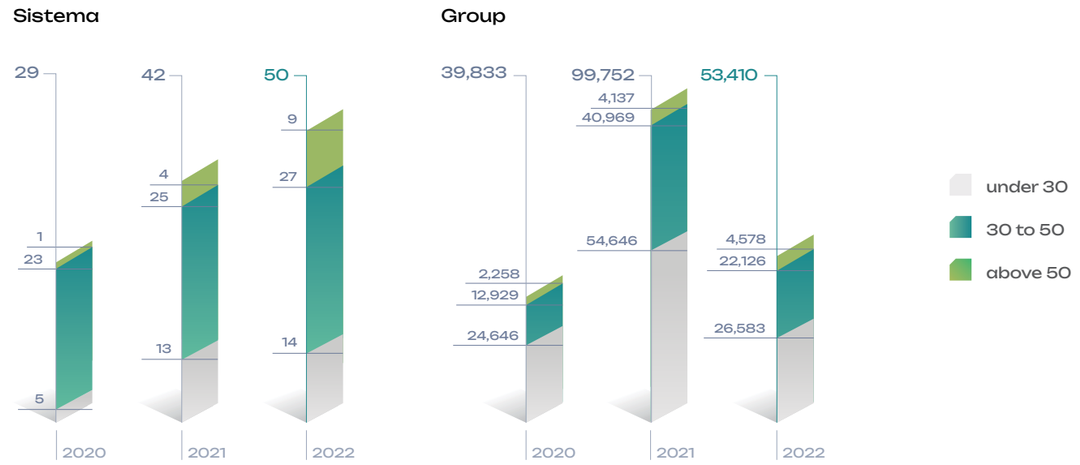
In February 2022, the **telecommunications asset** organised a "date week" with potential candidates in the format of one-day offer[1]. During the event, the company offered jobs in analytics, marketing and product development. To participate in the new recruitment format, candidates had to choose a job they were interested in on the website and respond to it. Each candidate received feedback and those whose CVs seemed interesting to the team were invited to an in-person meeting. Successful candidates received a preliminary offer within 24 hours after the interview. Also in October 2022, the asset organised a social and educational event at the career centre of the Kuban State University of Technology. The participants could visit interactive lectures and workshops on successful employment, learn about available jobs and leave an application. Invited to the event were all interested unemployed residents of the region, young professionals, graduates of colleges and universities and also disabled persons.

In the reporting period, the **pharmaceutical asset** of Sistema together with Sistema Charitable Foundation and the Main Labour and Employment Department of the Kurgan region launched an educational programme for the region's residents. The programme is an addition to the existing federal project "Assistance with employment" that offers professional retraining and is carried out as part of the Demography national project. The educational programme was carried out as part of the Lift to the Future project of Sistema Charitable Foundation.

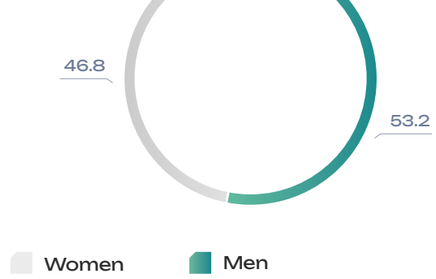
1 Possibility to get a job at a company in one day after just one interview.

New employee hires by age group, persons

GRI 401-1



New hires at Sistema Group in 2022 by gender[1], %



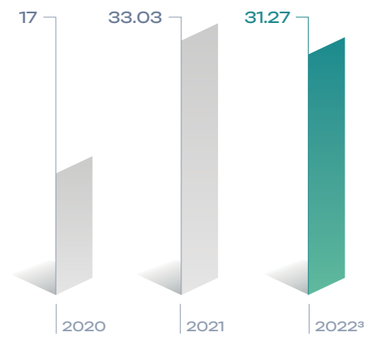
The average personnel turnover rate across the Group in 2022 was

31.47%

New hires at Sistema by gender, persons

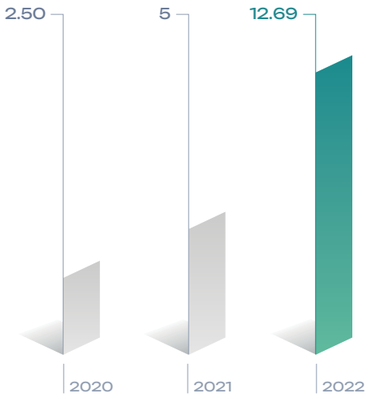
	2022	2021	2020
Men	29	22	19
Women	21	20	10
Total	**50**	**42**	**29**

Average personnel turnover rate at portfolio companies[2], %

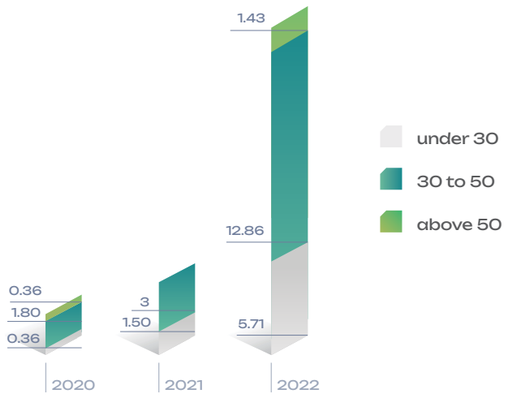


1 Without the e-commerce and real estate selling assets.
2 Voluntary turnover only.
3 Without the e-commerce asset.

Personnel turnover at Sistema[1], %



Personnel turnover at Sistema by age in 2022[2], %



Ratio of voluntary to overall turnover at Sistema and the Group, %

		2022	2021[3]	2020
Sistema	Voluntary turnover	14.05	4.60	2.50
	Voluntary to overall turnover	48.57	26.10	12.50
Group	Voluntary turnover	24.98	29.20	26.65
	Voluntary to overall turnover	83.18	88.50	84.56

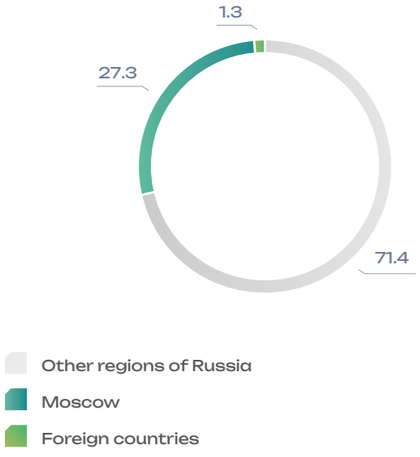
GRI 202-2

Portfolio companies hire mostly local population and organise training programmes to train professionals they need. If there are no candidates with required qualifications on the local market, employees from other regions can be hired.

Share of local leadership

	2022	2021	2020
Number of senior executives at Sistema, persons	19	22	19
Of which locals (from Moscow and its suburbs) are, %	100	100	89

Structure of Sistema Group personnel by geography in 2022[4], %



1 Voluntary turnover only.
2 Both voluntary and otherwise.
3 Witjout the e-commerce asset.
4 Without the real estate selling asset.

Creating comfortable working conditions

Sistema Group companies care about the physical and mental health of their employees and try to minimise the impact of external adverse factors.

Special attention is paid to shift teams that stay for a long time in northern regions. At the end of 2022, the **timber asset** built 16 warm log houses for shift teams in the Irkutsk region. Each house has central heating from boiler units working on wood pellets. Use of this biofuel helps to reduce the enterprise's impact on the environment. In Q1 2023, the company plans to complete connection to the central electricity supply system. Also in the reporting period, work was done to complete the construction of a hostel for 35 people with a canteen, medical office and two saunas.

Incentives and remuneration

GRI 2-12 GRI 2-19

The Group companies offer competitive salaries. On average, the minimum entry-level wage across the Group is approximately RUB 26,500, which is almost two times higher than the statutory minimum wage in 2022.

Average ratio of entry-level wage to statutory minimum wage[1]

Personnel expenses across the Group, RUB bn

GRI 2-20 GRI 2-21

Ratio of the total annual compensation for Sistema's highest-paid individual to the average annual compensation for all employees[2]

GRI 202-1

Minimum entry-level wage in 2022, RUB

1 The data is provided for assets operating in the sectors of timber industry, private healthcare, agriculture, pharma, commercial property management, power grid services, hospitality, high technology and "other".
2 The methodology for calculating the indicator represents the ratio of the average compensation of members of the Board of Directors and the Management Board to the average salary of all other employees. The indicator was recalculated following elaboration of the calculation methodology.
3 Witjout the e-commerce asset.
4 Without Sistema, the e-commerce asset and other.

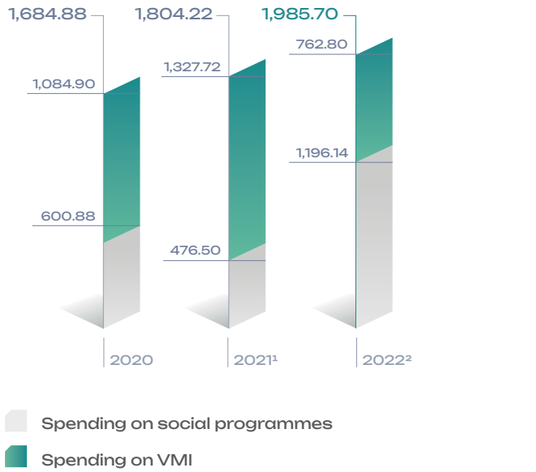
Non-financial incentives

GRI 401-2

Non-financial incentives at Sistema include:
- acknowledgement of employees' achievements;
- social benefits and participation in corporate events and volunteer projects.

Sistema offers employees extended benefits, including voluntary medical insurance (VMI), sick pay above the statutory minimum, financial aid for those in difficult circumstances, travel insurance, and accident insurance. Corporate programmes of voluntary medical insurance are also available for employees' families. Specific benefits vary from asset to asset according to the realities of their respective businesses and employee needs.

Group's spending on voluntary medical insurance and employee benefits, RUB m



GRI 401-3

Parental leaves at Sistema, persons

	2022	2021	2020
Number of employees entitled to parental leave	3	3	15
Number of employees on parental leave	3	3	15
Number of employees back from parental leave	0	0	1
Share of employees that resumed work, %	0	0	100

Professional contests and shows

Participation in professional competitions encourages development of technical and creative skills and motivates employees to develop professionally.

In summer 2022, four employees of the **timber asset** made it to the top ten at the Russian championship "The 21st Century Lumberman". As many as 40 teams of Russian timber enterprises with a total of 170 participants competed in the championship in four categories: operators of forwarders, harvesters, hydraulic manipulators and wood loaders.

In autumn 2022, employees of the timber asset joined teams of the Republic of Karelia and the Arkhangelsk region and won medals at the 7th Russian championship Lumberman 2022.



1 Without Sistema, the e-commerce asset and the R&D company.
2 The data is provided for assets operating in the sectors of telecommunications, residential property development, agriculture, pharmaceuticals, hospitality, power grid services, private healthcare, high technology (the data for the latter three is presented for the first time) and "other".

The event attracted 74 participants from 17 regions of Russia. They competed in two categories: operators with fuel-powered saws and machine operators.

In the reporting year, the **power grid asset** announced the results of a contest between all of its 15 substations. The best substations were selected based on the state of transformers and switching gear, the effectiveness of their use, the state of power facilities, the quality of repairs done and labour productivity of the personnel.

Support to employees' work-improvement projects and lean production

Sistema Group supports implementation of employees' work-improvement projects, viewing them as conducive to increase in labour productivity and personnel motivation.

The **timber asset's** enterprise continued optimisation of its production processes as part of the Ideas Factory corporate project launched in December 2021. The main goals of the Ideas Factory are professional development of the team and increase of production efficiency by reducing need for repairs and the amount of defective products. In the reporting period, the company reviewed 86 work-improvement proposals made by employees; 73 were approved and 38 have already been implemented. Authors of the proposals receive remuneration based on the economic effect, scope and complexity of their projects. The project was successfully rolled out to another enterprise of the Group, with employees registering 600 projects, implementing 200 and working on 125. A project for eliminating defects in a sublaminated layer used for gluing of colour plywood was recognised as the most successful work-improvement idea. The economic effect after two months from the project's implementation was RUB 18m. Another enterprise of the timber asset reported economic effect from introduction of work-improvement proposals in the reporting period in the amount of RUB 2.9m.

Also in 2022, a company of Sistema's timber asset received expanded support from the Federal Centre of Excellence as part of the Labour Productivity national project. It became the third company in the Kirov region to launch a programme in 2023 for increasing competitiveness of Russian goods and labour productivity with the Centre's participation. The programme is designed for three years. The company's employees may undergo training at and receive expert consultations from the Federal Centre of Excellence. Participation in the programme is expected to increase labour productivity by 10%.



Sistema's **agricultural asset** organised a contest of work-improvement proposals among its employees. The contest helped to identify the most talented and ambitious innovators. First place was given to a project that enabled all enterprises of the asset to quickly transition to purchase of electricity from a single supplier. Thanks to a single tariff set for a long period, the company significantly reduced its spending on electricity and increased energy saving. Second place was given to a project that envisaged performance of certain agronomic tasks by quadcopters, which increased efficiency and cut costs.



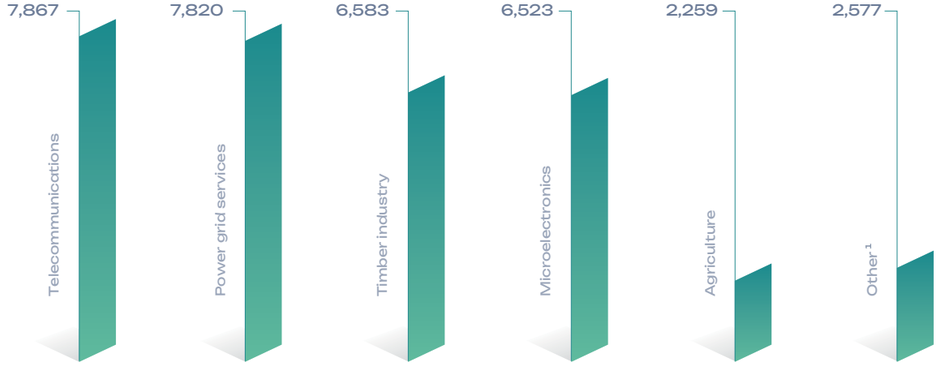
Collective bargaining agreements

GRI 2-30 GRI 201-3 UNCTAD C.4.1

Sistema pays special attention to social partnership with its employees. The terms of social partnership are laid down in collective bargaining agreements that provide for additional benefits and compensations for employees. They include voluntary medical insurance, pensions, additional vacation days, higher sick pay, etc.

24.5%
of employees across the Group are parties to collective bargaining agreements

Number of Sistema Group employees covered by collective bargaining agreements in 2022, persons



Share of Sistema Group employees covered by collective bargaining agreements, %





1 The data is provided for Sistema and its assets operating in the sectors of telecommunications, timber industry, residential property development, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and "other".
2 The data is provided for assets operating in the sectors of telecommunications, timber industry, residential property development, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and "other".

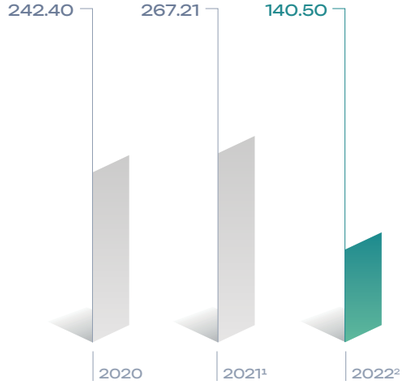
Employee training and development

GRI 3-3 GRI 404-2

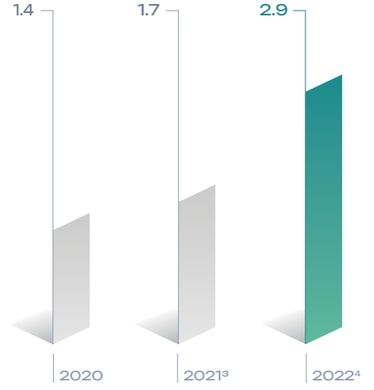
Being aware that the quality of employee education directly correlates with their performance, the Group's companies are constantly investing in employee training and development. In 2022 alone, the Group invested RUB 140.5m in employee training and development.

RUB 140.5m
the Group invested in employee training and development in 2022

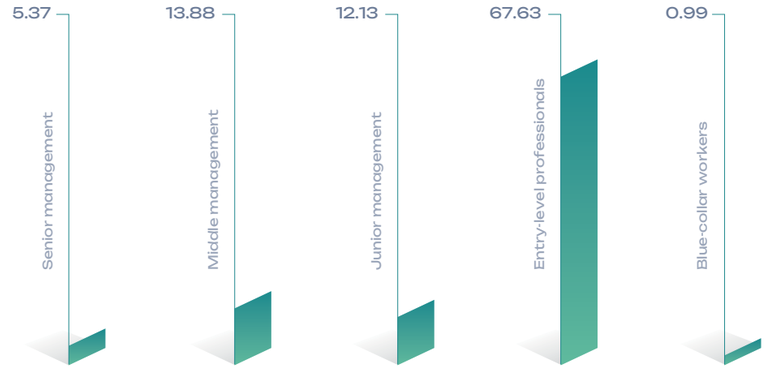
Training expenditure across the Group, RUB m



Academic time financed by Sistema Group, m hours



Sistema Group's spending on training in 2022 by staff category[2], %



1 Without Sistema, the e-commerce asset, the pharma asset and the power generation asset.
2 The data is provided for assets operating in the sectors of telecommunications, timber industry, residential property development, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and "other".
3 Without Sistema, the e-commerce asset, the pharmaceutical asset and the power grid asset.
4 The data is provided for assets operating in the sectors of telecommunications, timber industry, residential property development, private healthcare, agriculture, commercial property management, power grid services, hospitality, high technology and "other".

To develop management skills of line managers, the **timber asset** carries out an educational programme titled “School of Masters”. The project first appeared in 2021; in the reporting period it received new modules and was implemented at several enterprises of the asset. Participants learned about occupational safety, specifics of plywood production and certain technological processes, lean production tools, legal requirements, internal standards, provisions of the collective bargaining agreement and algorithms of working with new employees during their adaptation and retraining. In August 2022, a project for comprehensive employee assessment was launched in the Kirov region to assess the results of the “School of Masters”. As a result, improvement areas were identified to be addressed during next year's studies.

The **telecommunications asset** has its own corporate university that offers about 3,000 courses on various subjects. In addition, the asset has a free corporate e-library with educational videos and business publications. In 2022, the number of library users exceeded 13,000 people, and the number of reading hours steadily stays above 30,000. In the reporting year, 4,007 employees completed in-person on-site training (an increase of 5.4% from 2021), while 3,382 underwent in-person off-site training.

The **private healthcare asset** has its own Medical Academy. The main goal of the project is to create an educational platform for continuous development and improvement of professional skills of medical workers and rolling out of the best Russian and foreign medical practices. The Academy is expected to improve theoretical knowledge and practical skills of doctors and nurses. It has 14 departments and over 150 educational programmes. Since the launch of the project, it has trained over 4,000 professionals and conducted 35 scientific conferences. The Academy cooperates with leading Russian universities. The asset managed to reduce personnel turnover from 64% to 20%. In line with the company's development strategy, its headcount increased by 35% in the reporting year, and the staffing rate was maintained at 93%.

~3,000 courses
offers own corporate university of the telecommunications asset

>150 educational programmes
has own Medical Academy of the private healthcare asset

Succession pool

The succession programme includes work to identify high-potential employees, their targeted development and promotion to key management positions. For the Group companies, a succession programme is a guarantee of business efficiency, while for the employees it is an opportunity of career growth and development.

In 2022, the **timber asset** and the Higher School of Business of the National Research University Higher School of Economics implemented a succession pool training programme aimed at developing management competences and understanding of the management cycle by personnel. For six months 46 managers of the asset's enterprises and divisions from different cities studied three educational modules. Also in 2022, 90 candidates participated in a test assessment training for inclusion in the succession pool of the timber asset's enterprise in the Republic of Karelia. Each participant received an individual expert opinion analysing his/her strengths and weaknesses and career growth opportunities.

In December 2022, executives of the **pharmaceutical asset** successfully defended diploma papers of the corporate programme “Modern technologies of managing pharmaceutical production” at the Higher School of Economics. The training programme took 12 months and included topics related to increase of efficiency of corporate management in the pharma industry: management of business processes and marketing, project management and management of structural divisions, business communications and leadership technologies.

In 2022, the **power grid asset** updated its succession pool in accordance with its succession programme. Since the beginning of the year, over 87% of employees included in the succession pool underwent training according to specially developed programmes. The company's representatives took part in the Russian national contest “Leaders of the energy sector” and winners took a professional retraining course, “Technological management in the energy sector”.

46 managers
of the asset's enterprises and divisions from different cities studied three educational modules

87% of employees
included in the succession pool underwent training according to specially developed programmes

Mentorship

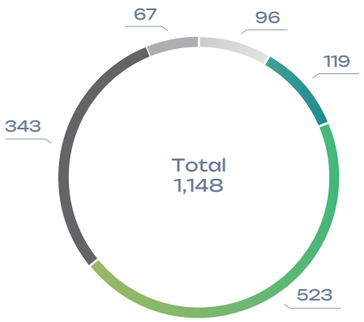
Sistema's portfolio companies carry out programmes for adaptation of personnel and develop mentoring in order to get employees engaged in production processes and corporate culture and increase labour efficiency of young professionals.

In May 2022, the **timber asset** launched such a programme at its production facility in the Kirov region. The programme is designed for new employees of production divisions. First, a new employee is offered internship at the work place, during which time employees of the industrial training division monitor the intern's psychological status, using specialised questionnaires. After passing the final qualification exam the intern becomes a full-fledged employee. Employees involved in the programme received algorithms for interaction with new hires from the HR service; their motivation includes both financial and non-financial incentives.

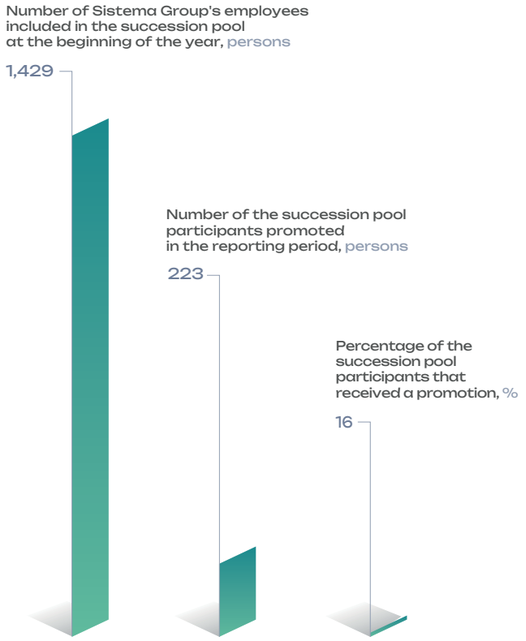
The **power grid asset** has a Mentorship Policy in place; it actively works to develop mentorship, to offer regular training and to increase the qualifications of the mentors. The company's management pays significant attention to adaptation of young professionals and development of their competences, including through sharing of knowledge and skills by more experienced employees. In 2022, the company conducted a contest among mentors. Ten mentors, each representing a territorial production division of the company, were declared winners.



Number of Sistema Group's employees included in the succession pool at the beginning of 2022[1], persons

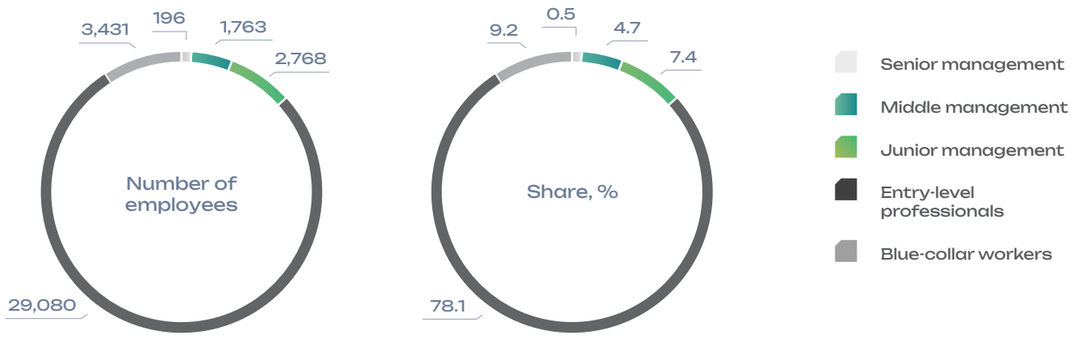


Sistema Group's succession pool in 2022[1]



Sistema Group's employees who received performance reviews by category [2]

GRI 404-3



1 The data is provided for assets operating in the sectors of residential property development, private healthcare, agriculture, power grid services, hospitality, high technology and "other".

2 The data is provided for assets operating in the sectors of telecommunications, timber industry, residential property development, agriculture, pharmaceuticals, hospitality, high technology and "other".

Corporate culture

As part of preparations for its anniversary in 2023, Sistema launched a team-building campaign #WeSistema, which seeks to:

- to nurture the feelings of belonging and pride for the Corporation;
- to increase awareness about the Corporation, its scale, history and achievements;
- to increase recognition of Sistema's brand and strengthen the Corporation's HR brand;
- to offer creative expression, self-actualisation and networking opportunities for participants of the activities.

A special online platform was developed for the project; it includes five key sections that engage users — employees of the Group and their children — in various activities.

Sections of the #WeSistema campaign

"Oscar for Occupation" contest

Employees of all assets across the country make and upload creative videos about their professions: what is interesting about it, what its peculiarities are, etc.

The winners of the contest will be invited to a private screening of a film about the Corporation, their videos will be shown at the event where they will also be awarded "Oscars."



#InsideSistema: excursions to assets

A systematised calendar of career guidance tours to Sistema Group companies for employees and their families.

Quizzes and contests in the Sistema News telegram channel

To keep readers interested, the channel will organise quizzes, contests and raffles with anniversary merchandise among registered participants[1].

"Children's Corporation" video contest

A contest of videos about Sistema Group companies made by employees' children or starring children. Winners are selected in an online vote, and they will represent their respective companies in a final film devoted to Sistema's 30th anniversary: children will star in various roles, from the president of the company to ordinary workers.

The film "Children's Corporation" will be shown at the Sistema corporate party. And the young winners will be invited to a boat ride on the Moskva river in the company of their favourite children's bloggers.



History in faces (on an interactive map of Russia)

Employees of all portfolio companies across Russia upload their photos and stories about Sistema's role in their lives. Visitors of the platform can look at the uploaded photos and read the stories; the map is interactive in regions where the Corporation operates.

At the end of the campaign, the most interesting stories will be published in the anniversary issue of Sistema Magazine, and their authors will receive copies with the top management's autographs.

For more information about the #WeSistema campaign, visit its official website.

1 Clothes, accessories, souvenirs and other functional or simply beautiful items with a brand's logo.

Contribution to the education of younger generations

GRI 3-3

Sistema Group is dedicated to collaboration with academia and works hard to create education and self-fulfilment opportunities for talented young professionals. In 2022, the companies of the Group signed 13 cooperation agreements with Russian universities and colleges.

13 cooperation agreements
with Russian universities and colleges in 2022

Agreements with schools

Sistema

Bauman Moscow State Technical University (MGTU)	>>	Agreement on research and technical cooperation, personnel training and implementation of infrastructure and educational projects. Joint research and development in the following spheres: • data storage and processing systems; • software and mobile platforms; • power plant engineering, microelectronics and devices on the Russian component base, including electric cars, satellite systems, smart power grids, naval transport navigation, Internet of Things, agricultural bots, UAVs; • environment monitoring systems and carbon-neutral solutions for households, enterprises, industries and cities; • biomedical engineering and soft tissue technology; • hydrogen technologies. The company plans to open a department of hydrogen technologies at MGTU to carry out projects in the area of cryogen transportation and storage of hydrogen and to train a new generation of designers. It also intends to establish a creative cluster on the Yauza river with participation of Sistema's electrical asset

High-tech asset

Novosibirsk State University	>>	Agreement on development and introduction of digital and production technologies, artificial intelligence, design and upgrade of equipment, software of the Lavrentyev supercomputer centre, and development of the Novosibirsk Science Campus.
Voronezh State University	>>	Agreement on development and introduction of digital and production technologies used in the real sector and education and on cooperation in employment of graduates and internships at the high-tech asset's branch in Voronezh. In 2022, the parties organised an inter-university team contest in competitive programming, which attracted over 40 teams from the region
Innopolis special economic zone and Innopolis University	>>	Agreement on implementation of scientific projects in the area of video analytics, microelectronics, unmanned aerial vehicles, geoinformation, development and introduction of software, design of equipment, robotics and information technology
St Petersburg State Marine Technical University	>>	Agreement on cooperation for the purpose of development of shipbuilding and in design and production of ships, including alternative-powered ships, development of advanced ship navigation technologies and of the learning process using latest practical experience
Scientific University of Malaysia	>>	Agreement on cooperation in space engineering and development of the first educational course on small satellites. The course includes lectures and practice at the university laboratory with Russian-made equipment

Power grid asset

Ufa Fuel and Energy College (UTEK)	>>	Agreement on development of educational, scientific, innovative and research activities to increase the quality of training and specialisation of UTEK graduates for the purpose of including them in the company's succession pool

Telecommunications asset

Surgut State University	>>	Agreement on cooperation in the development of IoT devices for the fuel and energy sector of the Khanty-Mansi Autonomous District and on internship programmes for IT students. A total of 200 students will be able to research Internet of Things thanks to the equipment donated by the company
Yugra State University	>>	Agreement on scientific and technical cooperation for the purpose of establishing an IT laboratory for researching wireless communications and on internship programmes

Sistema Charitable Foundation (SCF)

Russian Knowledge Society	>>	Agreement on innovative activities and interactive formats in the areas of education, development of the lecturers' community and development of SCF's Lift to the Future educational initiative
Far Eastern Federal University	>>	Agreement on cooperation in scientific, research and educational activities and on development of programmes, modules and courses for SCF's Lift to the Future educational initiative
Agency for Professional Skills Development (WorldSkills Russia)	>>	Agreement on joint efforts for the development of new competences and mass training of personnel. Notably, the cooperation includes an impact project that is being carried out by SCF together with the timber asset

Lift to the Future

In 2022, Sistema Charitable Foundation, being the main operator of Sistema Group's social investments, continued implementing its flagship project Lift to the Future. The project gives motivated young people an opportunity to improve their skills for free, to find the first job and receive expert support and scholarships.

Since November 2020, Lift to the Future has been based on a digital educational platform, making it accessible for everyone, regardless of the place of living. In 2022, new options were added to the platform, making it even more convenient and useful for all segments of the target audience.

>364,500
registered Lift to the Future platform users

Key activities implemented as part of the Lift to the Future project in 2022

Cooperation with schools

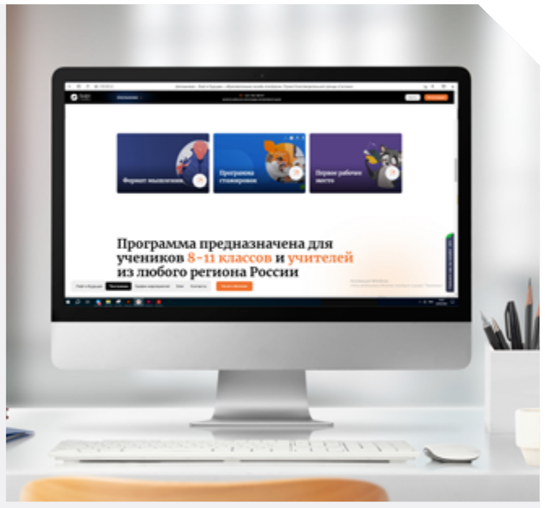
Teachers' contest "Best career guidance methodology for school students"	A contest of career guidance methodologies among teachers of 8th–11th grades	**15 applications** from teachers; **1,500 students** completed local career guidance programmes of Lift to the Future; **5 winning schools** in 5 regions of Russia
Training teachers in the Lift to the Future career guidance methodology	A series of open webinars for home-room and career guidance teachers, school psychologists, tutors, school counselors and intellectual volunteers at orphanages	**> 3,000 teachers** use the Lift to the Future methodology for their career guidance work with students
Career guidance programme from Lift to the Future	A career guidance programme for school students held at the Okean Russian national children's centre, the Artek international children's centre and the Orlyonok Russian national children's centre	**187 participants** of the programme
Lift to the Future mobile laboratories	Industrial workshops from university volunteers on the basis of Lift to the Future mobile laboratories at the Okean Russian national children's centre and the Orlyonok Russian national children's centre	**30 university students** were selected as volunteers-ambassadors; **>1,600 school students** took part in the workshops in five days

Cooperation with universities and colleges

University Students to School Seniors programme	An intensive online training programme for students on basics of project activities and project management, work with school students and soft skills, as well as leadership of school project teams	**420 students** applied and completed training; **241 students** were selected to lead school project teams; **96 school project** teams presented their projects to experts from corresponding industries; **34 teams** from 28 cities made it to the finals; **8 winning teams** in 8 industries
Lift to the Future pilot scholarship programme	The goal of the programme is to provide comprehensive (financial and educational) support to young students with a high professional potential till they get their first jobs	**46,000** school, college and university students participated in the contest for the Lift to the Future scholarship; **75 winners** received scholarships and career consultations, while university students were also offered internships at companies under the guidance of industry experts; **11 leading companies** from various industries acted as the programme's partners
Thinking of the Future online project	The goal of the project is to teach students basic skills of various types of thinking, which will become the foundation of their career success in the future	**2,100 students** completed the programme
Industry internships Cosmos Camp and Agro Camp	Internship programmes in partnership with industry leaders	**130 students from 50+ Russian cities** joined the online stage of Cosmos Camp. **15 best participants** of the online stage completed a two-week offline internship at Cosmos Group hotels; **137 students from 30+ Russian cities** joined the online stage of Agro Camp. **15 best participants** of the online stage received scholarships. **10 best participants of the online stage completed** an offline internship at a leading enterprise in the Krasnodar region

Online events		
Russian national career guidance classes	Online broadcasting of lectures on selection of a profession from industry experts, contests and prize raffle from the event's partners	**> 65,000 views** of the event
Python programming: graduation	Free training in Python and soft skills for team work and project management	**216 school students** successfully completed training; **10 teachers** completed training for successful programme implementation
Create Merchandise contest	Designing branded stickers and/or sweatshirts and hoodies	**119 concepts** from young artists and designers from across the country; **2 winners, 1 special prize**

Lift to the Future digital educational platform,
the online resource of the Lift to the Future project, aggregator of the project's opportunities and also:



100+
free educational and career guidance materials

+114,500 users
compared to 2021

7,135 users
aged 14 to 35 participated in a voluntary anonymous survey of soft skills

For more information on the Lift to the Future career guidance and training programme please go to SCF's 2022 Annual Report.

For more information on other projects pursued by SCF, see section "Support to Regions and Social and Charity Projects".

Work with school students

Sistema's portfolio companies together with Sistema Charitable Foundation actively invest in educational and outreach project for school students and assist in their career guidance and career development.

In 2022, **Sistema Charitable Foundation** carried out a project for training of personnel for timber industry enterprises in Kostroma region. The educational cluster includes 16 regional schools, colleges and vocational schools and Kostroma State University. The project helps to improve the quality of career guidance work at schools, increase students' interest in engineering education and retain young professionals in the region.

In 2022, over 14,000 school and university students attended the Russian national career guidance lesson organised as part of SCF's Lift to the Future programme. At the lesson, representatives of Sistema's assets told participants about innovative technologies. Activity during the lesson and solving of cases counted towards achievements needed to get a Lift to the Future scholarship.

In October 2022, SCF organised career guidance events for school students in Gorno-Altaysk. Guided by Lift to the Future ambassadors, 125 children solved cases from the Group's companies using technologies that are really in use in respective industries. SCF also organised an excursion to a farm in the Republic of Altay for 25 school seniors.

In 2022, the **timber asset** allocated RUB 2.7m for opening of natural sciences and technology classes at a school in Segezha. The classes were set up as part of the Modern School federal project of the Education national project.



In December 2022, Sistema's **telecommunications asset** launched a free national online camp for children as part of its Generation M federal charitable project. Over 2,000 school children from 29 regions of Russia took part in the event. Also in 2022, the telecommunications asset organised a career guidance event for school students in Komsomolsk-on-Amur. The participants learned about engineering professions of the future, smart home technologies and how to remain safe online. They also had a quest and learned the Morse code.

In 2022, the **private healthcare asset** organised a tour of its multi-discipline medical centre in Moscow for school seniors. They visited the departments of X-ray diagnostics, ophthalmology and endoscopy and hybrid operating theatres and learned about use of AI in medicine and telemedicine. The company also organised career guidance events and educational lectures for school children in Mytishchi.

In autumn 2022, the **pharmaceutical asset** became a partner of the regional stage of the Urals Chemical Tournament. The event gathered over 75 school students, teachers and professional chemists.

In 2022, the **power grid asset** also organised 28 career guidance excursions to power facilities in Bashkortostan for over 500 school and college students.

In the reporting year, the **high-tech asset** gave lessons to school students on digital projects in airspace and transportation spheres and on new IT technologies as part of the annual national event "IT Knowledge Day".

> 14,000
school and university students attended the Russian national career guidance lesson Lift to the Future programme

RUB 2.7 m
was allocated by the timber asset to open Point of Growth classrooms in Segezha

Internship programmes

Sistema Group gives a lot of attention to educating the future workforce. The Group's companies closely cooperate with university students and invite them to internships at their production facilities.

In 2022, Sistema together with SCF and other portfolio companies organised internships for over 5,200 students; investments in the project amounted to some RUB 500m.

As part of the Lift to the Future national career guidance and development project, Sistema Charitable Foundation organises internships for more than 300 students of Russian universities and colleges. The online educational platform — the digital database of the project — offers 650+ internships and jobs at Sistema Group companies.

In 2022, the **hospitality asset** partnered with SCF to organise internships for 3rd–5th year students studying hospitality: 130 students from 50 Russian cities joined the online stage of the programme, while the best participants were invited for offline internships at the asset's hotels in Moscow and Astrakhan.

The Group's **agricultural asset** and SCF organised a two-stage internship programme for students of agricultural schools and universities, which completed in October 2022. The programme was carried out as part of the Lift to the Future project. More than 150 students completed internships in the areas of agronomy, agricultural engineering, ground transport technological systems, food production technology, economics, accounting, audit, IT technology, etc.

Internships of Sistema's **timber asset** were completed by over 65 students, out of whom 40% were subsequently offered jobs. The timber asset's river shipping company offered internships for 72 students of the Ust-Kut Institute of Water Transport[1] and 21 students from other relevant schools. All interns received jobs at the shipping company. The timber asset also provided financial support to 24 medical students who came to Segezha for internships at the central district hospital. The company allocated RUB 400,000 to cover their accommodation costs.

Sistema's **pharmaceutical asset** offers students internships in various areas. In Februrary 2022, the pharmaceutical asset's enterprise signed a cooperation agreement with the Professional Training Centre in the Kurgan region.

In 2022, the **private healthcare asset** organised practical training for students of Pirogov Russian National Research Medical University and Sechenov First Moscow State Medical University with further employment opportunities at the asset's clinics.

Over 70 students of universities and vocational schools completed internships at Sistema's **power grid asset**. The bulk of interns came from Ufa State Aviation Technical University, Kazan State Energy University and Ufa Fuel and Energy College. Based on results of the internships, over 15 graduates were offered jobs at the company.

In 2022, Sistema's **telecommunications asset** continued implementing the updated internship programme launched in 2021. A candidate can apply for internship at any time of the year from anywhere in the country and, if qualified, become part of the company's ecosystem. Internships under the programme are offered in all the major business divisions of the ecosystem: IT, marketing, product management, finances, HR, PR, technology, and many other. In two years, over 900 students interned at the company and more than one third of them were eventually offered jobs. In the IT divisions job offers were made to about 60% of interns.

The bank that is a subsidiary of the telecommunications asset gave the opportunity to learn about profession to about 150 interns from more than 50 Russian universities; most internships took place at the company's IT and operational clusters. In November 2022, the first group of students from leading Russian technical universities began free studies at Fintech Academy. The best graduates will be offered paid internships and subsequently jobs. Out of 1.450 candidates, 75 students qualified for admission to the Academy.

Sistema's **e-commerce asset** also actively engages students of major Russian universities for immersion in the real business environment. The company offers two programmes of paid internships for university seniors in five areas: analytics, marketing, commerce, finance and product management. Almost 2.000 students have completed internships at the company since their launch in 2021. About 60% of interns received jobs at the company.

In 2022, the **residential property development asset** accepted over 30 interns from the country's leading universities and also organised internships for students of the St Petersburg regional division of the national youth organisation Russian Student Teams. The company also signed agreements with the Russian Presidential Academy of National Economy and Stieglitz St Petersburg State Arts and Industry Academy with view to train qualified personnel for the real estate development sector.

> 650
opportunities
for internship and work can be found in the Lift to the Future digital database

> 900
students
had internships at various divisions of the telecommunications asset

Scholarship programmes

Sistema Charitable Foundation and the Group's portfolio companies launched scholarship programmes to support talented school and university students across the country. Allocations for the programmes will amount to about RUB 50m.

As part of the Lift to the Future project, **SCF** launched its own scholarship programme for school, college and university students aged 14 to 22. The key partner of the project is Sistema's telecommunications asset. The timber, pharmaceutical and agricultural assets also joined the initiative.

Sistema Charitable Foundation also financed scholarships for students taking bachelor's degree programmes in IT and helped to carry out a scholarship programme of the timber asset. In August 2022, the timber company launched a scholarship programme for 2nd–4th-year students of relevant vocational schools and colleges. The project is carried out in six regions of the company's operations. A total of 38 students received scholarships in 2022.

SCF also contributes to the development of creative professions. In February 2023, it awarded the first scholarships to students of Gerasimov Russian State Cinematography Institute. Personalised scholarships were extended to three students for creative initiative and academic achievements.

46,000
students
took part in the programme in 2022

75 getting scholarships

In 2023, Lift to the Future scholarships will be given to 50 school students, 50 college students and 50 university students.



1 A branch of the Siberian State University of Water Transport.

Development of competences in IT

Digitalisation changes the structure and requirements to competences of personnel and creates new, more complicated tasks. Sistema's portfolio companies create conditions for young professionals' development in the digital sector.

In 2022, the **telecommunications asset** launched three courses in cloud methodologies and programming languages as part of master's and bachelor's programmes at national research universities — the Institute of Precision Mechanics and Optics (ITMO University) and the Higher School of Economics. The company also launched a programme titled CloudThinking for IT specialists. At the first stage, the programme offered a free Cloud DevOps course with latest approaches to developing, implementing and scaling applications.

In 2022, the telecommunications asset launched another stream of its MOOVE programme of digital product management and startup launch. The programme is designed for students and recent graduates. Participants develop a real project, present it and get an opportunity to find investors or start cooperation with companies. In 2022, eight new teams developed and presented one IT project each, testing management tools in real life.

The **high-tech asset** also contributes to the development of digital competences of young professionals. In 2022, the asset's experts participated in updating of 505 educational programmes in the IT sector of over 100 Russian universities as part of the working group “HR for the Digital Economy”. As a result, a matrix of digital competences was developed that will be used for training IT professionals. Training will be conducted as part of the state programme Priority 2030.

In December of the reporting year, the high-tech asset organised a team contest in competitive programming for computer science students of Voronezh State University.

In 2022, experts of the high-tech asset participated in updating

505

educational programmes for IT personnel

Equipment for educational facilities

The Group's portfolio companies actively interact with educational establishments, carrying out projects to develop university infrastructure, which ensures high quality of professional training.

In 2022, the **telecommunications asset** provided a Russian platform for online communications for Chechen State University. The service makes it possible to organise lectures, seminars, brainstorms and group trainings using online boards and presentations. Up to 2,500 people can simultaneously join a meeting on the platform. Also in 2022, the electronic teaching platform of Nizhnevartovsk State University was transferred to the telecommunications asset's cloud service. As the carrying capacity of the communications channel grew by 150%, online lectures can now be watched by up to 150 students simultaneously. The cost of the cloud service is 25% lower than the cost of servicing own server rooms.

Also in the reporting year, the telecommunications asset provided students of Tomsk Polytechnic University with equipment for the development of IoT devices. It allows developing sensors that transfer small amounts of data and require high energy efficiency. Such devices are actively used in the sectors of utilities, security, smart cities and agriculture.

In 2022, the **high-tech asset** and Altay State University completed testing the asset's servers under real-life workload. The server equipment demonstrated high reliability and capacity, so it can be used for development of the university's IT infrastructure. The servers are suitable for data storage, cloud computing, high-speed operations and big data analytics.

up to 2,500 people

can simultaneously join a meeting on the platform



Employees' children

To increase employees' loyalty and shape a corporate culture supporting family values, Sistema's portfolio companies organise interaction with employees' children.

In 2022, Sistema launched its first career guidance project for children together with the Vtoraya Shkola specialised school. The summer course attracted 220 children. Employees of Sistema Group companies organised for them lectures and practical classes in IT and research. In 2023, the project will embrace over 800 children of the Group companies' employees.

In 2022, 200 children of the **timber asset's** employees took part in the annual summer project Specialised Technical Teams. The participants developed various competences, such as CAD engineering design, additive production, internet marketing, IT solutions for business on the 1C platform, operation of unmanned aviation systems and industrial robotics. The company fully covered the participants' travel and accommodation costs. The timber asset also provides targeted support to employees with three or more children and to parents of all first-grade school children. In 2022, more than 100 employees received “first-grader sets”, stationery and financial support.

In July 2022, the **telecommunications asset** organised the first free Russian online camp for schoolchildren and teenagers. The camp had three streams — music, photography and drawing — and attracted 500 students from 37 regions.

In August 2022, the **power grid asset** organised a family day for employees' children in Bashkortostan. Children took part in active and intellectual games and attended the award ceremony for winners of the republican contest of children's drawings on the occasion of the asset's 10th anniversary. In 2022, the power grid company also financed trips to children's recreation centres for 550 children of its employees.

In 2022, the **pharmaceutical asset** paid for summer camp for 137 children of employees entitled to such benefits (single parents and parents of large families) in the Moscow and Kaluga regions and in Kurgan.

200 children

took part in the annual summer project “Specialised Technical Teams”

500 children

and teenagers took part in the free All-Russian online camp

Volunteering

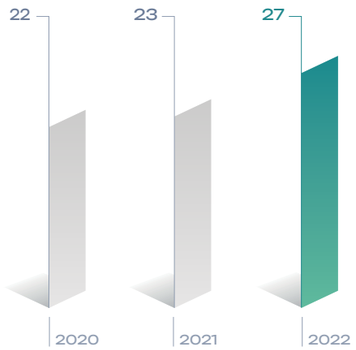
Employees across Sistema Group take part in a variety of volunteer and charity initiatives primarily targeting:

- underprivileged children;
- large families;
- veterans;
- people with disabilities.

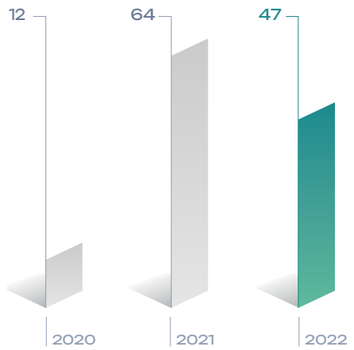
Sistema Group's volunteer projects are coordinated by Sistema Charitable Foundation. When planning its volunteer projects SCF uses a comprehensive approach that takes into consideration the social needs of various regions.

SCF Corporate Volunteer Centre Performance

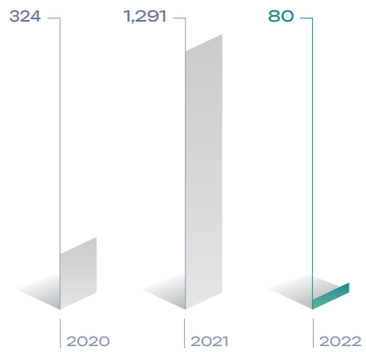
Number of Group companies involved (at least once)



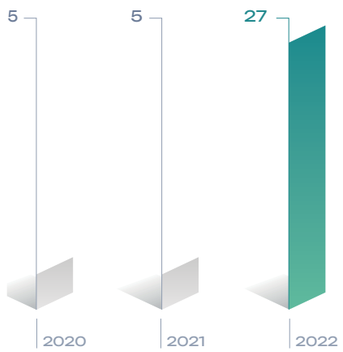
Number of events held



Number of volunteers who took participation in at least one event of SCF



Average number of the Group companies taking part in activities



For more information about the volunteering activities at Sistema Group, see SCF's 2022 Annual Report, and the section "Social and Economic Development of Local Communities" of this report.

Health and safety

GRI 3-3

Management approach to occupational health and safety

Sistema Group companies aim to create comfortable and safe working conditions for their employees. They conduct regular monitoring and analysis of operations to identify and eliminate problems and irregularities in the area of health and safety, which guarantees compliance with all health and safety standards and regulations.

GRI 403-1 GRI 403-2 GRI 403-3 GRI 403-7

Compliance with workplace safety rules in the Group is regulated by internal documents and collective agreements based on the specific realities of particular industries. The key principles of Sistema's activities in the area of occupational health and safety are described in the Sustainability Policy and in HR management regulations.

GRI 403-4

The employees of Sistema Group are involved in managing occupational safety matters through participation in health and safety committee meetings. In 2022, 157 committees on occupational health and safety were registered across the Group's production assets, each including representatives from both management and employees[1].

157 committees
on occupational health and safety were registered across the Group's production assets

Sistema Group companies ensure optimal working conditions for their employees, so that the impact of harmful and/or hazardous production factors is either negligible or within the limits set by existing health and safety regulations. Apart from that, the Group companies control the observance of health and safety norms by contractors, especially on production sites:

- when hiring contractors, the Group companies make sure their contracts contain labour safety clauses formulated specifically for the type of work to be done and equipment to be used;
- the Group companies regularly monitor the observance of workplace and fire safety rules by contractors;
- they also check that the contractors' staff uses personal protection equipment;
- and require contractor employees to have passed a medical check-up and completed a labour safety training before they are admitted to work.



1 The data is provided for assets operating in the sectors of telecommunications, timber industry, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality and "other".

Occupational health and safety

The **timber asset** of Sistema aims to achieve its strategic goal of completely eradicating fatal injuries and becoming the best company in Russia in the area of industrial safety. To reduce the number of industrial injuries, the company has adopted an Occupational Health and Safety Policy and introduced a risk-oriented approach to managing occupational health and safety standards. The company conducts regular safety monitoring of technological processes both on its own and with the help of independent auditors. Sistema's timber asset has one of the lowest industrial injury rates in the Russian timber industry, with most of the asset's enterprises reporting a zero injury rate in 2022. The number of committees on occupational health and safety including representatives from the workforce increased from 46 to 127. In 2022, all the enterprises of the timber asset were certified for compliance with the international standard ISO 45001:2018 (Occupational health and safety management systems). The company spent RUB 448m on occupational health and safety in the reporting year.

Sistema's **residential property development asset** has an Occupational Health and Safety Policy in place. The asset has formed a separate occupational health and safety function, which is headed by the asset's President who monitors health and safety matters through HR Director.

GRI 403-7

Contractors are also conducting works on the asset's construction sites. In accordance with occupational health and safety regulations the work of such contractor companies is coordinated by general contractors.

The property development asset determines the level of occupational health and safety at its construction sites using a special tool called “Safety Index”. It is calculated using data on a number of key parameters obtained during the monitoring of construction sites with the help of Building Information Modelling, and is measured by the ratio of positive ratings to the total number of ratings at a controlled site. The senior managers of general contractors and contractors working for the asset are required to ensure that the Safety Index at the construction sites of the Group does not fall below the minimum acceptable level.

89%
the average safety index on construction sites in 2022, which is 14 p.p. higher than the target level

The occupational health and safety function includes the following subdivisions and employees of the property development asset:

- HR Director of the asset;
- occupational safety unit of the asset;
- managers of all levels at the asset's enterprises;
- occupational safety units and specialists at the asset's enterprises.

The **power grid asset** performs its occupational health and safety activities in accordance with the legislative requirements and regulatory documents and by-laws that establish the protection of lives and health of employees as the main priority. Employees working at production facilities with harmful or hazardous working conditions have regular medical check-ups aimed at prevention of occupational diseases. In 2022, the company's enterprises launched an occupational safety project aimed at automation of such processes as medical check-ups, testing and certification of employees, assessment of working conditions and introduction of a new function for investigating and recording accidents.

The **telecommunications asset** adopted the Safety, Health and Well-Being Strategy for 2021–2023, which is based on the Vision Zero concept combining three areas: safety, occupational health and well-being of employees at all levels of production. The company is certified for compliance with the international standard ISO 45001:2018 (Occupational health and safety management systems).

The **agricultural asset** also has an Occupational Health and Safety Policy in place. The company aims to completely rule out fatalities and accidents at the production sites and is guided by the principle of prevention of any injuries and emergencies and encouragement of safe behaviour among employees. As part of achieving this objective the company is committed to compliance with occupational health and safety regulations and expects the same commitment from its contractors; it ensures safe working conditions, takes measures to prevent injuries, accidents and emergencies, mitigates health and safety risks, provides safety training to personnel and discloses information about occupational health and safety.

In 2022, the **healthcare asset** of Sistema was also successfully certified for compliance with the international standard ISO 45001:2018 (Occupational health and safety management systems), which testifies to the high level of occupational safety at the company's enterprises.

Results in occupational health and safety

GRI 403-10

In 2022, there were five cases of occupational diseases among the Group's employees.

In the reporting period, the number of injuries declined by 24.57%, down to 89 cases, which were mostly reported by production assets.

Each case was followed up by an internal investigation seeking to reveal their causes and prevent similar accidents in the future.

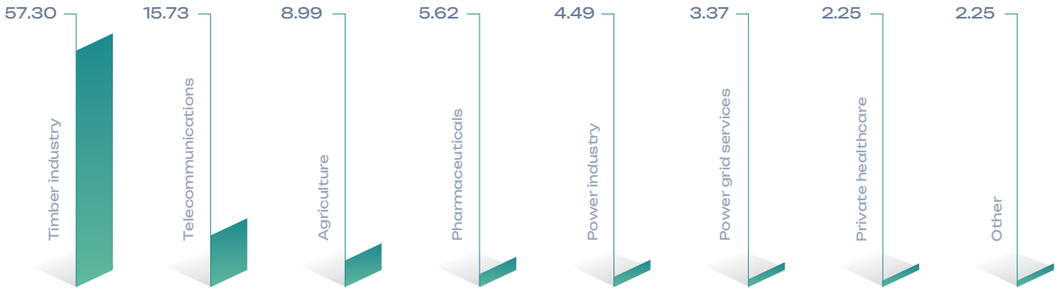
RUB 1.6bn
was spent by the Group on occupational safety in 2022[1]

Workplace injuries across the Group

GRI 403-9

	2022[2]	2021[3]	2020[3]
Number of work-related accidents	89	118	80
Including fatalities	3	5	1

Accidents by industry, %



Training in occupational health and safety

GRI 403-5

All categories of employees at Sistema Group companies receive labour safety training designed to maintain and improve working conditions and ensure occupational health and safety.

The **timber asset** of Sistema implements all occupational health and safety programmes required by the law and provides employees with additional training aimed at improving the safety culture across the Group and enhancing employees' engagement and motivation. The company's top managers and professionals undergo special annual training on occupational health and safety both immediately upon hiring and as part of regular activities. As many as 7,151 employees attended such training courses in 2022.

The **residential property development asset** also conducted 1,749 hours of training on occupational health and safety for 133 employees.

The **telecommunications asset** uses a specially developed programme called “Colossus” for internal training on occupational health and safety. Among other things, employees learn how to give first aid to the injured before the arrival of the emergency crew. The asset's corporate university provides opportunities for distance learning: it has created a video course called “Safety Culture”.

The **power grid asset** provides all types of occupational safety training for personnel, covering legislative requirements and rules on health and safety, statistics on occupational injuries and best practices in the area of health and safety.

1 The data is provided for assets operating in the sectors of telecommunications, timber industry, residential property development, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and “other”.
2 The data is provided for assets operating in the sectors of telecommunications, timber industry, private healthcare, agriculture, pharmaceuticals, power grid services and “other”.
3 The data is provided for assets operating in the sectors of telecommunications, e-commerce, residential property development, timber industry, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality, high technology and “other”.

Taking care of employees' health and emotional well-being

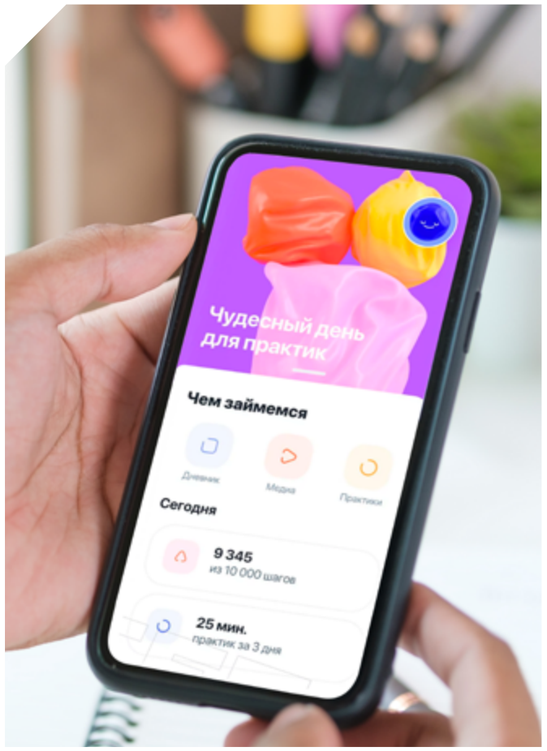
GRI 403-6

The Group companies develop comprehensive programmes aimed at promoting a healthy lifestyle and ensuring the emotional well-being of employees.

In 2022, Sistema's **healthcare asset** launched health and well-being programmes including offsite lectures and seminars, webinars, master classes and special health days at the company's offices.

In the reporting period, Sistema's **telecommunications asset** launched a free application called Beffo. The app's users will get access to 60 specialised mental health practices, tests, breathing techniques and sleep stories, which were created in collaboration with psychologists. The application teaches people how to cope with negative emotions and mood swings, control stress levels and develop psychological self-help techniques.

Sistema Charitable Foundation launched a free online course "#No Worry: Conversations with psychologists" on its Lift to the Future platform. The online course offers techniques for coping with crises, holding on to personal values, adapting to changes and maintaining mental balance. The course also teaches how to practice mindfulness in a crisis, keep thoughts and emotions under control, develop critical thinking, timely identify and successfully resolve conflicts.



Corporate culture and promotion of a healthy lifestyle

GRI 403-6

Sistema Group develops corporate culture and promotes a healthy lifestyle among its employees. Portfolio companies set up teams for corporate sports games, organise marathons, reimburse gym membership expenses.

> RUB 200m
was spent by Sistema Group companies on personnel's sports and healthcare programmes in 2022

In 2022, **Sistema** conducted its fifth Winter Sports Games in six disciplines: cross-country skiing, family relay, ice fishing, curling, ice hockey and, for the first time, practical shooting. Sistema Charitable Foundation and its partners organised a lot of recreation activities for fans: art master classes, family relays with prizes, rugby games, figure skating, ice hockey lessons and environmental games conducted by corporate volunteers from the telecommunications asset. The sports games attracted more than 400 athletes from 18 teams and more than 1,000 fans.

As part of the Winter Games **Sistema Charitable Foundation** organised its first corporate charitable ski marathon involving 625 employees from the companies of Sistema. For each participant of the ski marathon SCF donated funds to Lift Without Failure, an educational project aimed at helping orphans prepare for high school finals and university entrance exams. The Winter Games are carried out as part of the national projects "Demography" and "Sports as a Lifestyle Choice".

In 2022, SCF organised its regular charity race #ZaLes with 1,400 employees taking part. The race was conducted in an online format, enabling the organisers to increase the number of participants by 50% by attracting the residents of remote regions and small towns. The project used a digital platform with the personal accounts of participants. The participants chose their distance when registering for the event and proved their participation by uploading a screenshot of their itinerary through any sports tracker app. In the same way, the participants were able to confirm training sessions as their contribution to the team activity score and register test distances. The online format does not rule out group offline activities. As part of the #ZaLes charity race many companies organised joint training sessions and group races for their employees.

The **telecommunications asset** has a lot of employee support programmes ranging from reimbursement of fitness expenses to office work-outs and massage and the corporate Race of Heroes. The asset launched a sports programme "In motion", offering online fitness classes, balance webinars, psychology practices and inter-regional competitions with offline activities for the winners. The company's employees also have access to by-the-minute fitness plan GOGYM, which is available in more than 400 gyms and fitness studios across Russia. The launch of this digital tool has made it easier for employees to get reimbursement for their fitness fees: they work out using this service and get compensated accordingly under the programme. In 2022, the corporate Race of Heroes attracted more than 800 employees from 56 cities of Russia.

In the reporting period, the **timber asset** started developing a comprehensive well-being programme. Gyms with exercise machines for all muscle types, cardio zones and group workout halls, changing and shower rooms were opened at all the enterprises of the timber asset. Each enterprise formed its own team for participation in corporate competitions. More than 73% of the company's employees work out on a regular basis. The company is planning to establish a health school, set up sports communities, organise corporate sports events (festivals, competitions, marathons, family relays), lectures on a healthy lifestyle, training sessions on quitting unhealthy habits and health days at the office.

Sistema's **e-commerce asset** has a library of online training classes and the Fitmost subscription service that provides access to hundreds of fitness clubs, sports studios and wellness centres in several cities of Russia. The company is developing sports clubs (yoga, football, volleyball, triathlon), organising online marathons, corporate competitions and tournaments.

The **high-tech asset** organises sports and recreation activities, including psychological support and the Best Benefits corporate platform offering discounts on fitness membership. A corporate gym is available at the company's head office. The company's sports programmes involve approximately 95% of employees.

The **pharmaceutical asset** also creates favourable conditions for doing various sports, including medical gymnastics, volleyball, basketball, football. At the same time, the company is actively using digital technologies, organising online workouts for employees and posting lifestyle tips. More than 400 employees are taking an active part in corporate sporting events.



Health and safety of stakeholders

Sistema's assets are using modern technologies and project solutions aimed at protecting the health and safety of all stakeholders.

New technologies and patents in healthcare

Sistema's companies are developing innovative technologies for the diagnostics and treatment of serious diseases.

In 2022, the **biotech asset** developed a new treatment for cancer and atherosclerosis: targeted therapy. The technology is based on the molecules that are able to target and destroy pathological proteins that take part in the development of cancer and atherosclerosis. The molecule transports protein to lysosomes, thus inhibiting the growth of cancer cells, while the blood plasma gets cleared of the protein causing the development of atherosclerosis. The molecules have already proven their efficiency in experiments on cells. Unlike chemotherapy, this technology leaves the healthy cells unharmed.

In the reporting period, the biotech asset developed and prepared for commercialisation in the Russian market 12 innovative natural medication complexes for treatment of such socially significant conditions as reproductive function disorder, impaired fat metabolism, atherosclerosis, arterial hypertension, diabetes, cognitive impairment, and also developed drugs for prevention of ageing of the central nervous system. The medications target molecular processes that cause such diseases. The modulators developed by the company will be produced in Russia at the partners' production facilities and may be included in the lists of drugs recommended for the prevention and treatment of socially significant diseases.

In November 2022, Sistema's **healthcare asset** introduced ultrasound contrast imaging to visualise organs, tissues, blood vessels and to diagnose tumours and identify focal lesions. This ultrasound imaging technique uses microbubble contrast. The advantage of microbubble agents is that they do not damage intercellular space, do not create additional health risks and greatly enhance the accuracy of diagnostics.



Sistema's assets are making a significant contribution to the development of Russian pharmaceuticals and telemedicine.

In July 2022, the **pharmaceutical asset** launched the first generic antibiotic in Russia to be used in gastroenterology. The launch of the antibiotic decreased patients' dependence on the supplies of foreign drugs.

The pharmaceutical asset also developed a single test for diagnosing flu, COVID-19 and six more viruses. The tests are done by carrying out nasal and oropharyngeal swabs. The test itself takes from 15 to 30 minutes and may detect the infection with 97% accuracy. Due to this single test, patients no longer need to do eight different tests and wait for the results of lab analysis. This enables doctors to timely prescribe medications and reduce the risks of complications for the patient. The reagents used in the test consist of exclusively Russian components.

In 2022, Sistema's pharmaceutical asset continued working on the development of drugs and co-medications for fighting the coronavirus infection. In particular, in the reporting period the company started the production of the antiviral drug Molnupiravir, which is used for the treatment of COVID-19, among other deceases. The antiviral drug will be fully produced in Russia, making it possible to decrease dependence on imported supplies. The company is planning to produce up to 15 million packages a year. In October 2022, Sistema's pharmaceutical asset started clinical testing of this drug. The tests involved 120 participants. In the reporting period, the pharmaceutical asset also supplied the first batch of the Favipiravir drug on the Russian market. Molnupiravir and Favipiravir are included in the treatment protocols of patients with the coronavirus infection in accordance with the recommendations of the Ministry of Health of the Russian Federation.

The pharmaceutical asset completed renovation of the section of its Kurgan plant that produces antipyretic drugs. New equipment was installed and production shops were upgraded. The renovation will make it possible to increase the output of antipyretic drugs up to RUB 6m bottles a year.

In April 2022, the Russian manufacturer of medical equipment launched remote electroencephalogram testing and cardio training in the cloud of the **telecommunications asset**. The data from the electroencephalogram is transferred to the cloud and is accessible from any place, enabling specialists to quickly obtain the necessary data. Moreover, doctors from any place in Russia may supervise patients' medical exercises during the rehabilitation period, which helps decrease the number of repeated hospital admissions. In future, a number of major national and regional hospitals specialising in cardiology and pulmonology are expected to get connected to the cloud.

In 2022, the **healthcare asset** continued its cooperation with school children: the company offered to teach artificial intelligence how to detect the first signs of a cardiovascular disease in patients by using the methods of data science. In two weeks, five students from the healthcare asset's team analysed a data set of 500,000 lines containing the test results of real patients and taught artificial intelligence that became the basis of a new medical application. The system included data on 50 diagnoses in 12 medical specialities. Upon the completion of the programme it was decided to upgrade the project to create a digital chatbot to help patients develop a clear route for examination and treatment. The company is planning to introduce the intelligent assistant tool in its clinics to help doctors interpret lab test results.

Children's health & safety

The Group companies organise programmes aimed at improving children's quality of life and physical and emotional well-being.

In 2022, Sistema's **healthcare asset** conducted a three-week rehabilitation course in Krasnogorsk for 190 children suffering from cerebral palsy and other motor function disorders. The comprehensive rehabilitation programmes for children include medical gymnastics, physiotherapy, massage, medical and educational activities, special help: acupuncture, osteopathy, leech therapy.

At the beginning of 2022, the **power grid asset** of Sistema held extracurricular electrical safety lessons at 123 schools of the Republic of Bashkortostan as part of its goal to prevent electrical injuries. The schoolchildren were taught how to safely use electrical devices, how to take the necessary precautions when handling electrical appliances and how to behave near power facilities. Some of the classes were conducted remotely. In the autumn, the teachers of the Republic of Bashkortostan took part in a contest of lessons on prevention of electrical injuries among children "The best electrical safety lesson".

In 2022, the **telecommunications asset** of Sistema in the Republic of Belarus presented a free booklet "How to defend oneself against cyberbullying and how not to become a hater". Psychologists and experts on teenage and children's online safety talked to children and teenagers about cyberbullying and methods of its prevention. They also spoke about virtual aggression and its traumatic consequences. Training materials were handed out to about 200 children from 26 schools across the Republic.

190 children
suffering from cerebral palsy and other motor function disorders attended a three-week rehabilitation course in Krasnogorsk

123 schools
of the Republic of Bashkortostan organised extracurricular electrical safety lessons





Confidentiality and personal data protection

GRI 3-3

Protection of personal data of customers, employees and other stakeholders is a priority for Sistema Group that is becoming increasingly important with introduction of innovative digital technologies.

Portfolio companies accumulate large sets of personal data of various stakeholders in the course of their activities that need protection, but at the same time can be leveraged to customise services and products. Because of that, Sistema's assets regularly upgrade their technologies and methods of protection in order to prevent unauthorised access to confidential information.

GRI 418-1 SASB TC-TL-230a.1

Any complaints about privacy breaches and loss of personal data can be made via Sistema's centralised hotline or appropriate communication channels of its portfolio companies. No personal data leaks were identified in 2022.

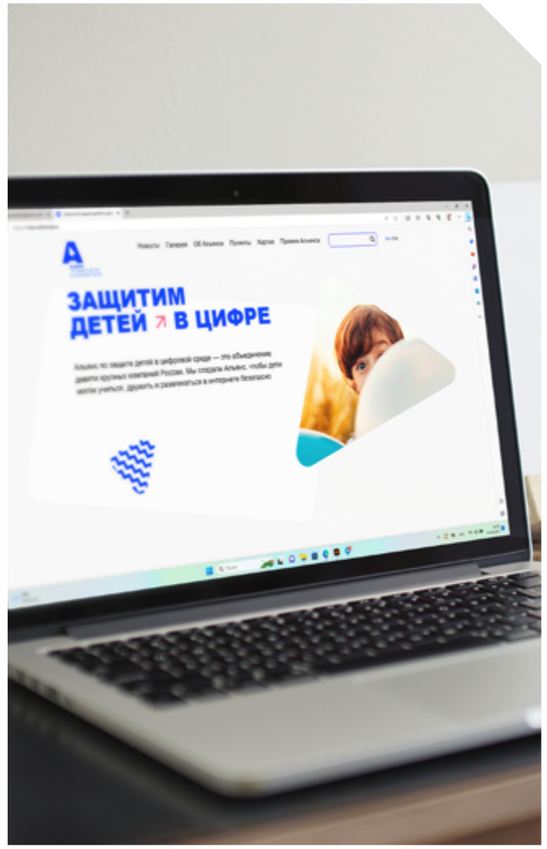
↗ You can read the Policy of Sistema PJSFC on Personal Data Processing and Protection on the official website.

Partnership for data security

In June 2021, the Russian Federal Antimonopoly Service and the countries' major telecom operators (including Sistema's **telecommunications asset**) signed a memorandum on counteracting voice calls violating law requirements. In 2022, an amendment to the memorandum on blocking spam calls was signed. As part of the initiative, the regulator's website has a feedback form for complaints about unauthorised advertising calls and messages with links to the telecom operators' websites. The complaints are received directly by the telecom operators who then block spam callers' numbers.

In the reporting period, Sistema's **online retailer** became one of the first Russian marketplaces to join the Code of Data Ethics (developed by the Institute for Internet Development and the Big Data Association) and was entered in the register of bona fide data market players, which includes signatories of the document. This confirms that the platform uses best practices in the area of user data processing and transfer.

In 2022, the Corporation'sfintech direction of the **telecommunications asset** joined the "Digital Ethics of Childhood" Charter of the Alliance for the Protection of Children in the Digital Environment[1]. Participation in the Charter enables its participants to exchange best practices in creating a favourable digital environment for children, including in the world of finance.



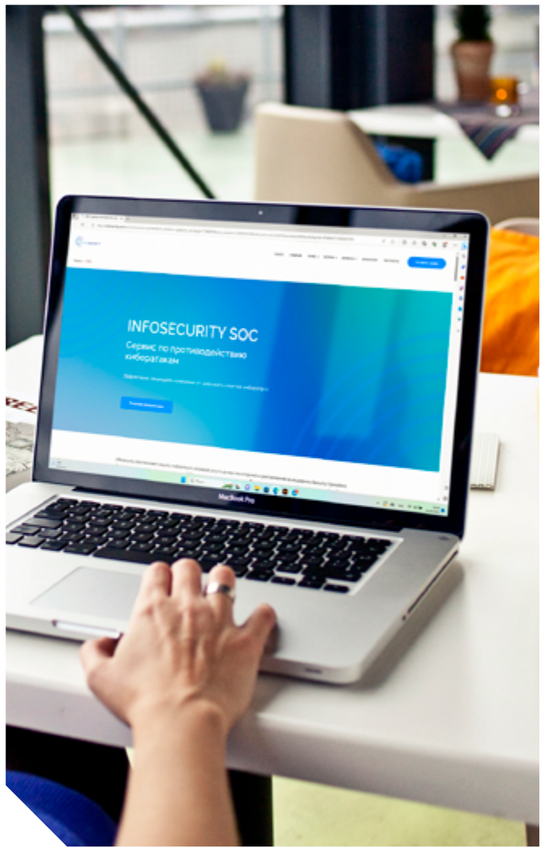
1 An alliance of nine large Russian companies. The main goal of the organisation is to create a child-friendly internet environment based on creative and safe technologies and digital solutions.

Protection of assets' information infrastructure

SASB TC-TL-220a.1 SASB TC-TL-230a.2

In order to protect information infrastructure of its portfolio companies, Sistema takes the necessary measures to constantly monitor and timely identify and eliminate cyber threats.

The Security Operation Centre (SOC) was established to protect the ecosystem of the **telecommunications asset** against digital threats. The SOC controls the protection of the external perimeter of the company's IT systems, analyses incidents (virus attacks, cyber attacks, internal violations of the information security policy) and coordinates elimination of reasons and consequences of such incidents. In 2023, the SOC's technological base was upgraded and it now functions on a SIEM system[1]. This enables it to collect, analyse and establish correlation between cyber security events from various data sources in a centralised mode in order to identify and prevent various incidents and complicated hacker attacks. Another new feature acquired by the SOC was personal accounts, which makes protection processes transparent and enables prompt responses to incidents. Personal accounts contain situation dashboards and monthly analytical reports. They are provided in a visual format both to employees of the Information Security Service and to the company's top management. The reports offer analytical statistics on information security events. In 2022, the SOC identified and helped to prevent about 14,000 hacker attacks on the web resources and mail servers of Sistema's fintech direction of the telecommunications asset.



In 2022, in order to identify vulnerabilities and enhance infrastructure security, Sistema's **e-commerce** engaged independent bug hunters[2] who checked the security of the website, accounting systems, career portal and customers' mobile app. In August 2022, the company launched an online classified service with for-sale offers at its platform. To ensure safe processing and storage of users' personal data, it envisaged a multi-stage fraud protection and used the Incognito platform solution. This made it possible to conceal a seller's phone number; instead, buyers will see a virtual number in the announcement. This measure prevents potential spam calls from bots and protects the real mobile phone number of a seller from being included in fraudsters' databases.

In 2022, Sistema's **residential property development** asset developed and implemented a proprietary platform for managing customers' data on the basis of an end-to-end analytical service. The platform has already collected over 1m digital passports of potential and existing customers. The platform's functions make it possible to identify global (e.g., men and women) and local (persons that bought or booked real estate, that could not be reached, etc.) customer segments. The data makes it possible to finetune the targeting of advertising campaigns, attracting potential buyers on the one hand, and minimising spending on ad views by already attracted audience on the other hand.

14,000
hacker attacks were reflected by the Centre for Monitoring and Responding to Cyber Attacks (Security Operation Centre, SOC)

1 Security information and event management are solutions that monitor information systems and analyse security events from network devices, means of information protection, IT services system infrastructure, applications and other sources in a real-time mode.
2 Bug hunters are security experts that legally look for vulnerabilities in software.

Information security for business

Sistema Group uses domestic solutions to ensure network security, conduct systemic inspections for vulnerabilities, monitor, analyse and respond to incidents and protect enterprises across the country against information leaks.

The customer portfolio of Sistema's **high-tech asset** in the area of information security grew by 20% in the reporting year. The biggest number of requests made to the company were related to protection against DDoS attacks and design and implementation of new generation firewalls[1] (NGFW), provision of information security services under the MSSP (managed security service provider) model and ensuring compliance with the requirements of Federal Law No 187-FZ "On safety of critical information infrastructure of the Russian Federation" dated 26 July 2017. Also, programmes were put in place to increase the awareness of non-tech personnel about basic information protection, since more than 50% of attacks are linked to the human factor.

In order to ensure stable functioning of Russian business infrastructure, experts of Sistema's high-tech asset first of all assess systems resilience to distributed attacks using stress tests. Based on the results, they offer options for backing up the existing means of protection with Russian-made analogues and, if necessary, help to promptly replace foreign equipment.

In 2022, the high-tech asset received the status of an official partner of Alt, the developer of Russian operating systems. This status gives the company the right to relocate corporate IT infrastructure to the Russian operating system, making it possible for its customers to transition to domestic solutions without huge one-time expenses and training of employees.

Also in 2022, a Russian producer of network solutions that specialises in the development of software and hardware for telecom operators confirmed that the servers produced by Sistema's high-tech asset were compatible with EcoRouterOS[2]. The operating system is certified by the Federal Service for Technological and Export Control. In partnership with domestic developers, the asset will be able to meet the growing demand for reliable Russian IT solutions of the key customers: participants of the critical information infrastructure, telecom operators, government agencies and enterprises in the key economic segments handling confidential information.

In 2022, Sistema's **telecommunications asset** launched a service of remote identification of individuals for large businesses — ID Scan RIM (a modular solution that is integrated in a website or mobile app using open API and is embedded into any user journey). The service makes it easier for company to quickly check information about individuals and protects them against fraudulent activities of unscrupulous users. It checks the link between personal data and passport details via public systems and verifies the link between personal data and phone numbers.

Increasing awareness in the area of information security

In order to increase awareness in the area of information security, Sistema Group actively engages various categories of internet users.

In 2022, Sistema's **high-tech asset** delivered a series of lectures at the New Horizons forum to increase information security awareness of students of a big pedagogical university of Tatarstan. The participants shared practical aspects of behaviour on the internet and knowledge about modern information hygiene and popular fraudulent schemes.

As part of the Children on the Internet project, Sistema's **telecommunications asset** in the Republic of Belarus launched an educational Telegram chatbot on cybersecurity in 2022. In voice messages, popular bloggers talk about potential online dangers and ways to avoid them. The main goal of the service is to teach children the basics of safe and proper behaviour on the internet. A user can select a tutor, a topic for studying and start a “conversation”. After a chosen topic is completed, the user will receive a link to a number of videos made by the Children on the Internet project that offer more useful information on cybersecurity. In the eight years of the project's functioning, over 10,000 school children across Belarus took part in master classes on safe internet behaviour.

1 A system that prevents unauthorised network access.
2 A Russian operating system for IP/MPLS routers.

Socio-economic development of local communities

GRI 3-3

Sistema Group's portfolio companies operate in almost all regions of Russia. The assets implement projects aimed at improving the quality of life and expanding social infrastructure, support scientific and educational initiatives, and promote projects in the sphere of culture and art.

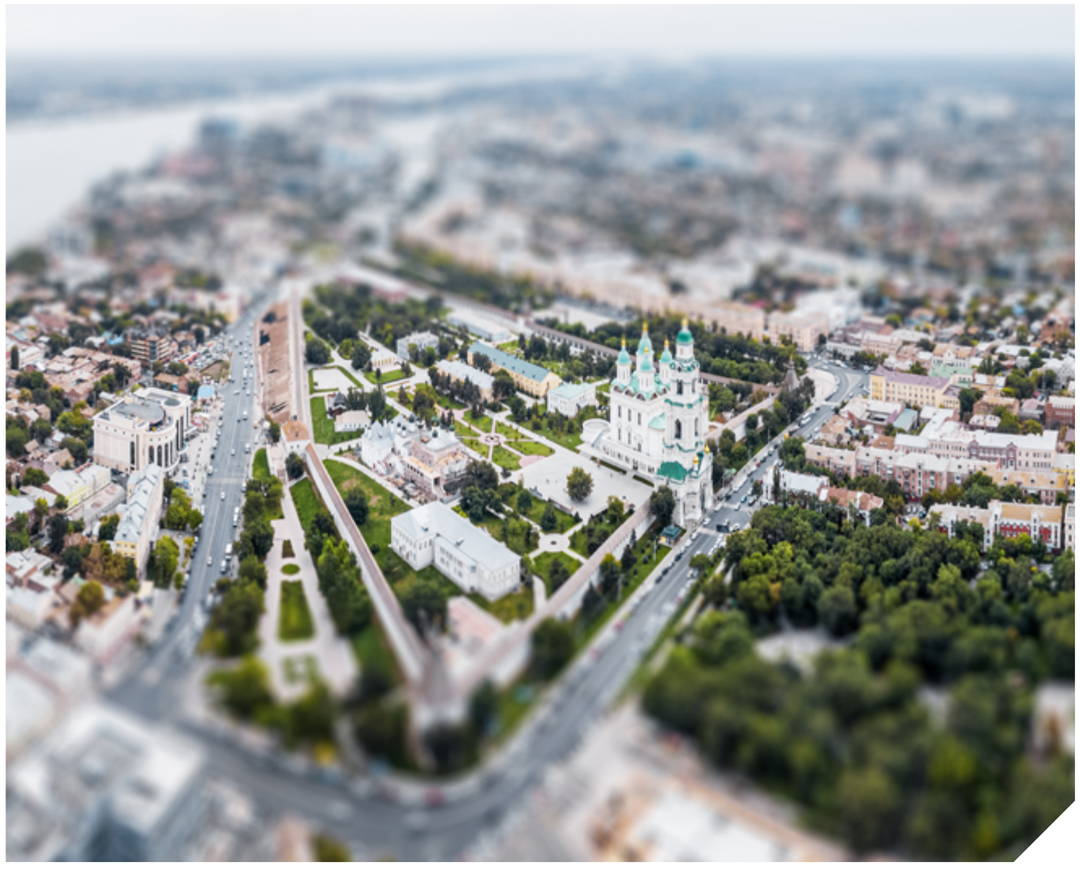
Social and charitable projects are of key importance for Sistema, as they not only contribute to business development, but also have a positive impact on social well-being and strengthen social ties with the regions of operations.

Socio-economic partnerships with local administrations

GRI 413-1 GRI 413-2

In its dealings with local governments across the country, Sistema is invariably committed to mutually beneficial socio-economic partnerships. At the end of 2022, Sistema had 14 agreements with regions of operations. In 2022, Sistema signed new cooperation agreements with four regions: the Republics of Bashkortostan and Altay and the Astrakhan and Perm regions.

14 agreements
with regions of operations at the end of 2022



Priorities of Sistema's regional development in 2022

- Establishment of enterprises for advanced timber processing
- Development of the hotel business
- Construction of infrastructure
- Development of the IT business
- Development of the AI business
- Development of the healthcare business
- Expansion of drug production
- Construction of residential properties
- Construction of commercial properties
- Development of the communications network
- Development of logistical infrastructure
- Information technology and security system enhancements
- Development of new production facilities
- Adjustment of contracted capacity
- Reconstruction of the airport
- Timber facility construction
- Expansion of agricultural activities, modernisation of agricultural production
- Establishment of a vertically integrated enterprise for the production and sale of Caucasian mineral waters
- Research and development in machine learning
- Safe City
- Implementation of an investment project in sturgeon farming

Arkhangelsk region	»
Astrakhan region	»
Republic of Bashkortostan	»
Republic of Altay	»
Vologda region	»
Irkutsk region	»
Stavropol region	»
Tyumen region	»
Kemerovo region	»
Kurgan region	»
Novosibirsk region	»
Nizhny Novgorod region	»
Perm region	»
Omsk region	»
Yaroslavl region	»

GRI 203-2

In June 2022, **Sistema** and the government of the Republic of Bashkortostan signed a cooperation agreement; its key project was the renovation of power facilities of the **power grid asset** in Ufa. Sistema plans to create Russia's largest electrical equipment cluster in the republic. The project will make it possible to establish domestic production of switchgear, fill the shortage of power supply in the Trans-Urals region and create new jobs. The financing will amount to about RUB 4.5bn. By 2024, the plant will start producing transformers and reactors of all voltage classes, as well as secondary electrical equipment.

Sistema and the administration of the Republic of Altay entered into a cooperation agreement aimed at creating favourable conditions for economic and social development in the region. The agreement envisages cooperation in IT, including digital transformation of the key economic sectors and the social sphere, development of proposals in the field of import substitution of information and communication hardware and software, and solutions in the field of urban environment security.

In the reporting year, Sistema's assets also signed a number of cooperation and facility construction agreements with the regions of operations. In July 2022, the **residential property development asset** signed a cooperation agreement with the government of the Yekaterinburg region and the administration of the city of Yekaterinburg to create optimal conditions for the functioning of cultural, educational, healthcare and sports facilities on the territory of new residential complexes under construction. In particular, the agreement concerns the development of the Solnechny residential area. It will have unique facilities such as the Governor's Lyceum, an innovative kindergarten and a centre for rhythmic and aesthetic group gymnastics (the largest in the Urals and the third largest and best-equipped in Russia). In December 2022, the asset also signed a concession agreement with the government of the Republic of Bashkortostan for the construction and subsequent operation of the campus of the world-class Eurasian Research and Education Centre in Ufa on the principles of public-private partnership under the federal project "Development of Infrastructure for Scientific Research and Personnel Training" of the national project "Science and Universities". The campus will include dormitories for 4,400 students, the building with lecture halls and labs, and a genome centre. The area of all facilities will total 133,000 sq m. The project will increase the attractiveness of the region for students and young scientists.

In July 2022, the **high-tech asset** signed cooperation agreements with Innopolis University and the Innopolis Special Economic Zone (SEZ). The SEZ ecosystem will allow the company to implement projects related to video analytics, microelectronics, UAVs and geoinformation. In September 2022, the asset signed an agreement on cooperation in the field of digital economy and development of Russian Internet services with the government of the Chelyabinsk region. The agreement will facilitate the introduction of high-tech domestic products and digitalisation of the South Urals economy.

New production facilities

Portfolio companies expand the scale of their businesses, which helps create new jobs and improve economic efficiency in the regions of operations.

In 2022, the **timber asset** launched a plywood mill in the Kostroma region. The company invested over RUB 12bn in the project. The production capacity is 125,000 cu m of plywood per year. To provide the new enterprise with human resources, a project on social impact in education for young people aged 14–35 from 20 educational organisations is being implemented. This will make it possible to train skilled personnel for the new mill with 1,300 jobs.

Also in the reporting year, the asset started construction of a pulp and paper mill in the Republic of Karelia. The mill will produce more than 1.5m t of pulp per year and will create more than 650 new jobs. Total investment in the project will amount to RUB 178bn. The mill is scheduled to be launched in 2026.

In July 2022, the **healthcare asset** and the government of the Nizhny Novgorod region agreed to build a medical cluster in the city of Vyksa. The medical cluster will be able to serve up to 167,000 people per month. The financing will amount to RUB 5.3bn. Construction of the centre is planned to start in 2024 and be completed in 2026.

1,300 jobs
were created at the new plywood mill of the timber asset

up to 167,000
people per month can be serviced by the new medical cluster in Vyksa

Logistics development

The **timber asset** is developing competitive logistics routes. In October 2022, the first consignment of paper produced by the pulp and paper mill in the Republic of Karelia was shipped to Chinese ports from St Petersburg via the Northern Sea Route. The development of the Northern Sea Route — the shortest route between the European part of Russia and the Russian Far East — expands international cooperation opportunities for Russian exporters and strengthens the competitive advantages of the portfolio company.

In November 2022, the timber asset summed up the results of the navigation of its river fleet in the Irkutsk region. More than 800,000 t of cargo was transported from April to October 2022. Most of this cargo was raw materials for advanced wood processing (555,000 cu m of timber). Also, more than 75,000 t of fuel was delivered for the needs of boiler houses in the Bodaybinsky, Mamsko-Chuysky and Kerensky districts of the Irkutsk region. As part of social partnership with local authorities, the company supplied firewood to the village of Mama and boiler equipment and pellets to the town of Kirensk. The company plans to increase timber supplies and commercial cargo volumes in 2023.

In April of the reporting year, the timber asset entered into an agreement with a transport company to organise export shipments of sawn timber and other products. The agreement will ensure efficient logistics, given the reorientation of cargo flows to new routes.

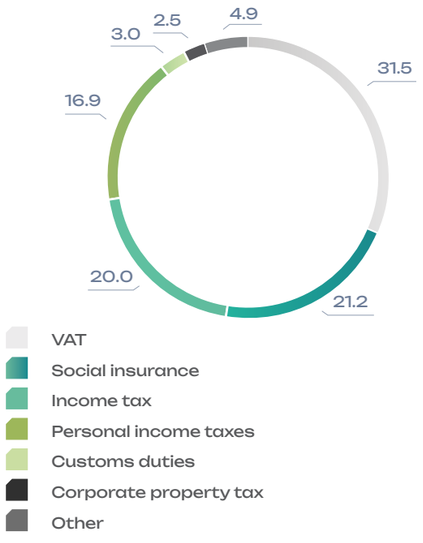
Tax management and taxation

Sistema Group is among the largest taxpayers in Russia. In 2022, the Group's total tax payments (both federal and local) grew by 13.6% year-on-year, to RUB 149.3bn, of which RUB 31.7bn (21.2%) went towards the Russian Pension Fund and health/social insurance.

GRI 207-1 GRI 207-2 GRI 207-3 GRI 207-4 UNCTAD A.2.1

RUB 149.3bn
the Group's total tax payments

Structure of Sistema Group's tax payments to Russian budget in 2022 by tax type, %



The largest taxpayer in Sistema Group is the telecommunications asset, which accounts for roughly 70% of the Group's total taxes. Sistema rigorously abides by the Russian tax legislation and received no tax claims in 2022.

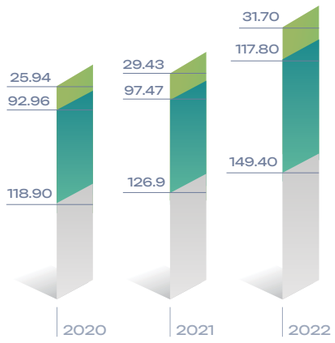
Companies across Sistema Group use tax benefits and special tax treatments to develop their businesses locally. This is especially relevant to companies operating in the industries and regions of particular strategic importance to the state.

The use of tax benefits saved
2.9%
in total taxes across the Group

Sistema Group's tax payments to the federal budget in 2022



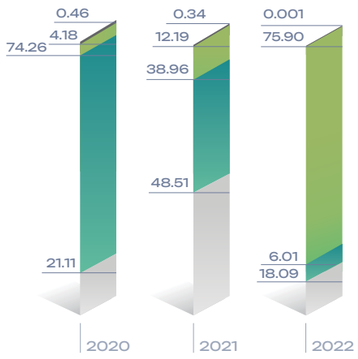
Sistema Group's tax payments to the federal budget, RUB bn



- Payments to the budgets of all levels and to off-budget funds (including other non-tax contributions)
- Tax payments to the federal and regional budgets
- Social security contributions

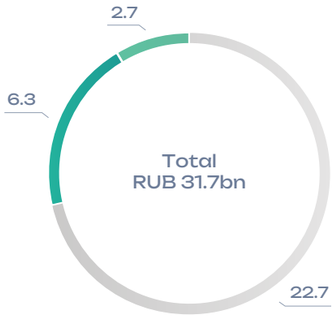
Governmental support by type, %

GRI 201-4



- Reduced income tax rate
- Property tax exemption
- Reduced rates of social security contributions
- Land/lease tax relief

Non-tax charges in 2022, RUB bn



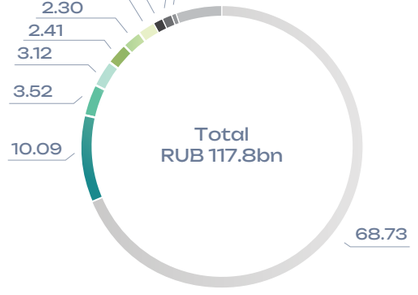
- Russian Pension Fund
- Mandatory Health Insurance Fund
- Social Insurance Fund

Sistema Group's Tax Payments to Federal and Regional Budgets in 2022, %

44.9%
of all tax payments made by Sistema Group in 2022 went toward regional budgets

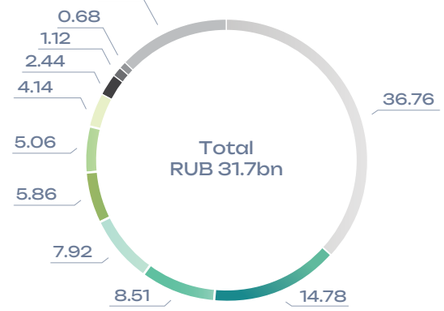
Federal budget	**55.09**
Regional budgets, including:	**44.91**
• Moscow	23.45
• St Petersburg	3.41
• Moscow region	2.36
• Irkutsk region	1.84
• Republic of Bashkortostan	1.58
• Krasnodar region	1.06
• Krasnoyarsk region	0.94
• Rostov region	0.84
• Republic of Karelia	0.81
• Nizhny Novgorod region	0.74
• Stavropol region	0.56
• Other	7.30

Sistema Group's tax payments to federal and regional budgets by sector in 2022, %



- Telecommunications
- Residential property development
- Agriculture
- Power grid services
- Sistema PJSFC
- High technology
- Pharmaceuticals
- Private healthcare
- Commercial property management
- Hospitality
- Other, including non-consolidated companies

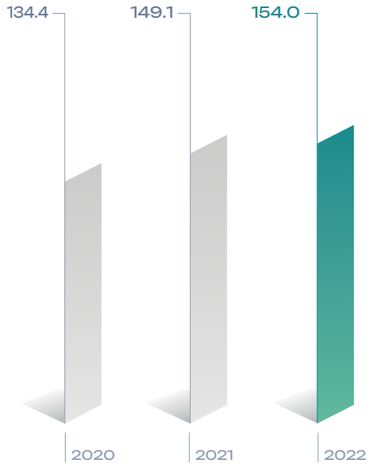
Sistema Group's tax payments to funds by sector in 2022, %



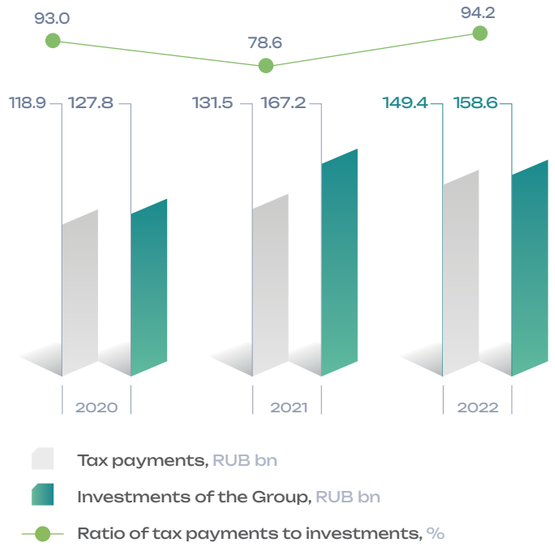
- Telecommunications
- Timber industry
- Private healthcare
- Residential property development
- Sistema PJSFC
- Power grid services
- Agriculture
- High technology
- Pharmaceuticals
- Commercial property management
- Other, including non-consolidated companies

Total taxes paid in the reporting period in all jurisdictions, RUB bn

GRI 207-4



Ratio of tax payments to capital investments of Sistema Group



Development of tourism

Sistema Group pays significant attention to the development of the tourist potential of Russian regions.

In 2022, Sistema's **timber** and **hospitality assets** held a foresight session to reveal the tourist potential of the Segezha district. Experts outlined ways to develop new technologies for attracting tourist flows to the town. In the future, it is planned to create a roadmap for the implementation of projects aimed at the development of the district's tourism sector.

At the end of 2022, the **telecommunications** and **hospitality assets** analysed tourist flows to the Republic of Buryatia based on big data. Anonymised data helped analyse the volume of tourist flow, hot spots, routes, ages and even interests of the region's guests. This analysis is useful for creating tourist products taking into account personal preferences of guests, their age, gender and expectations, as well as for determining the requirements for the tourist infrastructure in order to attract more new guests.

In December 2022, construction of a new hotel in Omsk was completed; the investor was Sistema's **hospitality asset**. Investments in the project exceeded RUB 2bn.

In 2022, Sistema's hospitality asset signed a number of bilateral agreements aimed at developing the tourism industry.

- The agreement with the government of the Kamchatka region envisaged the creation of an all-season ski resort Gora Moroznaya in the region. It is planned to build three resort facilities on the peninsula. The project involves modernisation of the existing equipment, installation of modern lifts, arrangement of several specialised downhill slopes, and construction of two hotels, a restaurant and a café.
- An agreement was signed with the government of the Republic of Karelia on the reconstruction of the Shuyskaya Chupa hotel. It will be re-equipped into the republic's first five-star hotel and spa. Investment in the project will total RUB 2.5bn. The reconstruction is planned to be completed by 2025.
- An agreement was signed with the Far East and Arctic Development Corporation on cooperation in the construction of a natural health resort in the Republic of Buryatia. Investment will total approximately RUB 11bn.

In 2022, Sistema's **telecommunications asset** also provided mountain rescuers on Mount Elbrus with smart trackers for tourists' safety. Based on GPS technology, the device is a thin, durable plate that fits easily into a backpack. The tracker supports voice, SMS and internet functions, and is equipped with internal high-gain antennas, so travellers can stay in touch with rescuers while climbing.

Audio guides and virtual guides

Sistema's **telecommunications asset** creates audio guides and virtual guides for discovering new cities, scenic routes, museums and tourist attractions.

In 2022, the asset launched free digital audio guides in a mobile app for motorists. The audio tour routes start from Moscow and go to Kaluga, Sergiev Posad and the Yasnaya Polyana museum in the Tula region.

In 2022, a free tourist audio guide was launched along the Chui Tract, a federal highway connecting Western Siberia with Mongolia. The audio guide starts in Novosibirsk and ends in the village of Tashanta on the border with Mongolia, covering 65 sites along the Chui Tract. The project is part of the asset's "Power Place" environmental programme and is aimed at creating the necessary infrastructure to protect natural sites and preserve rare animal populations, increasing the level of environmental culture and the public's involvement in the preservation of natural heritage, and developing ecotourism. Also within the framework of "Power Place", in autumn 2022 the asset created VR films about two protected areas in the Republic of Khakassia: Oglakhty area of the Khakassky Nature Reserve and the Pozarym Reserve. The films are virtual guided tours to hard-to-reach sights in the mountainous part of Siberia. They were shot in a "360 video" format using an omnidirectional camera. The Krasnoyarsk Regional Museum was among the first to be provided with equipment for viewing the VR videos.

As part of the "Culture Code" social programme, the telecommunications asset launched a free digital audio guide for Chekhov museums in Taganrog. The audio guide talks about the exhibits of the museums and the life of the famous Russian writer. The company presented museums with tactile 3D models of exhibits, which for the first time makes the expositions accessible to visually impaired visitors.

In May 2022, the telecommunications asset and the Sochi National Park signed an agreement on the development of a digital tourist and environmental space in the Sochi Arboretum. The company provided an interactive audio guide for the park's territory and smart systems to control the microclimate in greenhouses. The Arboretum's digital audio guide became the most downloaded product of the platform in 2022. Augmented reality elements and historical facts about the park attracted particular interest.

The telecommunications asset also launched a project to digitise the unique Lena Pillars Nature Park in autumn 2022. The free digital audio guide covers the water route along the Lena River and the hiking part. The guide contains over 30 interesting locations along almost 100 km. The free audio tour is available for download on the platform to subscribers of any mobile operator. The audio guide works offline.

Together with creative agencies, the telecommunications asset also launched free augmented reality theatre productions about St Petersburg and Yekaterinburg. They show the cultural features of the cities and their artistic and social life through the prism of street art and street culture. The authors of the project digitised and reconstructed in augmented reality the works of the most famous street artists in St Petersburg and Yekaterinburg. The AR shows are available in a special app.



Improvement of the cities of operations

Sistema's **timber asset** supports eight regions of operations in the five key areas: urban environment, natural environment, education, healthcare and sports. A total of more than 70 charitable projects were implemented in the regions of operations in 2022, reaching over 620,000 people.

In particular, the company invested RUB 155.7m in 36 large projects to improve the urban infrastructure of the city of Segezha in the reporting year. The company created a concept for a new city park, improved the city beach, repaired roads, created children's and sports grounds, and, together with the Northern College, developed an educational programme to train workers for its enterprise. Collection and utilisation of solid municipal waste is also a pressing issue. In 2022, the asset helped the city administration purchase four modern trash enclosures that are protected against birds and animals.

Also in 2022, the timber asset implemented improvement projects in the Galich urban district taking into account the suggestions of residents as part of its social partnership with the local administration. The company provided sawn timber for benches, bus stops and the stage in the city park. It also completed the improvement of a public garden and children's/sports grounds, and installed a monument to the home front workers.

Relief efforts

For more than 15 years, Sistema Group's main social investment vehicle has been Sistema Charitable Foundation, which manages group-wide philanthropy projects.

GRI 3-3 UNCTAD A.3.2

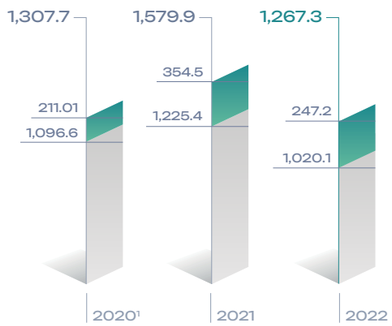
Sistema Group companies have their own charity and relief projects addressing specific pressing needs and challenges of local communities. The Corporation uses a broad range of tools for implementing social programmes, providing financial, in-kind and non-financial support to stakeholders, always aiming to use investment funds to best social effect.

↗ Fore more information about the approach to charity work management, see Sistema's Charity Policy.

GRI 203-1

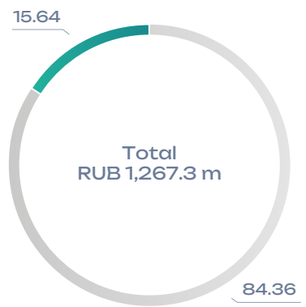
RUB 1.3bn
was spent by Sistema Group in direct social investment in 2022, which equals 0.14% of the Group's total consolidated revenue and 0.42% of adjusted OIBDA

Direct social investments of Sistema Group, RUB m



Group companies²
Sistema Charitable Foundation³

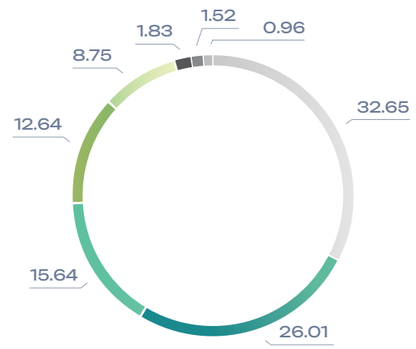
Financing of social and charitable activities at Sistema Group in 2022, %



Projects of portfolio companies
SCF programmes

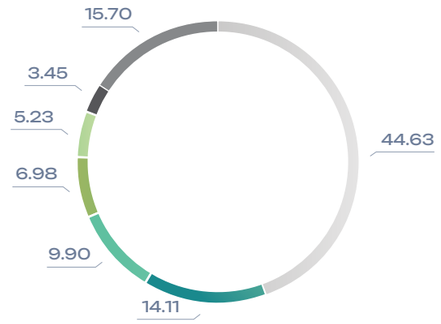
1 2020 numbers are adjusted.
2 Without SCF's operating expenses.
3 Without contributions to SCF.

Structure of spending on charitable and social programmes in 2022[1], %



Contributions to other charities
Individual support of employees, their families, and retirees, including COVID-19 relief
Contributions to SCF
Culture and arts
CSR
Relief programmes for children and veterans
Sports and healthy lifestyles
Religious organisations

Contributions to the Group's consolidated charitable budget in 2022[1], %



Telecommunications
Property development
Timber industry
E-commerce
Sistema PJSFC
Agriculture
Other

>500,000
participants of charitable programmes in 2022[2]

2%
of the total headcount of Sistema Group were volunteers in 2022

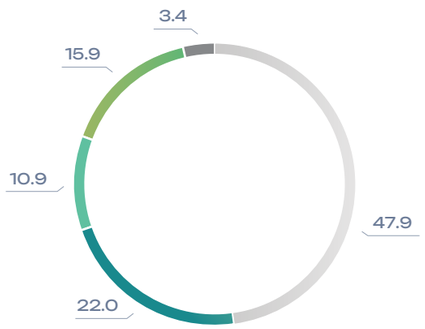
1 Including contributions to SCF.
2 Including online participants.

Key social projects of Sistema Charitable Foundation in 2022

Project	Results	Description
Education and technology		
Lift to the Future	All regions of Russia **364,589 registered users** on the digital platform **>80** online courses	A national programme for career guidance and training
Social environment and volunteering		
Sistema Fests	**2 regions** (Omsk and the Republic of Altay) **9,500 offline participants** (with "Cultural Weekend") without "Cultural Weekend": **>6,200** offline participants	Social and cultural festivals aimed at improving the quality of living and social activity in the regions of operations
Charity race #ZaLes	**2,028 registrations** **117 cities** from Kaliningrad to Kamchatka **4,000 trees** planted in 2 regions (Omsk and Rostov regions) **20 assets** participated in the initiative	A nation-wide charity race to promote respect to the environment
#RememberTogether campaign	**1,927** WWII **veterans** **600** corporate volunteers **35 regions** of Russia	A nation-wide corporate campaign on the Victory Day
Waste paper collection initiatives	**11 assets** participate in the initiative **>50 locations** in 13 regions of Russia are equipped with waste paper collection boxes **9,115 kg** collected **RUB 27,000** raised and allocated to the fundraising educational project #LiftWithoutFailure	An environmental project at partner companies' locations aimed at engaging the population in waste sorting and smart consumption practices, as well as supporting the #LiftWithoutFailure fundraising educational project
Outreach & culture		
Cultural Weekend	**4,150 visitors** **4 cities** in 3 regions	A nation-wide outreach project, offering free entrance to the best regional museums

Project	Results	Description
Support to projects of the Russian Museum	**4 online courses** on culture and art on the Lift to the Future platform a virtual guide on the ARTEFACT platform of the Russian Ministry of Culture **>390,000 participants** in the online and offline programmes of the project "Beyond the Establishment" **>800,000 viewers** of the public talk "Online Art: New Forms of Working With Audiences"	
Sistema Charity		
#LiftWithoutFailure	**RUB 517,776** raised **>800 lessons** organised with the Volunteers to Help Orphans foundation **>20 partners** **5 events** In the 2021/2022 academic year, 14 children from social institutions of the Kostroma region (grades 6 to 11) participated in the project: four of them passed the Main State Exam (MSE), three passed the MSE at the second attempt, and all of them were certified according to the programme of the respective grade. Two teenagers were no longer diagnosed with intellectual disability. Five project participants were admitted to vocational schools	Help with admissions to universities and vocational schools for orphans and underprivileged children
Sustainable Thinking Hub	**>30 corporate secretaries** and managing partners of Sistema Group companies **44 CEOs and CEO-1 level executives** **7 free online courses** and **>10,000 listeners** Guidelines for Implementation of Impact Investing Projects and Methodology for Assessment of Companies for Compliance With ESG Criteria; an impact project in the field of education "Talent Pool for the Forest Industry of the Kostroma Region"	Sustainability and ESG training

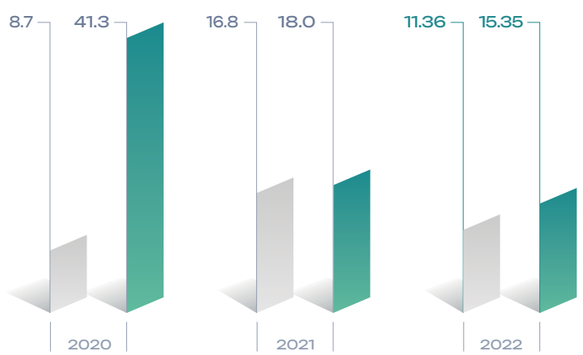
Breakdown of SCF's spending in 2022, %



> RUB 189.07m
contributed by the Group companies to SCF in 2022 for general corporate initiatives

> RUB 316.8m
spent on financing SCF programmes in 2022[1]

SCF's donations to funds and other non-profits, %



For more information about charitable work and its results, see SCF's 2022 Annual Report or its official website.

Support for arts and culture

The main goal of cultural initiatives is to make art accessible to everyone, regardless of region of residence, social status or health conditions.

In 2022, **Sistema Charitable Foundation** continued to implement the "Cultural Weekend" campaign in the regions of operations; the Foundation cooperates with local museums, provides an opportunity to visit them free of charge for one weekend day, and organises a cultural and educational programme for the whole family. The project develops the idea of an accessible museum environment and introduces local communities to the cultural and historical heritage of their regions and the entire country. In the reporting year, key museums in three regions were open for free visits as part of the "Cultural Weekend" campaign: Kostroma Museum, Galich Regional Museum, Vrubel Museum (Omsk) and Anokhin Museum (Gorno-Altaysk). The Foundation organised a cultural and educational programme at each museum: guided tours and quests, creative master classes, film screenings, concerts, re-enactments and photo shoots.

In 2022, the **telecommunications asset** presented the first digital platform "National School of Chuvash Embroidery" in cooperation with the Chuvash National Museum. The site will become the main digital platform for demonstrating the embroidery collection and will be supplemented by digital copies of items from other Russian museums, lectures and lessons. A total of about 40 items and clothing elements have been digitised. The project will help residents of other Russian regions study national embroidery remotely.

In the reporting year, the telecommunications asset launched an educational and entertainment project about aquatic wildlife from Moskvarium. Guests can virtually immerse in a submarine in Russia's biggest aquarium or listen to stories about the life of sea creatures using QR codes. The project is also available on the asset's website.

The telecommunications asset also supports theatre projects. In 2022, a strategic partnership agreement was signed with the Moscow Academic Theatre of Satire. Under this partnership, the company will organise the theatre's tours, invest in new productions, and develop social and cultural projects.

Charitable campaigns and events for children

Sistema funds charitable projects aimed at developing children and creating a favourable educational and creative environment for the younger generation.

In 2022, the **telecommunications asset** continued to implement the Generation M creative and charitable project. This open online platform allows any child from anywhere in the country, regardless of the family's financial situation, learn creative skills with famous mentors. A participant creates an artwork and submits it as an entry in the contest on the Generation M website. In the final round, the mentors select winners in each creative field. In the reporting year, the project organised a number of free online lectures not only for children but also for their parents. As part of the Generation M project, the telecommunications asset launched a free online educational course on digital art. The online course will allow children from all over Russia to learn about NFTs and take their first steps in IT by creating their own 3D artworks.

In the reporting year, the telecommunications asset organised the annual Running Hearts charity run, which raised RUB 25m, which was transferred to Konstantin Khabensky Charitable Foundation for the development of a project to provide rehabilitation assistance to children and young adults with brain and spinal cord tumours.

In 2022, the annual "New Year's Miracle" event was held for the second time as part of the fundraising project Lift Without Failure implemented by **Sistema Charitable Foundation** together with Volunteers to Help Orphans. The online charity event raised RUB 517,700 in private donations, which is equal to 709 hours of individual lessons with tutors for children from social institutions to prepare for exams.

In the reporting year, Sistema Charitable Foundation organised Sistema Fest with the support of the Omsk region government, Omsk city administration and other partners, including Sistema Group companies. The programme of the charitable socio-cultural festival in Omsk included career guidance master classes for high school and vocational school students, and environmental activities. The festival ended with nation-wide campaign "Cultural Weekend" and the planting of oak tree saplings.

A second Sistema Fest was held in the Republic of Altay. The programme included career guidance master classes, guided tours and public talks for schoolchildren and students, a master class in tag rugby, and a nation-wide initiative "Cultural Weekend" with a programme for the whole family, including the youngest ones.

In February 2023, a corporate charity skiing marathon was launched by Sistema Charitable Foundation. The Foundation transferred money to the #LiftWithoutFailure project for each participant who ran the distance chosen during registration: raised funds were used for 164 tutoring sessions for children from social institutions.

In 2022, the **residential property development asset** signed an agreement with the Omsk region government on providing apartments for orphanage graduates.

1 Including administrative costs.

Accessibility and quality



The UN Global Compact principles

Principle 1

Businesses should support and respect the protection of internationally proclaimed human rights

Principle 2

Businesses should make sure that they are not complicit in human rights abuses

Principle 7

Businesses should support a precautionary approach to environmental challenges

million people

>150

are customers of Sistema Group companies

industries

>20

Group companies operate in

Access to products, services and information

GRI 3-3

In the era of fast technological development and ever changing market conditions, convenience and availability of services and information for customers are a priority for Sistema Group. Group companies value the trust of their clients and always strive to improve their products and services, regularly upgrading their production infrastructure and introducing innovative technologies.

Development of digital services



In the reporting year, Sistema's telecommunications asset continued development of its services.

Also, **two new TV channels were launched**, one broadcasting family shows and the other detective stories. The total number of the asset's TV channels reached five.

A beta version of an app store was launched for Russian and foreign developers in 2022. Its users can download applications and pay for them with Russian bank cards or from their mobile phone accounts.

In 2022, the telecommunications asset also **expanded its audience and the financial services** of its mobile app: now its customers can make money transfers, open bank products and pay with virtual cards from within the app.

In 2022, the marketplace began selling **cheese and meat products** from 20+ farms of the Moscow region. In addition, residents of Krasnodar and Sochi were offered one-hour deliveries of local farmers' produce.

In 2022, a partnership was set up to sell **products of the timber asset** on the marketplace, which made it possible to reach out to additional audience and increase sales.

At the start of 2023, the marketplace began selling **RUF**[1] **fuel briquettes** that do not produce toxic gases or resins when burning, which makes them a 100% clean and safe material for heating.



In the area of e-commerce,

A new free section of the marketplace was launched in 2022, which allows sellers to sell marked-down goods. Also in 2022, customers were offered a bank card that can be used to buy goods on the marketplace at a discount and to pay for goods on other websites. The card works with the Mir payment system, its issue and servicing are free.

In the reporting year, a **crowdsourcing platform** was launched on the basis of the marketplace. It is the first e-commerce exchange that enables freelancers to earn money by performing simple tasks. Use of the platform reduces time needed for moderation of goods and reviews and increases the quality of the content and work of pick-up points.

In the area of commercial property,

a seamless route for remote sales of apartments was created in 2022. Now customers pass all stages of a purchase — from selecting an apartment to accepting it — via a personal account, and the developer's managers process the transaction in an end-to-end system, without the need to switch between tools.



1 RUF is the name of a special pressing machine that presses wood shavings and sawdust under high pressure. When burning, they produce three to four times more heat that ordinary firewood. They do not produce sparks and leave almost no ash.

Development of pick-up points and logistic centres

Expansion of geographic availability of goods and services is one of development focuses for Sistema Group. Group companies regularly expand their footprint, invest in establishment of new enterprises and increase the number of regions of operations, which contributes to their development.

Managing consequences of a fire at the marketplace's warehouse in the Moscow region

- In summer 2022, a fire broke out at the fulfilment centre of Sistema's online retailer in the Moscow region. The damage amounted to some RUB 17bn, with more than 100,000 sq m requiring reconstruction.
- Goods and equipment at the warehouse were insured for an aggregate amount of up to RUB 11bn. Also, the company's liability in case of harm to third parties' lives, health and property was insured for RUB 1bn.
- After a thorough inspection all undamaged goods were relocated to other warehouses and put up for sale. Customers' orders that were not fulfilled because of the fire were cancelled and refunded.
- The marketplace continued accepting goods from sellers, delivering orders to customers, providing customer support and making timely settlements with all counterparties as usual.
- In autumn, having taken inventory at the warehouse, the company settled accounts with all sellers who agreed with the amount of compensation for destroyed goods. Disputes are still being handled, with each compensation claim being reviewed separately.
- Reconstruction of the warehouse has begun. Consequences of the fire will be totally eliminated by the middle of 2023.

In the area of e-commerce, effort is made to expand the chain of pick-up points and build new logistic centres, including warehouses.

In October 2022, the format of “home points” managed by franchisees[1] was launched for towns with a population of 1,000 to 3,500 people. Over 80,000 entrepreneurs have a dispatch point within a walking distance from their warehouses, which is especially important for small towns. More than 10,000 new goods acceptance points for sellers selling from their own warehouses were opened in 2022. As of the end of 2022, the number of such points exceeded >16,000, an increase of 25% from 2021.

Increase in the number of points will further the development of the warehouse system. In 2022, a new large logistic centre opened in the Samara region and three warehouses were commissioned in the Republic of Tatarstan. Universal logistic complexes will also open in Adygeya, Bashkortostan and the Stavropol region.

In December 2022, a new support programme for pick-up points opened after 1 January 2023 was announced. It envisages fixed payments to franchisees in addition to percentage of a point's turnover and simpler requirements to premises and locations. This will make it possible to develop the chain more actively and to make it closer to and move convenient for customers.

Also, convenient state-of-the-art tools for online business were launched. In June 2022, a virtual distribution centre was launched. It is an algorithm enabling sellers to increase regional sales: it advises sellers which regions lack their goods and in which amounts. The scheme reduces the delivery time and minimises returns and cancellations.

1 Franchisee is a buyer of franchise. Franchise is the right to operate under the name of another brand and use its technologies, which can be bought.

Availability of communications

Sistema Group regularly invests in increasing the availability of communications and quality of life, including in remote areas of the country, by expanding the telecom network in the regions of its operations.

In 2022, the Corporation's **telecommunications asset** expanded its presence to the Amur region, Yakutia and Bashkortostan, and also launched a joint BBA[1] network with regional operators of 15 new regions, including the Krasnoyark, Khabarovsk and Irkutsk regions and the Yamal Peninsula.

Special attention is paid to medical facilities in remote areas of the country. In 2022, construction of new base stations ensured uninterrupted communication and faster internet connection at three hospitals of the Khanty-Mansi autonomous area and the Khabarovsk region.

Another focus for Sistema Group is support to production infrastructure. In 2022, it provided communication services at four fields with mining and processing works on the Yamal Peninsula and in the Khanty-Mansi autonomous area and at one field in Buryatia. In the reporting year, NB-IoT[2] networks were built in special economic zones in the Leningrad and Oryol regions, which allow controlling sensors and meters within the network.

The Group pays special attention to developing communications at transport facilities within Russian regions. In 2022, telecommunication was made available along five roads in the Omsk, Novosibirsk, Vladimir and Nizhny Novgorod regions, along the Barnaul-Zarinsk railway, and at the airports of Novy Urengoy and Novosibirsk with an internet speed of up to 150 Mb/sec. 3G and 4G internet was made available in the metro in Kazan.

In the reporting year, voice and internet communications appeared at sports facilities in Kazan, the Nizhni Novgorod and Kemerovo regions, Vladivostok and Primorye. By installing external and internal equipment, the company provided telecom services to the Fetisov Arena sports facility, where several thousands of participants and spectators from 15 countries gathered for the Children of Asia sports games.

For several years, the Group has been actively building telecom networks in hard-to-access and lowly populated towns and villages, developing local infrastructure and increasing tourist appeal. In 2022, communication was made available in a number of remote tourist attractions and sparsely populated villages. These include the Arctic village of Kheta with a population of 300 people in the northern part of the Taimyr Peninsula, the mountainous village of Kurush on the border of Dagestan, the hardest-to-access (due to extremely cold climate and mountain terrain) Vostok research station in the Antarctic, 57 small villages in Udmurtia, and many more.



1 Broadband internet access.
2 Internet of Things network.

PROVISION OF TELECOMMUNICATION AND INTERNET
in regions of operations in 2022

Central Federal District

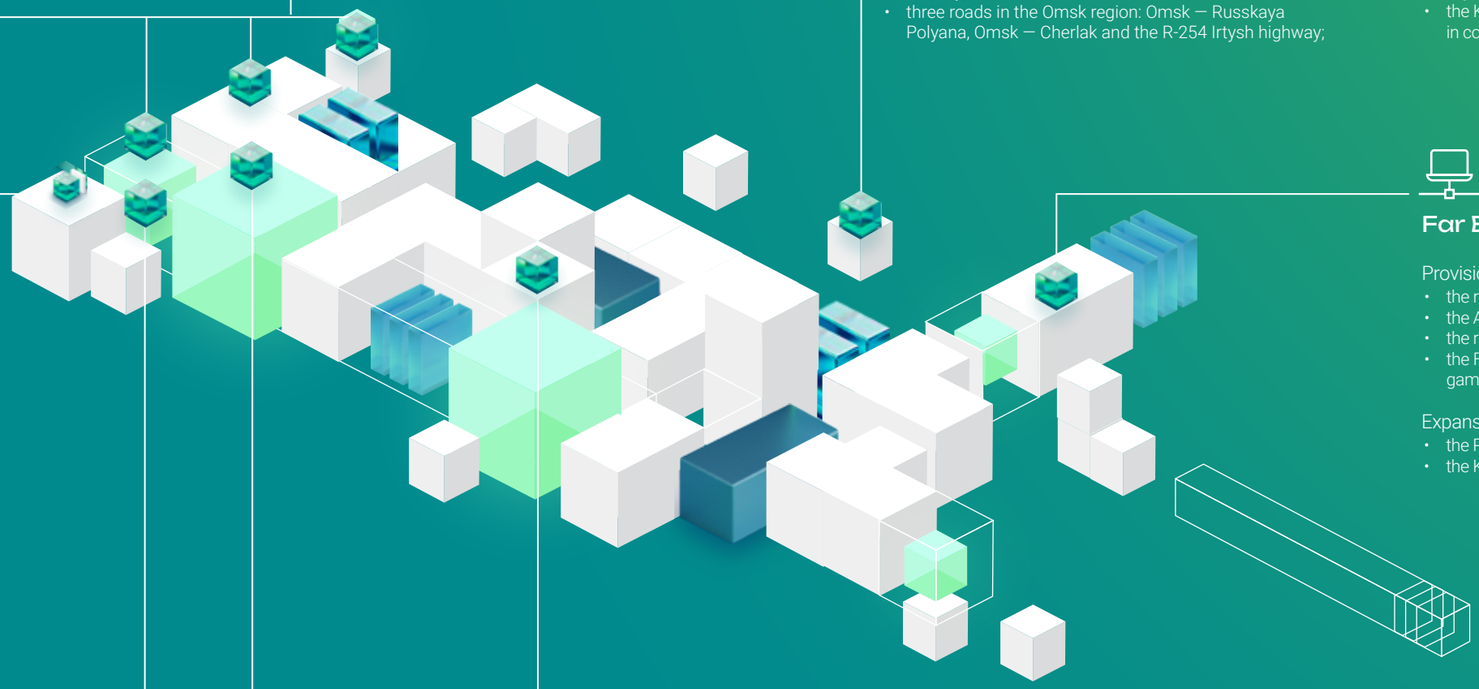
Provision of telecommunication and internet to:
- the Ice Arena in Luzhniki, Moscow;
- the entire Oryol region for transmission of data from gadgets (meters, sensors, video cameras);
- the section of the M7 highway near Vyazniki, the Vladimir region.

North-West Federal District

Provision of telecommunication and internet to:
- the Ust-Luga special economic zone in the.

Republic of Komi and Yamal

Laying of an optic fibre line between the polar regions of the Republic of Komi and Yamal



Siberian Federal District

Provision of telecommunication and high-speed internet to:
- new terminals of the Tolmachevo airport in Novosibirsk;
- the village of Kheta on the Taimyr Peninsula (north of the Krasnoyarsk region);
- small villages along the Barnaul-Zarinsk railway in the Altay region;
- the Ozernoye field in Buryatia;
- the Novosibirsk part of the Chuiskaya road leading to Altay;
- three roads in the Omsk region: Omsk — Russkaya Polyana, Omsk — Cherlak and the R-254 Irtysh highway;
- the Molokovsky health resort near a volcano mouth in the Baikal region;
- the mountainous village of Belyashi in the Altay region;
- the school in the village of Khuzhir on the Olkhon island in the Irkutsk region;
- the Lokomotiv Arena volleyball centre in Novosibirsk;
- the Yugus alpine skiing centre in the Kemerovo region.

Expansion of geography to:
- areas along the Katun river from Gorno-Altaisk to Chemal in the Altay region;
- the Krasnoyark and Irkutsk regions and the Republic of Khakassiya in cooperation with regional partners.

North Caucasian Federal District

Provision of telecommunication and internet to:
- the mountainous village of Kurush in the Republic of Dagestan;
- the Sulaksky canyon in the Republic of Dagestan;
- the Gelbakh Hydropower Plant in the Republic of Dagestan.

Expansion of telecom coverage to:
- the Caspian Sea coast from Makhachkala to Derbent in the Republic of Dagestan;
- the Caucasus Mountains in the Stavropol region.

Far Eastern Federal District

Provision of telecommunication and high-speed internet to:
- the regional hospital in Khabarovsk;
- the Aquatoria water complex in Vladivostok;
- the remote village of Tsimmermanovka in the Khabarovsk region;
- the Fetisov Arena in Vladivostok for the Children of Asia sports games.

Expansion of geography to:
- the Republic of Yakutia and the Amur region;
- the Khabarovsk region in cooperation with regional partners.

South Federal District

Expansion of telecom coverage to:
- the Black Sea coast from Sochi to Anapa in the Krasnodar region;
- the Azov Sea coast in the Krasnodar region.

Volga Federal District

Provision of telecommunication and high-speed internet to:
- skiing routes, skating rinks and the metro in Kazan;
- the Monte Roza business IT centre in the Samara region;
- the village of Novinki in the Nizhny Novogod region, in time for the Russian Ski Run competition;
- 57 small villages in the Republic of Udmurtia;
- the Tatneft Arena ice hockey centre in Kazan;
- the Aigir railway station in Bashkortostan.

Ural Federal District

Provision of telecommunication and high-speed internet to:
- two biggest hospitals in the Khanty-Mansi autonomous area;
- the airport in Novy Urengoy;
- the Kharasavey field on the Yamal Peninsula;
- the Teplovskoye, Priobskoye and Zhagrin fields in the Khanty-Mansi autonomous area;
- the VEER Mall in Yekaterinburg;
- area around Lake Singul.

Antarctic

Provision of telecommunication and internet to:
- the third out of Russia's five year-round Antarctic stations: Vostok.

Reliable power supply

Sistema Group invests in the development of reliable power supply in its regions of operations, which takes into account the growing demand for electricity in residential and industrial district.

Its **power grid asset** carried out a number of projects to provide electricity to residents of the Republic of Bashkortostan in 2022. New transformer substations and distribution units were installed and state-of-the-art cable and air power lines built in the suburbs and villages of the Ufa, Blagoveshchensk, Ishimbay and Karmaskaly districts.

The upgrade of power grids and expansion of power lines were driven by the development of domestic industry. In the reporting year, the efficient work of Sistema's power grid asset provided electricity to the Alga special economic zone in the Ishimbay district, a Bashkir company producing and processing copper ore and a poultry farm in the Ufa district. Also, air power lines were relocated to a cement producer to increase the limestone production area. Connection of new transformer substations in the Meleuz district improved the reliability of power supply to the animal-breeding farm of Khlebodarovka, the Nugush tourist resort in Sergeyevka, the radio broadcasting station in Vostochny and the territory of an industrial warehouse and a chemical plant.

In 2022, active work was undertaken to improve the reliability of power supply in the suburbs of Ufa. Notably, the Surovka distribution point was launched for villages to the west of Ufa and the Shmidtovo point for those to the southeast. Air power lines were built in southwestern districts. In the northeastern district, construction of the Inors substation began, which will be equipped with new Russian-made transformers. In order to improve transport infrastructure in Ufa, three power lines were rearranged at the Eastern Exit and major repairs were performed at the Airport substation at the Ufa airport, including replacement of unsafe oil circuit breakers with new vacuum ones, which significantly increased the substation's fire safety.



Construction of Russia's first multi-storey residential buildings of CLT panels

In the reporting year, Sistema's **timber asset** continued developing wood housing construction using eco friendly and high-tech CLT panels. CLT panels are produced of cross laminated softwood timber and are used for load-bearing and enclosing elements of walls, floor and roofs. Windows, doorways and paths for utility systems are cut out at the production facility, which ensures high accuracy and quality of work. Panels are fixed using metal fasteners like a meccano set. On average, assembly of a floor takes seven days, and the key advantages of CLT panels are earthquake resistance, high durability, high noise insulation between rooms and floors, shrink resistance, and impermeability of walls and joints to wind and frost.

In the reporting period, several CLT projects were carried out: two four-storey residential buildings in Sokol, the Vologda region, with a total living area of 3,540 sq m, and an apartment complex of two two-storey buildings for students of the branch of Moscow State Lomonosov University in Sarov, the Nizhny Novgorod region, with a total area of 2,000 sq m.

According to current Russian law, the height of wooden buildings may not exceed four floors. Nevertheless, it is expected that construction norms will be adjusted by 2024, and it will become possible to build multistorywooden buildings like it is now done in other countries. Amendments to legislation will enable the company to increase sales and expand the range of customers.



Development of digital services in healthcare

850 doctors of 25 directions
are available for online consultations to users of the telemedicine app

SASB HC-BP-240a.1

In order to increase the speed of provision and availability of quality healthcare services for patients, Sistema Group is actively introducing various digital services.

In 2022, Sistema's **healthcare asset** opened the first two offices of its SmartLab chain in the format of “neighbourhood digital clinics”. Total investment in the project amounted to RUB 34m. The clinics are designed to receive about 70 patients per day and up to 20,000 per year. The company plans to open over 20 SmartLab offices in its regions of operations.

In 2022, the healthcare asset continued developing its telemedicine application for patients. It introduced remote issue of sick leaves for holders of voluntary medical insurance from Ingosstrakh and Alfa Insurance, which made the service more easily available and convenient. Also, thanks to integration with a partner, the app now includes an e-pharmacy and a medical marketplace offering about 46,000 SKUs. In order to develop its own digital ecosystem of disease prevention and treatment, the healthcare asset invested RUB 135m in the Zdorovye.ru platform.

Sistema's **telecommunications asset** also contributed to digitalisation of the healthcare segment; notably, it provided telecom infrastructure for the Mezhdurechensk multi-specialty hospital in the Kemerovo region, which will enable doctors to make the most of telemedicine: the clinic's employees will be able to participate in online conferences, organise online consultations and watch broadcasting of surgeries. Also, over 120 video cameras were integrated in the clinic's digital ecosystem to ensure safety of the personnel and patients.

Development of CIS markets

Sistema Group companies constantly expand their footprint and scale. In the reporting year, Sistema's assets continued developing logistic infrastructure and services for their customers from the CIS. This helps to provide equal access to trade to all market participants locally and globally, simplifies logistics between countries of the Eurasian Economic Union (EAEU) and furthers long-term economic cooperation between them.

In January 2022, the **e-commerce asset** of Sistema launched its first postal logistic centre in the capital of Kyrgyzstan, Bishkek, and by the end of 2022 it completed construction of a big logistic hub in the Republic of Kazakhstan. The centre's area is 38,000 sq m, and this capacity allows processing at least 260,000 orders daily and storing over 9m units of goods. Thanks to the new hub, the company reduced the time of delivery to Russia by 1.5 times and within the republic by half. It also created more than 2,600 jobs in this region of operations. The company plans to further develop infrastructure and open new pick-up points.

In 2022, Sistema's **telecommunications asset** launched a service allowing clients from Armenia to pay for mobile communication at the company's outlets and via the mobile app. Moreover, for the first time on the Russian market the company made it possible for customers to transfer money to all banks of Uzbekistan by phone number free of charge and to deposit money on cards of any bank of Tajikistan at its retail outlets. In 2022, the share of the telecommunications asset in certain segments of cross-border money transfers exceeded 10%.

In the reporting year, Sistema's **high-tech asset** contributed to the development of state-of-the-art city infrastructure in Kyrgyzstan. In June 2022, the company signed a memorandum of cooperation with the administration of Osh, Kyrgyzstan. The parties agreed to implement a smart city project that includes digitalisation of utilities and development of engineering solutions for organising urban space and city infrastructure. The project will improve the population's living standards and quality of urban resources management and will create a comfortable and safe environment.

Sistema's **healthcare asset** also develops cooperation with CIS countries. In June 2022, the chain of private clinics organised a conference in Bishkek, during which it signed a memorandum of understanding with the Kyrgyz Ministry of Economics and Commerce. The conference was attended by more than 300 doctors and honourable guests. As part of the event, the company provided over 100 free consultations for local residents, based on which 12 people were offered further tests, four were offered programmes at the Reproductive Health Centre and another two were referred for surgeries at the asset's clinics.

Entry into new markets: India, China, Turkiye

Sistema's assets actively expand their presence in Asia and the Middle East.

In 2022, its **timber asset** continued developing cooperation with Asian countries. The company announced plans to open a representative office in China. As part of expanding cooperation, it acquired ten high-tech log trucks with improved manoeuvrability for its enterprise that operates in the EAEU, China, India and South Korea. The new vehicles increased the volume of wood delivered from leased plots to processing facilities and, therefore, the operational efficiency of the enterprise.

The timber asset also continued developing the supply chain. In the reporting period, a trial batch of eco friendly construction material — CLT panels — was delivered from the Vologda region to India along the North–South international transport corridor. Establishment of uninterrupted logistical ties serves as a foundation for developing long-term economic cooperation with new partners in the East.

The **e-commerce asset** also developed relations with Asian countries. In 2022, Sistema's marketplace opened representative offices in China and Turkiye.

Sellers from China account for over 90% of the product mix of the marketplace's international division. Their number exceeds 10,000 and turnover grows very fast: in Q3 2022, it soared fourfold vs the same period of 2021. By 2024, the marketplace plans to attract more than 100,000 sellers from China and to increase turnover of Chinese goods tenfold. Also, partner delivery of goods from China and Turkiye was launched for Russian customers. The new format will reduce delivery times by half: deliveries from China to Russia will take 14 days on average and from Turkiye six to eight days, not including time for order processing by the seller.

Ahead of opening of the marketplace in Turkiye, a conference on e-commerce was organised in Istanbul that was attended by over 300 Turkish retailers. In H1 2022, the number of sellers from Turkiye doubled compared to a year before, while delivery of Turkish goods to Russia surged threefold in the same period. To support new sellers, the marketplace plans to launch educational webinars on the specifics of the Russian market and on upscaling tools.



Support to businesses during crisis

Sistema understands the importance of supporting businesses at a time of economic turbulence. In the reporting period, it provided significant support to various businesses working with the Group companies.

As many foreign brands left the market, Russia's leading marketplaces, including Sistema's **e-commerce asset**, began supporting local brands and developed special programmes for manufacturers to boost sales. Together with the Russian Economic Development Ministry, the Group company launched a programme for support to small and medium-sized entrepreneurs. They can turn to My Business centres to receive individual help from tutors to start their business on the marketplace and free promotion of goods at the initial stage. Entrepreneurs and the self-employed registered in Bashkortostan can use the service of free placement of their products on the marketplace, which includes development of the storefront's design, uploading of data, analysis of the product mix, help with preparing supporting documents and training in marketing strategy and promotion. Moscow producers of consumer goods can present their products at the separate themed section Made in Moscow and get free promotion on the marketplace.

In 2022, Sistema's **telecommunications asset** organised a number of free webinars for businessmen in various regions of Russia. At the webinars, the company's experts shared their experience of reducing operational costs, spoke about trends in the digital sphere and helped the participants to understand cutting-edge technologies that can further business development at a time of crisis.

Sistema's asset was the first Russian telecom company to launch a free service for business registration. From spring 2022, entrepreneurs can prepare a set of documents for registering as an individual entrepreneur or a limited liability company without leaving home. The process takes 15 minutes on average. The service can be found in the online storefront of digital solutions.

Looking for alternatives to blocked social networks for promotion and customer acquisition, businessmen began using targeted bulk messaging based on geoanalytics and big data technologies. The advertising service of the telecommunications asset became such an alternative, offering services of targeted bulk messaging. In 2022, the number of small and medium-sized businesses that used the service grew by 50% compared to the previous reporting period. In 2023, a mobile version of the platform was launched to improve convenience.

In the reporting year, the Group's fintech direction of the **telecommunications asset** and the Association of Corporate Treasurers organised a series of events titled Red Friday and aimed at supporting big and medium-sized businesses. At the events, representatives of corporations and experts of the banking community presented successful cases, talked about solutions available to businesses in the new reality and answered trending questions.

Private labels

Sistema's assets make a sizeable contribution to import substitution and develop their private labels, which makes it possible to expand the assortment of the most popular consumer goods and support Russian producers.

In 2022, Sistema's **e-commerce asset** launched a number of private labels: clothes (Hola), convenience goods (KIX), bed linens and dishware. By the end of 2022, Hola's basic collection for adults and children included about 300 SKUs.

Also, the company expanded the product mix of electronics under its private label Hartens and started selling Russian-made built-in ovens and cooktops, computer monitors assembled in Belarus and wireless speakers that are produced in China to the marketplace's order.

The marketplace's private labels generally offer high-margin goods, which due to direct ordering from manufacturers and savings on marketing have a relatively low price for customers compared to competitors' analogues.



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Customer experience

GRI 3-3

Sistema Group companies strive to attract and retain customers, so the key business growth driver is to build trust and develop a positive customer experience. To this end, Group companies improve the quality of service and introduce new ways of providing services, including through the use of digital technologies.

Development of loyalty programmes

To build long-term relations with customers, Sistema's assets develop special loyalty programmes that promote benefits, encourage repeat purchases and deter customers from switching to competitors.

Sistema's **hospitality asset** launched a loyalty programme for its hotel chain. By participating in the loyalty programme, customers can earn bonus points and exchange them for accommodation or meals. The programme has four levels, each with a certain set of privileges to make one's stay even better.

The **telecommunications, digital and media services asset** expanded its existing loyalty programme. Now, programme participants can exchange their reward points for discounts of up to 100% in cafés, beauty salons, gyms, clothing stores and other companies that are residents in the project to support small businesses.

In the reporting year, the **e-commerce asset** launched a service for creating loyalty programmes for marketplace sellers. The service helps entrepreneurs save on development costs typically associated with launching loyalty programmes. At the end of 2022, the service was scaled up, allowing sellers to extend loyalty programmes to their offline outlets; also, any offline businesses, even those not related to the marketplace, can now launch their own bonus programmes. More than 30,000 entrepreneurs have tried this service.



High-quality interaction with customers and patients

Sistema constantly improves the quality of interaction with its customers by developing new communication channels, including digital channels.

SASB HC-BP-240a.1

Sistema's **private healthcare** group continues to work on building an effective system of interaction with patients throughout the entire medical care process.

In 2022, its clinics introduced self-service kiosks. They can be used for self-registration, appointments, information updates and bill payments. This solution reduces queues and increases throughput at clinics. The kiosks also automate administrative aspects, such as reporting. The company plans to develop current functionality of kiosks and offer new services.

Children's hospitals carefully analyse feedback from patients. It is divided into several types: acknowledgements, suggestions and complaints. Feedback analysis is a tool for managing the quality of medical care.

Hospital clowning is used to create a positive experience for children receiving treatment in paediatric hospitals. Hospital clowning is an effective way of dealing with the stress and anxiety that children and parents experience in a medical institution. Clowns have been employed since 2021 for approximately 40 treatments. Clown assistance is especially useful in treatment rooms or when a child is accompanied to surgery. The clown helps the child shift attention by offering to play while the doctor performs the treatment. Hospital clowning is helpful for children, parents and doctors alike.

Sistema's **telecommunications asset** introduced a special system into its online customer support chats. The system uses neural networks to filter replies and comments on any requests, including to determine which user questions are better handled by the bot and which by the operator, and to assess whether the customer was satisfied. The analysis results in recommendations for improving customer satisfaction.

For the purpose of fast customer service, retail telecom outlets started offering the option of providing services without requiring an ID in 2022. After providing written consent and passing biometric identification, a subscriber can safely and quickly use all available services without presenting an ID: change number, SIM card or plan, activate and deactivate options, and perform other transactions.

Sistema's telecommunications asset is also developing digital services for businesses, such as a service for call centres. It can be used to combine landlines, cell phones and computers into a single telephone network available via the Internet. A call centre can be launched without a separate telephone line or special equipment. The operator has all the necessary software and hardware and makes it available 24/7 as a cloud service. In 2023, it is planned to launch a solution that will allow businesses to create their own apps for communicating with customers.

Sistema's **e-commerce asset** switched to a new method of order pickups – using a barcode. It ensures greater security of customer orders. The barcode is displayed on the order page and gets updated every few days.

In 2022, Sistema's **power grid asset** launched an official Telegram channel and a Telegram chatbot. The bot can be used to learn about power outages, connection to power grids, etc.

The Group's **residential property asset** set up special offices for convenient and prompt transfer of flats to owners at each new residential complex in 2022. Customers can go through the flat acceptance procedure, get their keys, sign an agreement with the management company, obtain certificates for metering devices, consult with specialists and promptly resolve all arising issues in these offices.

Development of accessibility and inclusion

In 2022, the **telecommunications asset** continued to develop its online school for the elderly called #TeachYourLovedOnes. This free course is designed to help seniors to use gadgets: download apps, shop in online stores, subscribe to online newspapers and magazines, pay utility bills online, make doctor appointments and search for medicines in the nearest pharmacies.

In the reporting year, the telecommunications asset also launched a project to translate films on its video streaming platform into sign language. The inclusive collection offers comedies, family films, animated features and sci-fi. The company implemented a project for simultaneous translation into Russian sign language of more than 50 episodes of the animated series Prostokvashino. A special page also features performances in Russian sign language by the volunteer puppet theatre of the telecommunications asset called "Fairytale Mobile Theatre". The company plans to expand its inclusive collection as part of the projects "Distant Loved Ones" and "I Will Live".

The hospitality asset also works to create a barrier-free environment and improve accessibility of its services for people with disabilities. Its hotels have 76 rooms for people with reduced mobility. The rooms fully comply with the ergonomic requirements for persons with reduced mobility and are also additionally equipped with luminous and audible warning systems. All rooms in this category have adjacent rooms for accompanying persons.

Sistema's companies also contributed to equal opportunities in education and culture. In 2022, Sistema Charitable Foundation and the Russian Museum presented an inclusive project for blind and visually impaired visitors. The audio guide with descriptions of items covers 20 masterpieces by Russian artists of the 19th and early 20th centuries from the main collection of the Mikhailovsky Palace. It makes the cultural experience of visually impaired persons more diverse and emotionally fulfilling.

At the end of 2022, Sistema Charitable Foundation and the telecommunications asset in partnership with the Russian Museum launched a video guide in Russian sign language for the exhibition "Home and Family. Pictures of Peaceful Life". The video guide to the exhibition consists of 11 clips about the exhibits supplemented with subtitles. Deaf and hard-of-hearing experts participated in the creation of the video guide.

In the reporting year, Sistema Charitable Foundation in partnership with the medical community, Sistema Gallery and Gzhel Group launched an art therapy project "Art of Possibilities". The project is aimed at supporting seriously ill adults and children undergoing inpatient treatment and rehabilitation at Sistema's chain of private clinics.

> 50 episodes
of the animated series Prostokvashino were translated into Russian sign language

20 masterpieces
from the collection of the Mikhailovsky Palace are covered in a descriptive audio guide

76 rooms
for guests with reduced mobility are set up at the hospitality asset's hotels

11 videos
in Russian sign language were created about items shown at the exhibition "Home and Family. Pictures of Peaceful Life" at the Russian Museum

New e-book subscription service

In 2022, Sistema's **telecommunications asset** continued to develop new services to enhance consumer convenience. The company launched an e-book subscription service with its own publishing house. The library includes hundreds of thousands of e-books, audiobooks and magazines. With the new multi-format catalogue cards, users can quickly find and switch between audiobooks and e-books. Special attention is also paid to the personalised recommendation system: the service analyses the user's preferences and suggests the most interesting new books.

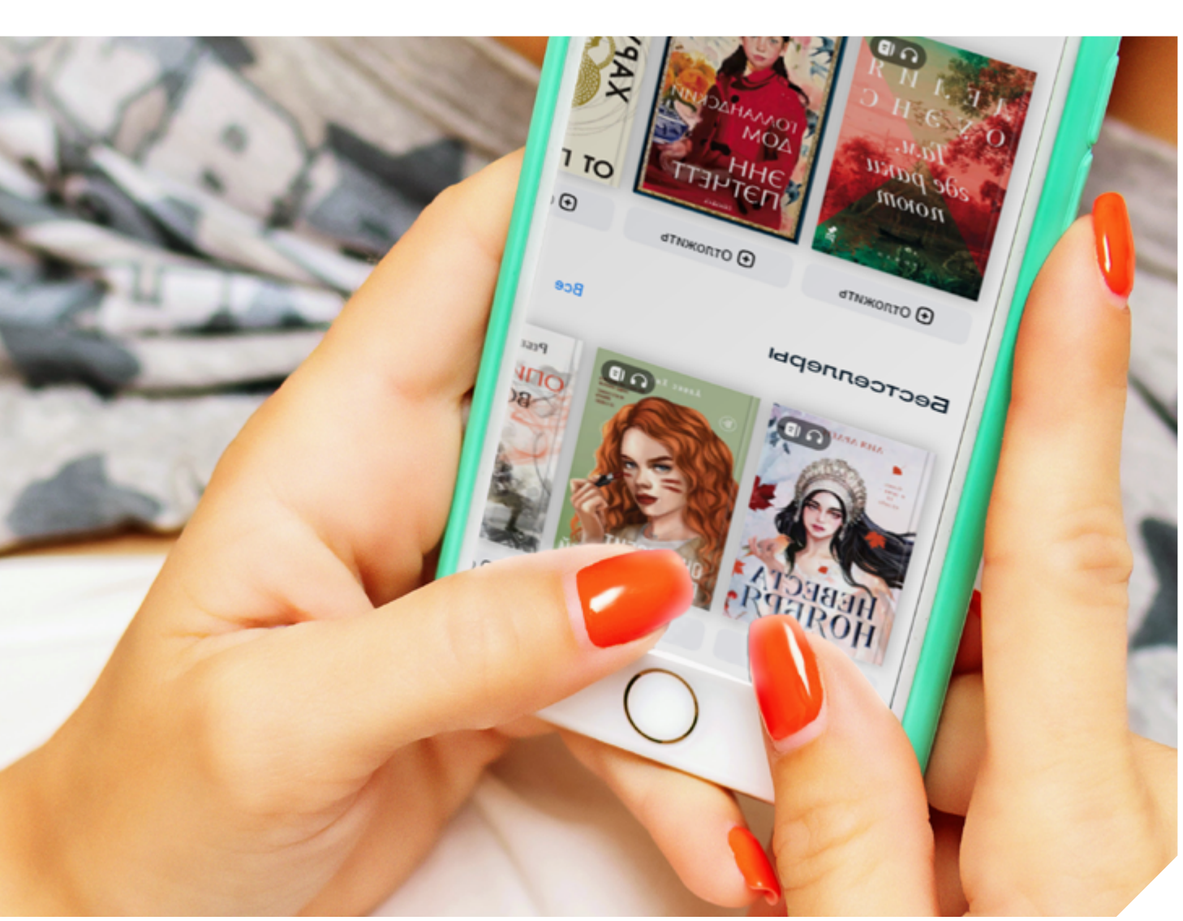
In addition, the book service together with its partner — a video streaming platform — launched a project in which original TV series were reworked into literary works of different genres. The service also has "cross-recommendations" of movies and TV series that might interest the reader. The service also produces podcasts on current topics with Russian media outlets and independent authors. Thus, the possibilities of its own publishing house and the idea of cross-platform connectivity take the service beyond the usual online library.

The service plans to add up to 10,000 new, previously unreleased audiobooks in 2023 using AI technologies.

The service plans to add in 2023

up to 10,000

new, previously unreleased audiobooks in 2023 using AI technologies



Responsibility for products

GRI 3-3 GRI 416-1

Sistema Group is constantly working to improve the quality of its products and services and ensure their safety for consumers and the environment. Modern quality assurance tools are implemented throughout the entire product life cycle. Consumers purchasing products or services of Group companies can be sure that they do not have any negative impact on human health, animals and the environment.

Certification

SASB RR-FM-160a.1

In order to confirm the high quality of products, Sistema's companies support the development of international and domestic certification practices.

Sistema's **timber group** is guided by the requirements of Russian and international certificates throughout the entire product chain. The company complies with the principles of responsible forest management. The share of the company's forest resources certified under international voluntary forest certification was 77%[1]. In 2022, voluntary environmental certification of the group's products was carried out by the independent certification company NEPCon (formerly the FSC operator). The company decided to switch to the independent forest certification scheme SFMRU/38200[2] based on the expert standards of forest management associations and the standard for the chain of custody of wood and wood-based products (ISO 38200:2018). Also in 2022, the CLT plant passed CE (Conformité Européenne) certification, which confirms that the company has implemented quality assurance practices for its products in accordance with European requirements. Its CLT panels also passed the European Technical Assessment (ETA) and at the end of 2022 received a certificate of conformity from the State System of Technical Regulation of the Republic of Kazakhstan. It facilitates the implementation of large-scale projects with government agencies and large private investors. In addition, Sistema's timber industry asset received a positive expert opinion from the Institute of Expert Assessment for a new heating plant at its woodworking mill in the Krasnoyarsk region in 2022. The plant's technologies help reduce the facility's power consumption by 10%, while bark utilisation makes it possible to organise virtually waste-free production. The heating plant is expected to be launched in 2023.



1 Data as of 4 March 2022 for PEFC certification and 8 April 2022 for FSC certification. These certification systems have suspended their certificates on such dates.
2 Independent forest certification system based on the forest management and forest use standard SFMRU/38200-ST-1:2022 of the Forest Certification Development Centre and ISO 38200:2018 standard "Chain of custody of wood and wood-based products".

In the reporting year, the **healthcare asset's** labs in Moscow and the Moscow region confirmed compliance with the international standard ISO 15189:2012 "Medical laboratories", which attests to the high quality of medical laboratories. Moreover, in September 2022, the healthcare asset's clinical hospital in the Moscow region was accredited according to the national standard of Roszdravnadzor "Quality and Safety of Medical Activities". The standard meets the requirements of the international non-profit organisation Joint Commission International (JCI) and guarantees that the quality and safety of medical activities are at the highest level.

In September 2022, the contact centre of Sistema's healthcare asset successfully passed certification according to the Russian version of the ISO 18295 standard "Customer contact centres". The certificate confirms high standards of customer service quality and continuous work to improve customer satisfaction.

In the reporting year, Sistema's **pharmaceutical asset** expanded its presence in the CIS and confirmed compliance with the regulatory requirements of the EAEU. In April 2022, the pharmaceutical asset's plants received EAEU GMP[1] certificates, confirming compliance with the EAEU Good Manufacturing Practice regulations, which guarantees the safety and efficacy of the drugs produced. This certificate allows selling drugs in the markets of Russia, Belarus, Kazakhstan, Armenia and Kyrgyzstan with unified requirements to product quality, efficacy and safety. The pharmaceutical asset's other plants also plan to undergo certification according to the EAEU GMP standards.

In addition, at the end of 2022, Sistema's pharmaceutical asset brought about half of its portfolio of marketing authorisations into compliance with the EAEU requirements and obtained an international certificate of compliance with the GDP requirements. The international GDP certificate[2] confirms good distribution practices for wholesale, transportation and storage of medicines.

A new line of grains and pulses of Sistema's **agricultural asset** has undergone voluntary certification in the field of environmental and industrial safety. Compliance with environmental requirements was confirmed by an accredited certification centre. The inspection included an audit of the full cycle of production, technological process and product storage, sampling and independent laboratory analysis by a research institute.

In order to increase customer confidence, Sistema's **e-commerce asset** started posting data from the Federal Accreditation Service on certificates and declarations of conformity. In the reporting year, safety data was added to more than a million product detail pages. The marketplace plans to increase the number of verified product pages with confirmed documentation.



Product inspection

Inspection of product quality and consumer properties is an important aspect of ensuring consumer safety.

In 2022, the **timber asset's** R&D centre conducted more than 250 strength tests for industrial paper packaging. As part of the tests, all closed sacks filled with cement or dry construction mixes successfully passed drop tests to test their tear resistance and exceeded the safety margin by 2.5x. In the reporting year, Sistema's timber asset also developed a new type of paper packaging for construction mixes and other dry bulk products that protects the contents from water, air, oils and fats. The polyethylene in the protective layer of the paper bag was replaced by a water-based polymer composition that is safe for humans and the environment. The company conducted laboratory tests that confirmed the moisture resistance of the material. The packaging can be recycled and disposed of without harming the environment. Pilot production is planned for the first quarter of 2023.

The timber asset is also introducing an advanced technology for multi-storey wooden housing construction — CLT — to the Russian construction industry. In 2022, CLT panels successfully passed fire resistance tests, making them a safe and reliable building material.

In 2022, Sistema's **e-commerce asset**, together with other Russian marketplaces, created a unified database with information on sellers working with counterfeit goods. After such sellers are blocked by one of the marketplaces, information will be added to the unified database and other marketplaces will be able to check them as well. This solution will help prevent cases of illegal sale and distribution of goods through the Russian e-commerce platforms. It is also planned to create, in cooperation with the Russian Federal Antimonopoly Service, a mechanism for suspending the activities of vendors working with counterfeit goods.

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Implementation of a pilot project to assess residential properties against DOM.RF's green standard

In 2022, DOM.RF and Sistema's **residential property development asset** signed an agreement to implement a pilot project to assess apartment buildings for compliance with the criteria of the future green standard GOST R 70346-2022 for apartment buildings. By the beginning of 2023, the parties completed the pilot project's assessment stage at one of the residential complexes in Yekaterinburg. The residential complex meets all the key criteria of the standard: it has a high energy efficiency class (A), a white box finish, a system for saving water and energy resources, comfortable thermal conditions, and an accessible (barrier-free) environment; it also meets the requirements for responsible construction. The project also complies with additional (optional) criteria of the standard.

The system of voluntary certification of housing according to the green standard is expected to be launched in 2023 as per the approved roadmap.

GOST R 70346-2022 standard "Green standards. Green apartment buildings. Assessment methodology and criteria for design, construction and operation" — DOM.RF's standards contain quantitative and qualitative characteristics for the assessment of apartment buildings in Russia, covering the entire life cycle of a construction project. Such assessment will identify green apartment buildings and responsible developers.

1 Good Manufacturing Practice.
2 Good Distribution Practice.

Smart homes, cities and manufacturing

Type UN Global Compact Principles

Principle 7

Businesses should support a precautionary approach to environmental challenges

Principle 8

Businesses should undertake initiatives to promote greater environmental responsibility

Principle 9

Businesses should encourage the development and diffusion of environmentally friendly technologies

RUB BN

23.23

spent on information technologies

RUB M

887

spent on environmental protection

THSD T

948

direct greenhouse gas emissions

M T CO_2 EQ

2.7

indirect greenhouse gas emissions

GJ/ RUB M

81.63

energy intensity of consolidated revenue



Smart homes, cities and manufacturing

GRI 203-1

Sistema Group has managed to achieve significant results in improving the quality of life through innovative technologies. Smart solutions contribute to the creation of sustainable, environmentally friendly and comfortable cities. Smart home technologies enable optimised management of energy consumption, lighting, ventilation and other systems, which creates optimal conditions for living and working. Smart manufacturing optimises and enhances the efficiency of industrial processes and ensures the environmental friendliness and safety of production facilities.

Large-scale programme for data centre network development

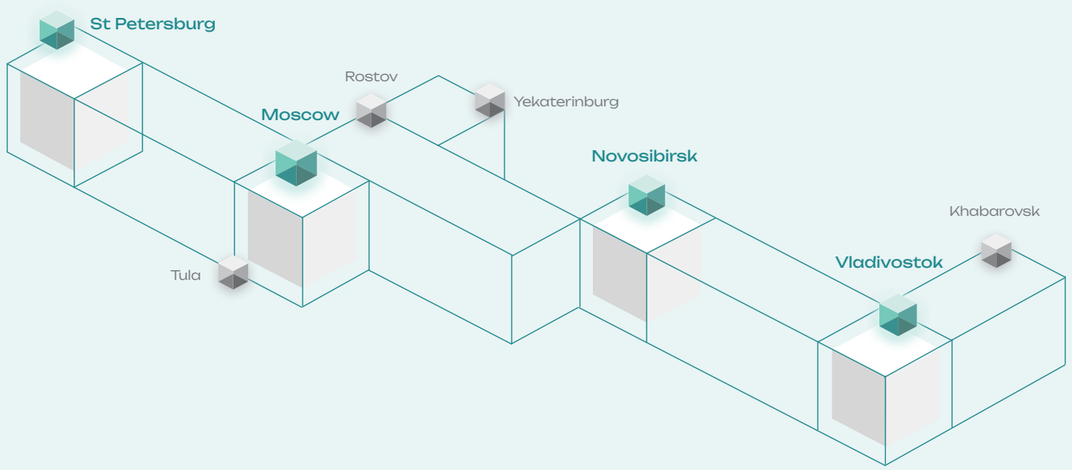
Sistema's **telecommunications asset** has a network of 15 geographically distributed data centres. They are connected by the company's own 248,000 km long backbone network; most of them have a Tier III reliability certificate[1].

In August 2022, the company opened the first modular data centre in the eastern part of Russia — in Novosibirsk (the 13th data centre in the company's federal network). The modules were deployed in eight months, several times faster than the construction of regular data centres. The key advantage of the modular data centre is the scalable number of modules and racks, and the payload can also be increased according to demand. Two modules of 125 racks each with a useful capacity of 1.8 MW have been launched.

The company's data centres are currently located in four Russian cities: Moscow, St Petersburg, Novosibirsk and Vladivostok. Investing in IT infrastructure development and expanding the geography of data centres ensures high-quality communications in all regions of Russia and allows corporate customers to use next-generation networks, have continuous and secure access to their cloud-based information systems, and process and store data.

In the future, the company plans to build four large data centres in Rostov, Tula, Yekaterinburg and Khabarovsk. Investments will amount to about RUB 6bn. After 2024, it is planned to place about 100 micro data centres across the country, uniting more than 20 Russian regions with the largest network of data centres.

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Deployment of the nationwide communications network for the Internet of Things

In 2022, Sistema's **telecommunications asset** completed the deployment of the largest nationwide NB-IoT network for the Internet of Things.

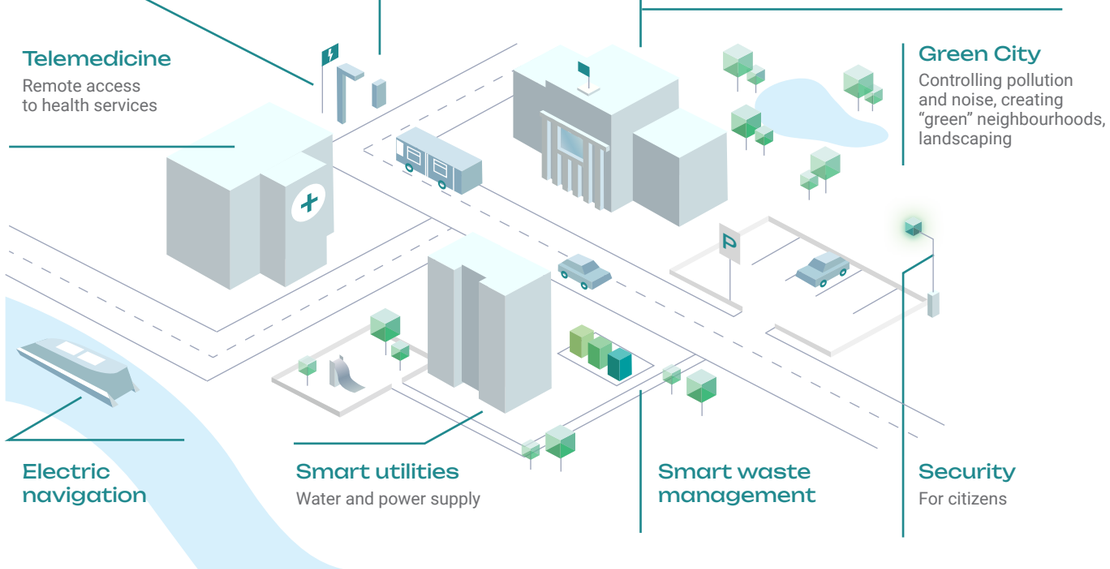
The company's network for the Internet of Things in Russia currently covers more than 90% of potential users. It has about 45,000 base stations and provides services for more than 76,000 business customers, including large utility providers and manufacturers of smart devices.

In the future, the network will work with several hundred million devices across Russia, as one base station can serve up to 50,000 connected devices in the NB-IoT standard. More than 10,000 NB-IoT base stations are planned to be deployed in 2022–2023. Sistema's telecommunications asset will become the key supplier of the Internet of Things communications for energy, industrial and agricultural companies, and for large nationwide smart city projects.

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Smart cities

A smart city is an automated system for managing urban infrastructure, including transport, energy, heat and water supply, and security, based on the data received from the information and communication networks of a particular city.



1 Tier III level means an extremely high standard of equipment and infrastructure reliability. The key difference of such data centres is the ability to carry out maintenance (including replacement of system components or addition and removal of failed equipment) without disrupting the operation of the data centre.

Digitalisation of transport systems

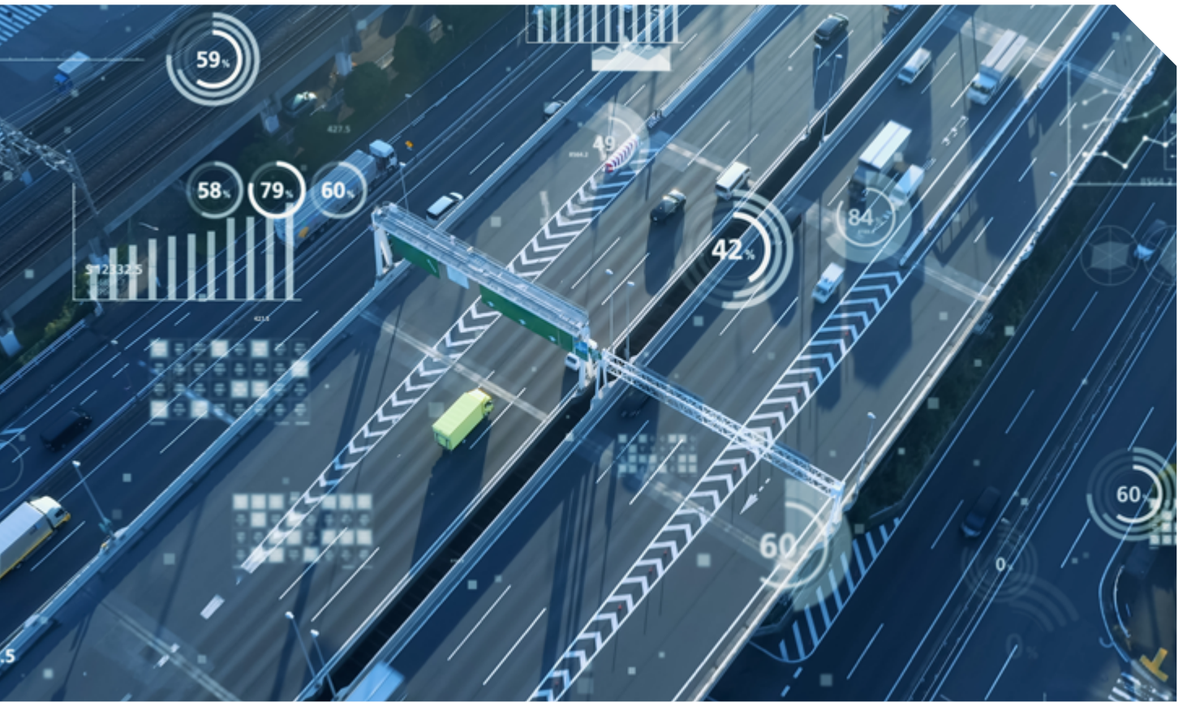
Sistema Group is introducing digital technologies into transport systems to improve passenger comfort and safety, increase the efficiency of road infrastructure, and reduce carbon emissions.

In 2022, Sistema's **high-tech asset** joined the National Technology Initiative's Autonet programme. The company was involved in developing a mechanism for subsidising charging infrastructure, incentivising the use of electric vehicles and developing rules for installing charging stations in private card parks. The development of electric vehicles and charging infrastructure contributes to improving the city's environment by reducing air pollutant emissions.

The company also presented its Digital Platform for Transport System Management at the federal conference Intelligent Transport Systems of Russia. The main capabilities of the platform include collecting data and presenting it in the form of dashboards and maps, analysing and forecasting road traffic, and managing transport subsystems and traffic flows. Implementation of intelligent transport systems increases road capacity by 15%, reduces traffic delays and accidents, increases the average speed of traffic by 17%, and helps reduce carbon emissions due to less traffic jams.

In September 2022, the company developed an intelligent traffic management system consisting of digital traffic light panels, a traffic controller and a Traffic Light Digital Twin system. The solution provides connection of CCTV, traffic detectors, weather station and additional sensors (temperature, humidity, power consumption, air quality and carbon level). Implementation of the Traffic Light Digital Twin will improve road safety and reduce traffic light maintenance costs due to remote monitoring and savings on electricity through the adjustment of traffic light brightness.

In 2022, the **telecommunications asset** implemented a project to introduce digital technologies on public transport in the city of Obninsk, Kaluga Region. The company equipped buses with ticket validators for contactless fare payment, digital screens for bus stop information and a CCTV system that will allow drivers to safely drop off passengers and close doors at bus stops, and to prevent emergencies. The company has installed a special system to monitor speeding, bus location and accurate route following, which will reduce the number of accidents. By the end of 2022, more than 70 city buses were equipped. The company also equipped Naberezhnye Chelny trams with smart CCTV and alarm systems. The devices operate on the basis of the telecommunications asset's Internet of Things network and transmit messages with any level of cellular signal. Smart services help ensure the safety of more than 15 million passengers, monitor public transport drivers' compliance with traffic rules and prevent vandalism.



Safe City

Sistema Group is making a substantial contribution to improving safety in cities due to its strong innovative potential.

In the reporting year, the **telecommunications asset** deployed an intelligent CCTV system as part of the Safe City programme in the town of Rasskazovo, the Tambov region. Cameras were also installed along roads, at train stations and in parks in district centres of the Bryansk region. The CCTV system provides online monitoring of events, with camera recordings helping solve cases of thievery and vandalism, and identify road accidents, dangerous driving or jaywalking.

In 2022, the company expanded its project to install intelligent CCTV in 25 public spaces in Vladivostok and its suburbs, and deployed networks of cameras in the cities of Bolshoi Kamen, in Primorsky region, Barnaul and Volgograd. The cameras have an optical zoom function and the high range of lighting ensuring good visibility at night. The system can be used to identify offenders, count the number of visitors, recognise their gender and age, and help find lost people.

In the reporting year, the company enhanced security with smart CCTV in the city of Tyumen and installed smart IoT sensors on attic doors in the town of Raduzhny in Khanty-Mansi Autonomous Okrug–Yugra. The technology of predictive analytics allows not only to record abnormal situations but also to predict them and prevent accidents and thefts. In case of an attempted breaking and entering, employees of a management company receive an alert, after which an on-site team is sent for inspection.

In May 2022, Sistema's telecommunications asset helped ensure fire safety in two shopping malls in Tula. The malls joined the federal digital fire safety platform Prometheus, which is powered by the Internet of Things. The platform also works with more than 20 schools, kindergartens, hospitals and children's camps.

Another socially significant initiative of the company was to provide cash collectors in Vladivostok with portable video recorders that are attached to the employee's uniform and record everything that happens in the device's memory. The devices have a 16x digital zoom and high-quality night vision. Video recorders minimise the risks of accidents and ensure the safety of employees.

In 2022, the company developed a smart lock for keyless access control at secured facilities. A radio module based on the Internet of Things is embedded in the lock, which allows it to be controlled remotely. In the event of a break-in attempt, the device will send an alarm signal to the responsible employee. The lock is made of high-strength steel and has a reinforced antenna. It will be suitable for power supply organisations, heating networks, water service companies, boiler houses, store chains and water transport facilities.

The company also developed a smart alarm button. This solution can be used in schools, hospitals, recreation centres and amusement parks to call rescuers or security guards. The device can also be installed in apartments to help people with disabilities quickly contact relatives or social workers. In addition, the solution can be used to exchange information between shops in industrial enterprises or to streamline communication between customers and staff in retail. The technology works through the IoT network, which ensures reliable signal transmission.

25
public spaces of Vladivostok
are equipped with intelligent video surveillance cameras

20
social facilities in Tula
joined the federal digital fire safety platform Prometheus

Smart solutions for urban and utility infrastructure

Sistema Group is actively implementing its own smart solutions to create a safe and comfortable environment, ensure transparency of settlements between service providers and users, and improve the efficiency of urban and utility infrastructure.

The pilot project "Digital Water Service" **telecommunications asset** was launched in Kopeysk, the Chelyabinsk region, where a system of online monitoring of the volume of water supplied to the city was set up. The reconciliation of settlements with the supplier revealed that the water service company had overpaid the supplier for more than 150,000 cu m.

The project was also implemented in the Taman Peninsula, Krasnodar region. Online access to the platform was used to monitor water consumption and respond quickly to emergencies. After ten months, the project helped optimise infrastructure maintenance costs of remote facilities.

At the end of 2022, the project was implemented in the city of Nizhnekamsk. The digital solution helped the water service company track pressure fluctuations on the networks, quickly locate potential emergency sites and identify illegal consumption. Water level readings in reservoirs and other utilities of the company are measured, recorded and transmitted regularly and automatically.

In early 2023, Sistema's telecommunications asset implemented a smart IoT solution for remote monitoring of temperature and pressure on heating networks in Nefteyugansk. Sensors installed on the city's longest pipeline remotely monitor temperature and pressure of water in online mode. In case of deviation by 2–3 units, notifications will be sent to a smartphone. The smart solution saves time and money required for on-site monitoring of engineering facilities.

Also in the reporting year, a smart CCTV system was implemented at a solid waste landfill in the Belgorod region. Smart cameras help promptly respond to accidents and monitor unauthorised access to the landfill.

In 2022, Sistema's telecommunications asset launched "Digital Water Service", a solution for collecting and analysing data from pressure sensors and meters in water supply systems.

Data collection and transmission devices help calculate the balance of water consumption and identify the points of maximum losses and possible thefts. Data from the devices can be transmitted and analysed by the system in online mode. Comparison of meter readings for different periods can help identify abnormal situations. The equipment can operate without external power sources for up to 10 years.

Air-based monitoring of changes in the urban environment

To monitor changes in the urban environment, Sistema Group is developing air-based monitoring solutions for the environmental situation, integrity of public utilities and the safety of urban spaces.

Sistema's **high-tech asset** launched an air-based monitoring system that includes controlled unmanned aerial vehicles and robotic take-off and landing stations — droneports. The droneports charge drones, launch them and can operate 24/7. Thus, drones can automatically — without human participation — inspect territories from the air and provide up-to-date information about unauthorised dumps, construction sites, utilities and roads, conduct thermal imaging surveys, and monitor the environmental situation. The solution is especially relevant for surveying places and facilities that are difficult for humans to access.

In addition, the high-tech asset, together with specialists from Moscow and Tyumen, assembled a spacecraft for the purposes of environmental monitoring. After entering orbit, the satellite will take images of clouds of different layers and dozens of lakes. The data on surface temperature of lakes in spring and autumn will make it possible to analyse the thermal regime of lakes. Remote diagnostics will increase the reliability of weather forecasts. The asset also plans to launch several dozen spacecraft that will monitor wildfires, help navigate ships and create digital models of cities for effective management.

IT solutions for cultural institutions and cultural events

Sistema Group implements its own innovative solutions for cultural institutions. Museums, libraries and religious sites are provided with indoor climate monitoring sensors to preserve their collections. Geoanalytics-based attendance analysis services are being developed for organisers of cultural events.

In 2022, Sistema's **telecommunications asset** installed IoT-based climate monitoring sensors called Celsium during the reconstruction of the Resurrection Cathedral in Arzamas. The sensors constantly monitor changes in temperature, humidity and atmospheric pressure and transmit them to the cloud. In case of deviation from the set parameters, restorers instantly receive a notification in the app, which allows them to promptly respond to the incident. This helps preserve the exterior and interior decoration of the church, including paintings, ancient icons and 18th-century frescoes.

A system of constant monitoring of indoor climate was also installed in the Rybinsk Museum. Sensors make it possible to track changes in indoor climate in the exposition halls. The main reasons for the ageing of museum collections are unstable temperature and air humidity: they lead to mould growth, drying or delamination. Previously, measurements had to be taken manually twice a day with a special device. Now the museum staff can track the current situation and see how the temperature, humidity and pressure in the rooms have changed over a given period using an app.

Celsium sensors were also installed in the Nizhny Novgorod Special Library for the Blind as part of the testing. The devices work in book depositories, reading rooms and lending rooms. The solution will help preserve more than 150,000 books.

In 2022, Sistema's telecommunications asset continued to develop a service for analysing attendance at outdoor cultural events based on a geoanalytics system. The service is designed for organisers of outdoor events: festivals, concerts and sports competitions. It can generate a detailed report on the number of visitors, their socio-demographic composition and the time spent at the venue. The geoanalytics platform can also assess the availability of recreational and social infrastructure in a city or district.

> 150,000 books

will help to preserve the sensors for monitoring the microclimate "Celsius"

Indoor climate monitoring

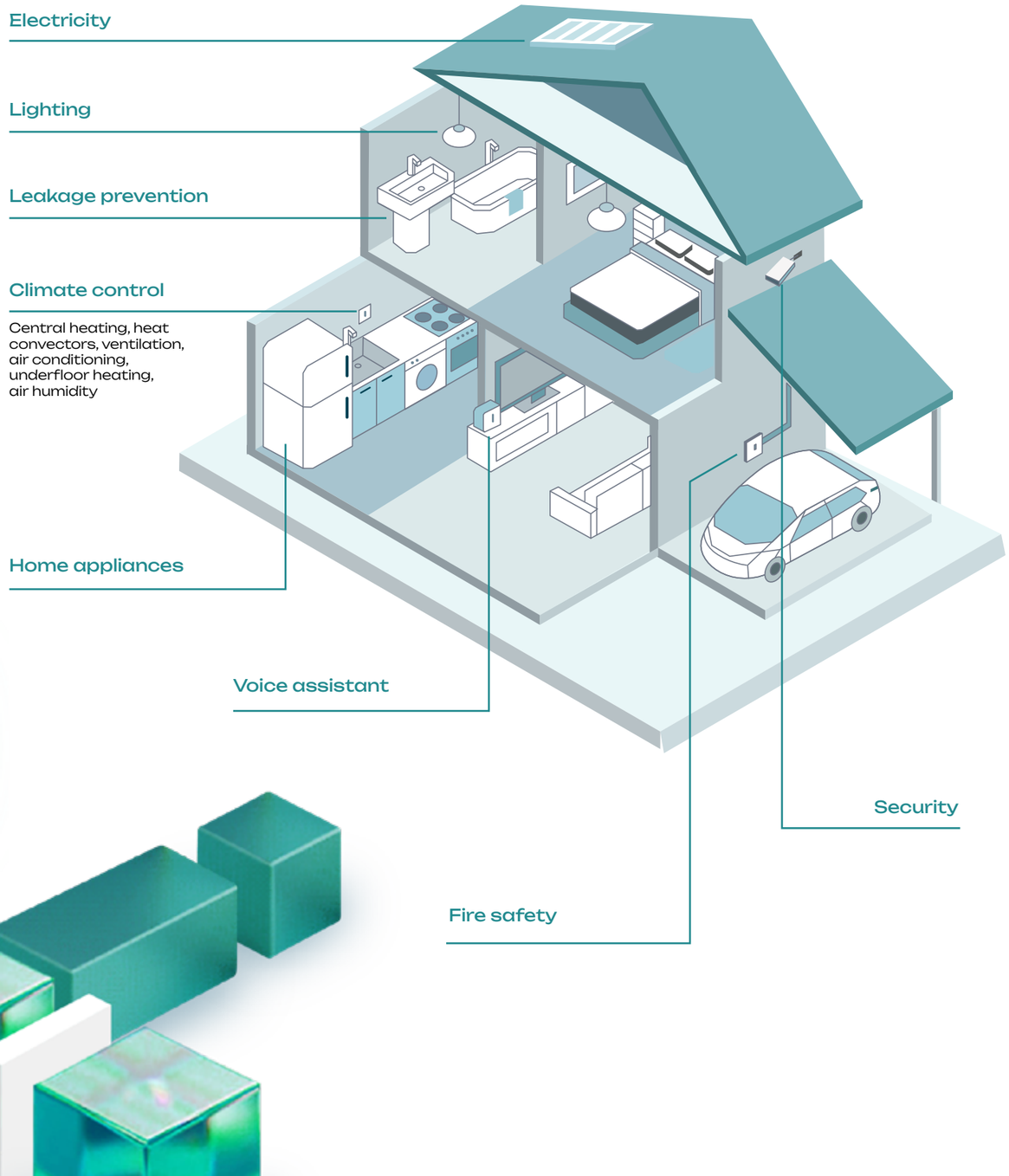
Sistema's assets develop smart indoor climate monitoring systems that ensure proper quality of goods storage at retail sites.

In 2022, the **telecommunications asset** implemented an indoor climate monitoring system in a chain of clothing stores. The IoT sensors constantly monitor room temperature and humidity, even if there is a power cut. All collected data is stored in the cloud, which allows comparing temperature and humidity indicators in the premises.

In the reporting year, the telecommunications asset also developed sensors to assess the medicine storage conditions. The device makes it possible to assess the parameters and avoid unstable temperature and humidity of the premises, as even a 5% daily deviation of the indicators is considered unacceptable when storing medicines. The service promptly notifies employees about any irregularity in these parameters via text messages and e-mails. The sensors are recommended for use in hospitals, pharmacies and other medical facilities.

Smart homes

Sistema Group companies actively develop smart home technologies for automating the functioning of residential premises. The system automatically maintains the indoor climate, provides remote control of lighting, ventilation, power supply and home appliances, and sends a notification in case of motion detection or intrusion into the apartment.



Sistema Group's **property development** company participates in the development of a unified concept for increasing the level of digitalisation of apartment buildings in Russia and also acts as one of the founders of the Smart Apartment Building autonomous non-profit organisation. In 2022, for the first time, one of the new buildings of the property developer's residential complex in Moscow received the "Class D Smart House" certificate. The register of smart new buildings includes about 180 projects in different regions of Russia.

In 2022, the company started offering all residents of its newly built houses the opportunity to order the installation of a smart home system in the mobile app, by phone and during the acceptance of a new apartment. The app was also updated with an opportunity to order installation/repair of plumbing fixtures, electrics and household appliances, and interior finishing.

In the reporting year, the **telecommunications asset** continued to develop smart home technology. The company developed an IoT solution for automatic data collection from electric meters based on the NB-IoT standard, which, compared to other M2M[1] standards, provides increased network capacity and low power consumption. Devices operating according to this standard can be installed even in areas with insufficient signal strength. They are also fully autonomous and can work up to ten years without recharging. This standard is used for remote monitoring and data collection from electric metering devices in small settlements of Kuban. The technology makes it possible to establish precise control over electricity supply to consumers and reduce costs by automating processes.

In 2022, the telecommunications asset launched an ecosystem subscription, which, in addition to communication and internet services, includes a security system kit. The security system includes wireless motion and door opening sensors, an SOS button, a mobile app, 24/7 monitoring and the ability for a response team to come in the event of unauthorised access. The mobile app can be used to remotely monitor the system's and apartment's status, activate / deactivate security mode, receive notifications and call the response team.

Starting from 2023, the telecommunications asset started installing hallway CCTV cameras in the town of Balashikha. The programme covers 1,000 buildings with 3,100 cameras already installed. The cameras transmit the recordings to the Data Storage and Processing Centre of the Moscow region, which makes it possible to promptly identify offenders.

~180 objects
are included in the register of smart new buildings

3,100
video cameras
installed at entrances in Balashikha

Indoor climate monitoring in residential premises

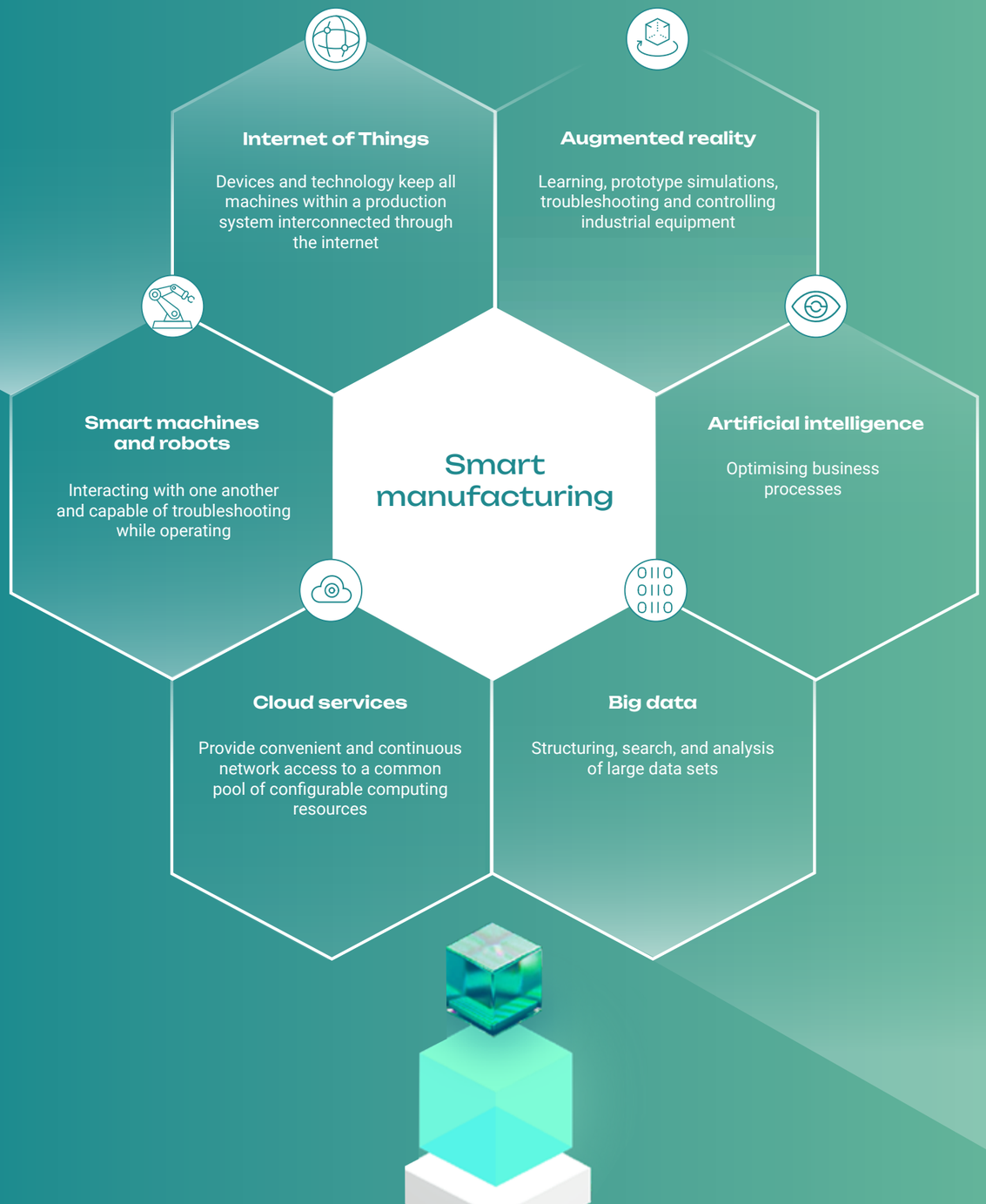
The indoor climate in residential premises has an impact on human well-being and on the premises themselves. Sistema Group creates tools for online monitoring of indicators characterising the condition of a home.

At the end of 2022, Sistema's **telecommunications asset** started testing its own IoT solution for constant monitoring of the climate regime in new buildings in Yekaterinburg. Sensors monitor data on temperature, atmospheric pressure, relative humidity, presence of suspended particles and harmful impurities in new apartments. The data is recorded every 10 minutes and sent to the service's cloud data storage. If any deviations are detected, the system immediately notifies the user via the Celsium app. The telecommunications asset's solution for indoor climate monitoring was also deployed in multi-storey buildings in the city of Cheboksary, the Chuvash Republic. The need for indoor climate monitoring in new buildings is associated with the use of large amounts of water and mineral building materials at the construction stage, as well as a number of climate requirements residents have to comply with during the first year. This monitoring will improve the quality of future design solutions and construction works.

1 Machine-to-Machine.

Smart manufacturing

Smart manufacturing is aimed at digitalisation of equipment, personnel activities and production processes. New technologies make the production process safe, allowing to predict scenarios of risk situations, while modern software synchronises and coordinates internal and external operational processes, minimising the human factor.



Implementation of smart CCTV systems at production facilities

Sistema Group is implementing smart video analytics systems at industrial enterprises, which helps ensure safety at production sites, and detect and prevent violations and emergencies.

The **telecommunications asset** has developed a cloud CCTV platform that includes analytical services such as motion detection, detection of sabotage attempts and response to sudden changes in sound volume. The service helps ensure the security of facilities and employees and remotely monitor business processes. The company plans to develop the platform's analytics tools and scale the cloud solution to meet the needs of large corporate customers. It is planned to connect 5,000 to 10,000 customers to the cloud service within three years. In April 2022, the asset provided a smart CCTV system to a cardboard packaging production facility in Kaliningrad. The company deployed 30 cameras and turnstiles with facial recognition.

The asset also equipped gasoline trucks of a transportation company in the Republic of Tatarstan with CCTV. The cameras are protected against vandals and operate at temperatures from –40 °C to +60 °C, with infra-red illumination activated in low light conditions. The system can be used for remote monitoring of the movement of transport to build optimal routes and prevent unauthorised opening of cargoes. The system helped the company eliminate inappropriate use of the fleet: it reduced fuel purchase costs by 7% and cargo delivery time by 12%.

The asset also deployed a smart CCTV system in a warehouse of a manufacturer of ceramic decorative and finishing materials. The system includes 22 high-resolution cameras to monitor the situation in the warehouse, loading area and order pick-up office. CCTV allows controlling access to the enterprise, the quality of production processes and the work of staff.

In 2022, the telecommunications asset supplemented the cloud CCTV service with AI. The system can be used to detect and respond to emergency situations three times faster; the built-in thermal imager detects overheating of equipment. At work sites, the system recognises objects left for more than 15 seconds and notifies the operator. The company developed an AI-based security system for the Special Economic Zone (SEZ) "Centre" in Voronezh. More than 9 km of fibre-optic cable was laid on the 6 km perimeter, and 155 smart cameras and 170 security vibration sensors were installed. Video cameras with facial and license plate recognition count vehicles and people, and control the time of presence and actions on the territory. This data speeds up the process of passing customs control and ensures the safety of property. The intelligent CCTV system will make the SEZ more attractive to investors.

The high technology asset has developed an accurate positioning platform to ensure industrial safety.

The development allows you to monitor the location of personnel, cargo and equipment in production in real time.

The digital platform also provides analytics on travel routes and allows you to upload logs and event reports.

The system reports on the "atypical" behaviour of personnel, displays the movement of employees or objects, notifies of events, warns of dangers.

The solution is useful for enterprises operating retail premises, protected areas, storage facilities and warehouse bases.

Digitalisation of transport in enterprises

The development and implementation of new technologies for transport systems contribute to the optimisation of logistics.

In 2022, the **telecommunications asset** started transitioning Russian companies to a domestic transport monitoring solution. The transition does not require equipment replacement, so it is carried out quickly and with minimal costs. In the reporting year, the telecommunications asset provided a logistics company with a monitoring system. The technology makes it possible to track the movement of vehicles, control fuel consumption, identify negligent drivers and automate logistics chains. This helped reduce fleet maintenance costs by 30% and improve fleet efficiency by 25%.

The telecommunications asset also implemented an intelligent collision prevention and truck driver monitoring system at a cement producer's transport company. The control system consists of five video cameras that monitor the position of the vehicle on the road and track its speed, obstacles on the road and dangerous proximity to other vehicles. The technology also registers the driver's condition and in case of atypical behaviour warns him with a special signal, which helps prevent emergencies caused by humans.

Commercial LTE networks for business

Effective digitalisation as a factor in optimising industrial processes is impossible without telecommunications networks. Sistema Group cares about infrastructure development and consistently develops commercial networks in hard-to-reach production fields and remote industrial zones.

In 2022, the **telecommunications asset** equipped a coal mine in the Kemerovo region, the Mnogovershinnoye deposit in the Khabarovsk region and a new mine at the Mokulaevskoye deposit in the Krasnoyarsk region with LTE networks. For the first time, the network was deployed in three hard-to-reach fields in Khanty-Mansi Autonomous Okrug–Yugra, which allowed more than 12.000 employees of the fuel and energy complex to access digital services. In the reporting year, LTE coverage was extended to five more mining fields in the region. The LTE network allows organising prompt notification about current work processes and potential emergencies at mining sites and monitoring the condition of quarry equipment online. Stable mobile communication improves employee safety and creates comfortable working conditions in difficult climate zones.

The LTE network also allows launching new production automation services with lower costs, implementation time and information security risks, which is especially important at remote enterprises. In 2022, the telecommunications asset completed construction of a two-kilometre fibre-optic communication line in one of the key industrial parks in the Voronezh region, providing its territory with broadband Internet access at 100 Mbps. Based on this telecommunications infrastructure, resident enterprises can optimise production processes, and implement IoT and AI solutions. A similar internet network was installed at the construction site of the Amur Gas Processing Plant covering an area of about 800 ha, which makes it possible to provide connectivity to process lines where equipment is being installed and tested.

In the reporting year, the company upgraded the internet network in the Lipetsk SEZ, increasing network capacity and mobile data speed (by 20%). The infrastructure in the SEZ includes, among other things, the company's own Internet of Things network,

400 enterprises
of the Republic of Tatarstan have the opportunity to use digital services for business at speeds up to 1 Gbit/s

which allows enterprises to introduce modern digital services: IoT devices for remote monitoring of equipment, smart video analytics to control compliance with industrial safety standards, and cloud platforms. The telecommunications asset also expanded and strengthened the infrastructure in the industrial zones of the Republic of Tatarstan, as a result of which about 400 enterprises were able to use digital services for business at speeds of up to 1 Gbps.

Agriculture

The development of innovative technologies and artificial intelligence is a key growth driver for the agricultural industry.

The Group's **agricultural asset** has been actively using unmanned control technologies since 2017. In 2022, the fleet of unmanned vehicles was equipped with a satellite monitoring and control system; an extensive operator-level reference network LocationPro was built, which calculates corrections to satellite signals with an accuracy of several millimetres and corrects the combine's movement in the field. According to test results in the Krasnodar region and the Astrakhan region, the use of autopilots with corrective signal technology can reduce seed consumption by 15% and fertiliser consumption by 15% to 30%. The agricultural asset plans to scale the use of machine and tractor stations equipped with the autopilot system and promote the technology in other regions of the country by providing professional machinery maintenance. In the reporting year, the company also tested the operation of an agricopter base station for automated charging and remote transmission of flight tasks to drones. Agricopters are an effective solution in agriculture, as they do not leave tramlines, reduce soil compaction and simplify the treatment of high crops; the technology of ultralow-volume spraying of plant protection products reduces their consumption and increases the efficiency of crop treatment.

As part of the experiment, in the reporting year Sistema Group's agricultural asset conducted autumn sowing of winter wheat on an area of 400 ha using a three-dimensional field model. Based on geospatial data and terrain relief, the technology identifies natural water flow paths and zones with excessive moisture, which allows for the correct direction of tillage and sowing, minimising the washing away of the fertile soil layer and allowing the crop to evenly accumulate moisture.

An innovative soil injection technology for liquid fertiliser application was also successfully tested in the fields of the agricultural asset in 2022. The upgraded injectors were equipped with nozzle needles from medical-grade stainless steel, eliminating needle corrosion and improving the protection of pumps, pipelines and moving parts.

The **telecommunications asset** also began testing photo and video monitoring technologies at agricultural enterprises in different regions of the country in the reporting year. In the Republic of Bashkortostan, an aerial photo system was introduced to simplify animal stock inventory and eliminate errors. The innovative solution counts animals and tracks their movement between farm zones. The telecommunications asset deployed an intelligent CCTV system with facial recognition, which operates around the clock in day and night vision modes, at an agricultural site in the Tambov region. The CCTV system was integrated into the enterprise's security system and ensured the operation of an "electronic front desk", facilitating staff monitoring and work time logging. A similar system of video monitoring and photo counting of the volume of plants was implemented at a rice farm in the Rostov region in 2022.

15%
reduction in seed consumption when using autopilots with correction signal technology

up to 30%
reduction in fertiliser consumption when using autopilots with correction signal technology



Timber industry

Sistema Group continues to improve smart manufacturing technologies in the timber industry. In particular, digital technologies and machine vision are effectively used, significantly increasing labour productivity and safety.

The enterprises of the **timber industry** asset are developing the technology of digital design of industrial structures using ground surveying of objects with a laser scanner and creation of a 3D model. The 3D model allows taking necessary measurements, determining the actual location of equipment, comparing the object with archive documentation for changes, identifying deviations and modelling future changes. The laser scanner is also effective in digital monitoring of construction within the framework of design supervision and engineering supervision. In 2022, design and engineering documentation was completed for 27 projects, including nine projects related to industrial plant modernisation.

In addition, the company successfully tested Smart Timber, a system for automated timber counting using computer vision and machine learning algorithms. The system is integrated with the corporate timber counting system, minimises time-consuming and routine processes, and improves measurement accuracy. Smart Timber is one of the most significant digital options that supports the input of information in the format required for transmission to LesEGAIS[1]. In the reporting year, it was recognised as the best project in the category "Digital Transformation in Industry" at RB Digital Awards 2022.

In 2022, the timber industry asset's enterprise developed and successfully applied a 1C-based MES[2] system — a unique software for accounting of plywood production. This new software enables high-quality planning and prompt management of production, manufacturing of a specific volume of products exactly according to the customer's order, and synchronisation and coordination of business processes of different departments. The MES system directly affects the efficiency and profitability of the enterprise without additional investments in production. In the reporting year, the project was also presented at the 6th international contest of the best management and accounting automation projects 1C:Project of the Year.

In the reporting period, Sistema Group's timber company tested the domestic augmented reality software platform IKSAR in combination with industrial AR[3] glasses. The equipment was tested in the field for two weeks, during which it was evaluated for use in setting up communication and maintenance equipment for logging machinery. Test results showed that the platform improved the speed of task completion and the reliability of the surveillance data, and reduced the number of routine operations to fill out special logs and reporting forms. In addition, the equipment leaves a digital trace, which significantly reduces the risk of possible falsifications.



1 LesEGAIS is a state information system whose task is to collect information about the processes of timber harvesting and trade. Received the information is used for government control of the wood processing industry and resource use.
2 From English manufacturing execution system – production process software designed to coordinate and optimize product output within any production.
3 Glasses using augmented reality technologies.

Energy, petrochemicals and construction

In 2022, Sistema's **telecommunications asset** provided the largest electric grid company in Yamal with an intelligent CCTV system. A system of 28 digital cameras operating without blind spots and withstanding temperatures as low as −50 °C maintains round-the-clock control over production facilities and the company's territory in the extreme conditions of the Far North.

Sistema Group's telecommunications company developed Energosbyt-Service, a system to automate electricity metering by electricity retailers. The system provides a full cycle of data collection: the meter automatically transmits readings via mobile network to the electricity metering systems of utility providers. After the installation of such devices, consumers will not have to transmit consumption data manually.

In 2022, Sistema Group's telecommunications asset signed an agreement with one of the largest power grid companies in the Siberian and Far Eastern Federal Districts, under which the asset will ensure remote monitoring and data collection from electricity meters by implementing IoT technologies in the region's electricity metering system. Remote monitoring and data collection will be based on the company's own NB-IoT network using NIDD (Non-IP Data Delivery) technology.

In the reporting year, the asset launched smart monitoring of cable manhole covers at a petrochemical plant in Tomsk using special sensors. Remote monitoring of utility networks and manholes will also help prevent possible actions of intruders and minimise the risks of road accidents.

The telecommunications asset also launched a solution that enabled the largest manufacturer of hot water boilers and integrated heat supply solutions in the Smolensk region to deploy virtual cloud-based workstations. This will allow the company's employees to engage in product development and design from anywhere in the country. In addition, the solution allows the same equipment to be used by different employees at different times, which leads to more efficient use of resources without compromising the quality of work.

A machine-building plant in the Urals switched to a secure Russian videoconferencing service developed by Sistema's telecommunications asset. The service can be used to hold remote meetings with representatives of the company's branches in other Russian cities, present its technologies to customers, and conduct video interviews with job applicants.

In 2022, Sistema Group's **power grid company** tested an automated system for monitoring ice loads, which, using a GSM channel, enables the company to promptly identify ice deposits on wires and transmit the necessary information about the condition of a power line section. The system helps reduce accident rate and improve the reliability of power supply to consumers. This innovative system uses a SIM card not tied to a specific operator; an operator with the best signal will be automatically selected when transmitting information, which is especially important in difficult climatic conditions.

Sistema Group's **property development company** launched its own geographic information system for automated spatial analysis of the investment attractiveness of land plots for housing construction. The system makes it possible to assess a land plot in 15 minutes using a list of key technical and economic indicators.

The asset also developed a multi-module platform, which uses a common information system and allows storing, exchanging and coordinating engineering and design documentation, controlling the volume and timing of construction, and monitoring compliance with occupational health and safety regulations. The platform makes the process of accepting work at construction sites systematised and transparent, and streamlines the analysis of identified violations committed by contractors. When developing BIM[1], the company is trying to organise a digital dialogue with government authorities in order to pass state expert review of completed buildings in a digital format within a shorter period of time. In the summer of 2022, the company completed construction of a kindergarten in St Petersburg. This is the first project in Russia fully developed on the basis of BIM. Its total area is 4,400 sq m. The kindergarten is designed for 160 children aged from one to seven years. The project was also the first in Russia to pass the state expert review and receive a positive opinion in a fully digital format. This building will be included in the register of pilot projects of the Russian Ministry of Construction, and will also help to develop and adapt the algorithm of BIM application to the requirements of state authorities.

1 Information modelling technology.

Ship navigation

In 2022, Sistema Group continued to develop domestic ship control systems, autonomous ship navigation, digital navigation and geographic information systems. Sistema's portfolio companies develop solutions for the maritime industry based on proprietary software that meets the requirements of Russian legislation. All technologies for the shipping industry complement each other, which makes it possible to use them comprehensively on Russian vessels.

In October 2022, Sistema's **high-tech asset** created the first Russian vessel traffic management system (VTMS). It obtains data on speed, course and position of vessels. One of the main components of the VTMS is a radar providing information to the dispatch system, which was created using a domestic component base with software written by the company's developers. The VTMS of the high-tech asset became the first domestic system certified by the Russian Maritime Register of Shipping. The VTMS ensures safe passing of vessels near meeting ships, control over their movement, and monitoring of straits and areas adjacent to oil and gas production platforms. This new system belongs to the class of critical infrastructure and helps solve the task of achieving the country's technological sovereignty.

In 2022, the asset continued the development of satellite-based solutions for monitoring ships. In November 2022, the company contributed to the creation of a monitoring system in the world ocean. The company launched test operation of the data visualisation platform of the automatic identification system, which identifies vessels, their dimensions and course. Obtaining such data makes it possible to control shipping traffic, identify vessels involved in water surface pollution, plan shipping, including in salvage operations, and combat illegal fishing. The company plans to launch 70 spacecraft with receiving equipment of the automatic identification system by 2025.

In 2022, Sistema's high-tech asset upgraded its navigation system for autonomous vessels. The Bering navigation system displays information about the vessel's location, route and other vessels, and supports maps in various formats. In 2022, the company added collision avoidance and smooth vessel stop functions. One of several parameters — speed, time of arrival and engine speed — can now be set for any section of the route. The update will allow the vessel to be operated in fuel-efficient mode. In November 2022, the Bering system was entered into the Russian Maritime Register of Shipping, which allowed it to be used on Russian vessels and replace foreign solutions. The system runs on domestic software, so it can be installed by government agencies. Thanks to its interaction with onshore systems, Bering improves reliability and safety of ship navigation, which is a competitive advantage over foreign systems.

Also in the reporting year, the company certified the Rumb autopilot system in the Russian Maritime Register of Shipping. The system provides interfacing with the ship's steering system, which enables complex manoeuvres. For example, in the situation of man overboard rescue, it helps accurately enter the ordered course, taking into account external wind and wave disturbances, which reduces the time of manoeuvring. In December 2022, the asset finalised the technology algorithms taking into account the characteristics of river navigation and, together with a partner, tested a remote navigation system for a tugboat on the Tom River. During the tests, the tugboat travelled 80 km. The technology ensures the river vessel's autonomous navigation on an ordered course, passing other vessels and evasion from objects that pose a danger. The system makes it possible to optimise operating costs, extend the river navigation period and improve the safety of river transportation. In 2023, the company will continue to test the management of river vessels in autonomous mode.

In June 2022, the high-tech asset successfully conducted sea trials of autonomous ship navigation technology (a-Navigation) in the port of Tuapse; it will be installed on ferries of the Ust-Luga–Baltiysk line. The system identified situations and automatically generated passing manoeuvres, thus successfully ensuring traffic safety.

In 2023, the company plans to introduce a-Navigation technologies on ferries operating in the Baltic Sea between the St Petersburg region and Kaliningrad, conduct tests on river vessels, and use the caravan management function for the Northern Sea Route.

The high-tech asset also plans to create domestic software packages for the Unified Digital Services Platform of the Northern Sea Route. The system will collect data from multiple sources, including on-board automated measurement systems, ice reconnaissance drones and space satellites. It will improve the safety of year-round navigation in the waters of the Northern Sea Route, reduce the cost of transportation and the duration of voyages, and optimise icebreaker support of navigation in the waters of the Northern Sea Route. In addition, the system will ensure a high rate of digitalisation of the Arctic.

In 2022, the high-tech asset started exporting shipping technologies. In December 2022, the company presented autonomous ship navigation systems in Hanoi, the capital of Vietnam. Negotiations with government authorities, research centres and shipbuilding companies in Vietnam concerned a-Navigation technologies, simulators, vessel motion monitoring systems and joint projects.

Pharmaceuticals

The pharmaceutical asset is actively modernising production processes at its facilities.

In 2022, Sistema's **pharmaceutical asset** completed the modernisation of packaging equipment at the small-batch section at its production site near Moscow. The new blister machine operates using special materials that provide the highest degree of protection of the drug from oxidising, moisture, UV light and mechanical damage. The "technical vision" system installed in the blistering machine ensures timely rejection of packaging that does not meet quality requirements. In addition, the new equipment will drastically reduce the cost of packaging for drugs produced in small batches.

In the reporting year, the pharmaceutical asset also began comprehensive modernisation of the technological equipment at its plant in the Kurgan region. With the help of engineers and designers from the Industry and Trade Ministry's State Institute of Drugs and Good Practices, the company will upgrade production shops, build a high-tech warehouse, install a freeze drier and launch a new drug packaging line. The production site will make it possible to concentrate the stock of raw materials and finished products in one place and will act as a convenient hub for structured deliveries from China. In addition, the plant's warehousing capacity will more than double, which will provide additional opportunities for expanding and increasing production volumes. Investment in the project will total approximately RUB 3bn.

~ RUB 3bn
investments in the comprehensive modernisation of technological equipment of the plant of medicines in the Kurgan region



Operational eco-efficiency

GRI 3-3

Sistema acknowledges the importance of solving global problems, is aware of the impact of its portfolio assets on the environment and is dedicated to managing this impact. One of the Corporation's key responsibilities is determining environmental management priorities within portfolio companies and monitoring their activities to evaluate their environmental footprints and manage related risks.

Sistema's approach to environmental protection is set out in its Corporate Governance Code, Sustainability Policy and the Environmental Policy adopted in 2021. The Environmental Policy is binding on Sistema and is recommended for adoption and compliance by Sistema Group companies. Sistema expects that the Group's suppliers, contractors and other business partners will also adhere to the high standards of environmental responsibility set out in the Environmental Policy.

↗ Sistema's Environmental Policy is available at the company's website.

Environmental management system

Environmental management priorities

Strict compliance with environmental regulations

Corporate Centre

- Corporate Governance Code
- Sustainability Policy
- Environmental Policy

- Conveying commitment to the environmental responsibility principles to the Group companies
- Promoting the best practices of environmental responsibility among the Group companies
- Monitoring the performance of the Group companies in the domain of environmental protection and increasing environmental transparency

Group companies

- Sustainability strategies
- Environmental policies
- Energy saving programmes

- Managing environmental risks and impact
- Introducing environmental responsibility and reporting standards
- Enhancing efficiency (energy saving, resource saving, waste management, protection of air, water and land resources, biodiversity conservation)
- Interacting with stakeholders on matters related to environmental protection

Managing environmental impact across the Group

The Corporation encourages its portfolio companies to introduce and develop environmental management systems with due consideration for the scale of their business and the existing environmental risks. The Group companies are working towards the implementation of environmental management systems according to ISO 14001:2015. The timber asset and the power grid asset have been certified in accordance with this standard.

In 2022, the **timber asset** continued implementing its long-term environmental security strategy for 2021–2025. It is aimed at minimising the impact on the environment, implementing the principles of circular economy and decarbonising production facilities. Environmental factors are considered when planning the development of the company's production: the programmes for the construction and modernisation of the Group's production facilities include environmental targets. When assessing the potential impact on the environment, the company is actively cooperating with stakeholders.

According to the ESG strategy adopted in 2021, the management of environmental impacts is an inherent part of the ESG agenda of the **telecommunications asset**. The ESG Committee of the Board of Directors determines the strategic areas of the company's environmental activities, with overall coordination in the area of "E" (Environment) and operational control carried out by the ESG Centre of the Ecosystem Development and Marketing Division. The company has adopted the policy "Environmental Safety and Environmental Protection at Administrative Facilities", which also applies to interaction with counterparties on matters of environmental protection.

The **power grid asset's** policy on quality and environment is the core document regulating the environmental management system. In 2022, the company once again confirmed its compliance with the international quality and environmental management standards ISO 9001:2015 and ISO 14001:2015.

The **electrical asset** is managing its environmental impacts through the occupational health, safety and environment department and the following documents: a five-year action plan for reducing harmful emissions in unfavourable weather conditions approved in 2019 and preliminary limits on waste and emissions adopted until 2025. In 2022, the production facility introduced a programme for industrial environmental monitoring.

The **residential property development asset** is also taking measures to minimise negative impacts on the environment and optimise business processes in accordance with the sustainable development policy adopted in December 2021. The company's regional enterprises have technology departments in place which are responsible for environmental monitoring. To improve the quality of environmental controls the company established a quality assurance department whose main objective is to define and register criteria for safe construction works.

Environmental Programme at the Pulp and Paper Mill

In 2022, the timber asset of Sistema continued the implementation of its environmental programme at the Pulp and Paper Mill, which will considerably reduce the mill's impact on the environment.

The production facility is completing its long-term project for reconstruction of recovery boilers and replacement of electrostatic precipitators. The total cost of the modernisation project is about RUB 2bn. In February 2022, the company received the equipment required for the replacement of the only remaining old precipitator in recovery boiler No 3, and in the autumn all the renewed precipitators were commissioned. In 2023, the company is planning to carry out an overhaul of recovery boiler No 4. The collection of solid lime dust particles by the new filters will exceed 99%.

Moreover, the treatment facilities at the biological wastewater treatment unit were upgraded, with the cost of works exceeding RUB 100m. The management of the Pulp and Paper Mill (PPM) also ensured the instalment of sensors to monitor suspended solids, temperature, pH and electrical conductivity in industrial effluents. The new equipment makes it possible to detect and keep under control above-limit emissions and effluents from the production shops.

At the end of 2022, the Public Environmental Council including representatives from the administration of the Segezha municipal district and the timber asset reviewed a report on the implementation of the PPM's environmental programme. The asset's representatives confirmed that the modernisation of the PPM was ongoing and that a comprehensive environmental permit would soon be obtained allowing the management to commission the production facility after the completion of renovation works. Moreover, the PPM's management informed the Council members about maintaining a constructive dialogue with the town residents on the environmental impact of the PPM and underscored that the production facility was regularly visited by environmental activists with the purpose of monitoring production processes.

The timber asset provided training to environmental specialists

In 2022, the environmental specialists and engineers together with the representatives of the environment directorate of Sistema's timber asset received training under the programme on ensuring environmental safety at production facilities.

The employees were updated on the revised Russian legislation in the area of protection of the atmosphere, in particular, they were introduced to new procedures for taking inventory of sources of emissions, conducting environmental monitoring and implementing the best available technologies.

Environmental footprint of Sistema Group companies

	Energy	Water	Biodiversity	Emissions	Effluents and Waste
High technology	+				+
Hospitality	+	+			+
Timber industry	+	+	+	+	+
Private healthcare	+	+			+
Commercial property management	+			+	+
Residential property development	+	+	+	+	+
Agriculture	+	+	+	+	+
Telecommunications	+			+	+
Pharmaceuticals	+	+		+	+
Funds & banks	+				
E-commerce	+			+	+
Power grid services	+	+	+	+	+

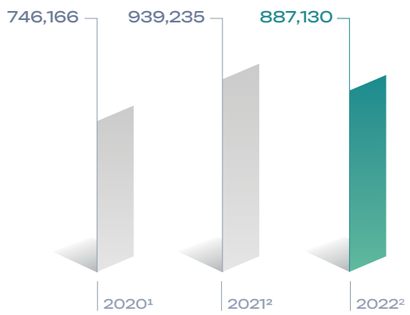
Performance in environmental protection in 2022

UNCTAD A.3.1

Wherever they operate, the Group companies take steps towards mitigating negative impacts on water and land resources, and biodiversity.

RUB 877 m
Sistema Group spent on the protection of the environment in 2022

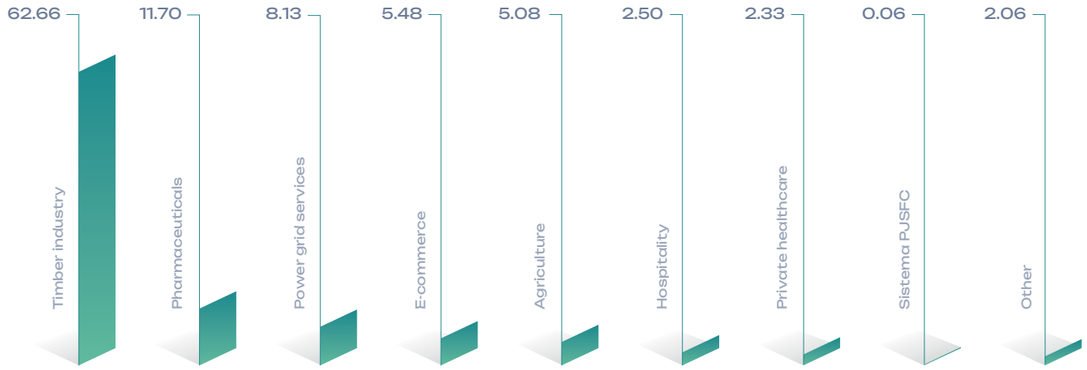
Sistema Group's spending on environmental protection, RUB thsd



Sistema Group's spending on environmental protection by segment, %



Total spending on environmental protection in 2022 by asset, %



GRI 2-27 UNCTAD D.2.1

In 2022, 31 financial penalties for a total amount of RUB 1,342.12 thousand were applied to Sistema's portfolio assets for violations of environmental laws.

1 The data for 2020 is provided for Sistema and its assets operating in the sectors of timber industry, pharmaceuticals, commercial property management, power grid services and high technology.

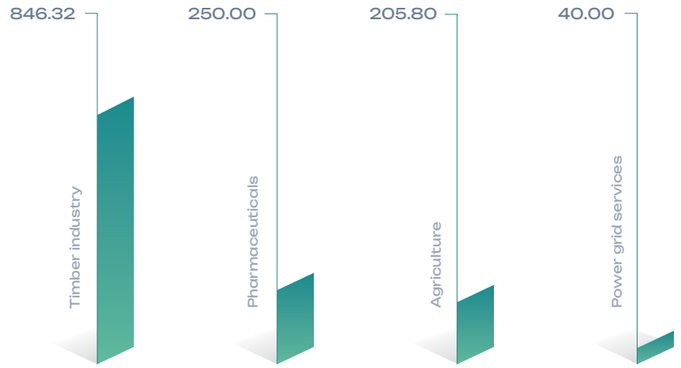
2 The data for 2021 and 2022 are provided for Sistema and its assets operating in the sectors of e-commerce, timber industry, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality and high technology. Indicators for 2020 and 2021 have been recalculated taking into account data adjustments.

1 The data for 2020 is provided for Sistema and its assets operating in the sectors of timber industry, pharmaceuticals, commercial property management, power grid services and high technology.

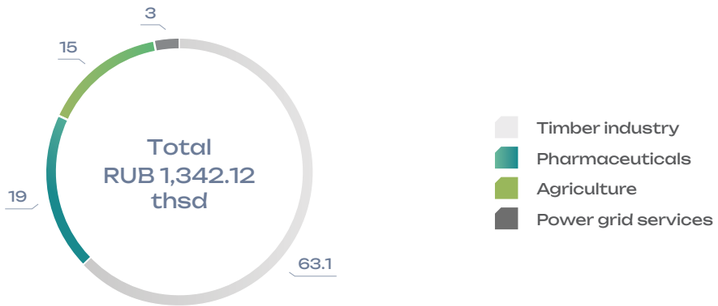
2 The data for 2021 and 2022 are provided for Sistema and its assets operating in the sectors of e-commerce, timber industry, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality and high technology. Indicators for 2020 and 2021 have been recalculated taking into account data adjustments.

Fines for non-compliance with environmental laws and regulations in 2022 by asset

Amount, RUB thsd



%



Use of water resources

GRI 303-1 GRI 303-2 UNCTAD B.1.3

Water is one of the main resources required for the Group's production processes and utility purposes. Sistema Group is committed to ensuring the rational use of water resources and decreasing water consumption. Water withdrawal and discharge are carried out in accordance with the legislation of the regions of operations.

GRI 303-5

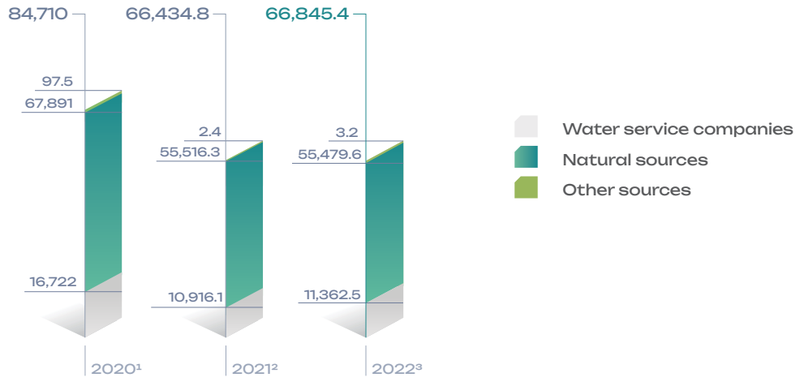
In 2022, the Group companies consumed 66.85 m cu m of water, down 0.62% from 2021. The main sources of water withdrawal were municipal water supply systems and natural sources. The withdrawal of fresh water[1] in 2022 amounted to 57.780 thousand cu m. The volume of water consumption[2] within the Group amounted to 9.8 m cu m. Most of this water is consumed by the Group's production assets.

1 Fresh water here means water from surface and underground sources, rainwater and water received from third parties under water supply contracts. Without Sistema PJSFC and assets operating in the sectors of e-commerce, residential property development, private healthcare, agriculture, commercial property management, hospitality and "other".

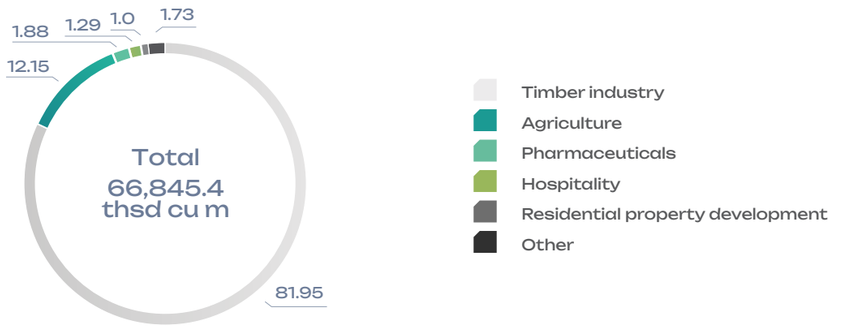
2 Water consumption is calculated using the following formula: Water consumption = Total water withdrawal – Total water discharge. Without Sistema PJSFC and assets operating in the sectors of telecommunications, e-commerce, residential property development, private healthcare, agriculture, commercial property management, high technologies and "other".

Water withdrawal by the Group by source, thsd cu m

GRI 303-3

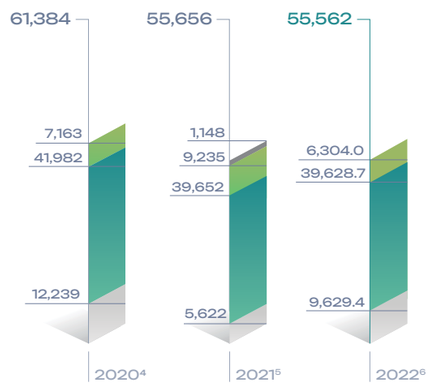


Water withdrawal in 2022 by company, %



Water discharge by the Group, thsd cu m

GRI 303-4



Water discharge by the Group companies in 2022 totalled approximately 55.6 m cu m. Water discharge by the portfolio companies decreased by 10% compared to 2020.

1 The data for 2020 is provided for Sistema and its assets operating in the sectors of telecommunications, residential property development, timber industry, agriculture, pharmaceuticals and high technology.

2 The data for 2021 is provided for Sistema and its assets operating in the sectors of telecommunications, residential property development, timber industry, private healthcare, agriculture, commercial property management, power grid services, hospitality, high technology and "other".

3 The data for 2022 is provided for Sistema and its assets operating in the sectors of telecommunications, residential property development, timber industry, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality and high technology.

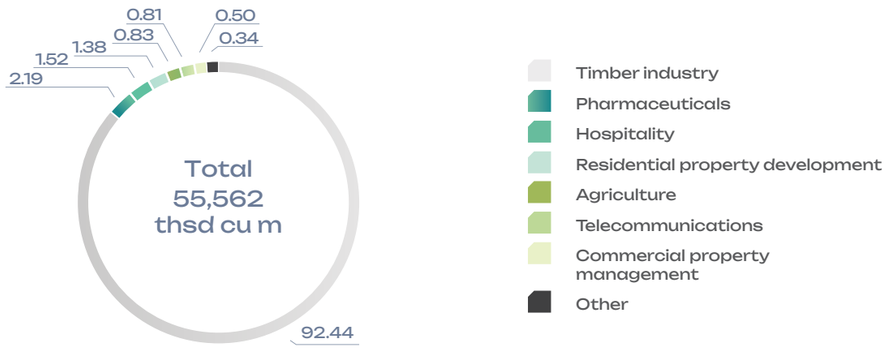
4 The data for 2020 is provided for Sistema and its assets operating in the sectors of timber industry, pharma and high technology.

5 The data for 2021 is provided for Sistema and its assets operating in the sectors of telecommunications, residential property development, timber industry, private healthcare, agriculture, commercial property management, power grid services, hospitality, high technology and "other".

6 The data for 2022 is provided for Sistema and its assets operating in the sectors of telecommunications, residential property development, timber industry, private healthcare, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality and high technology.

Water discharge in 2022 by company, %

GRI 306-1



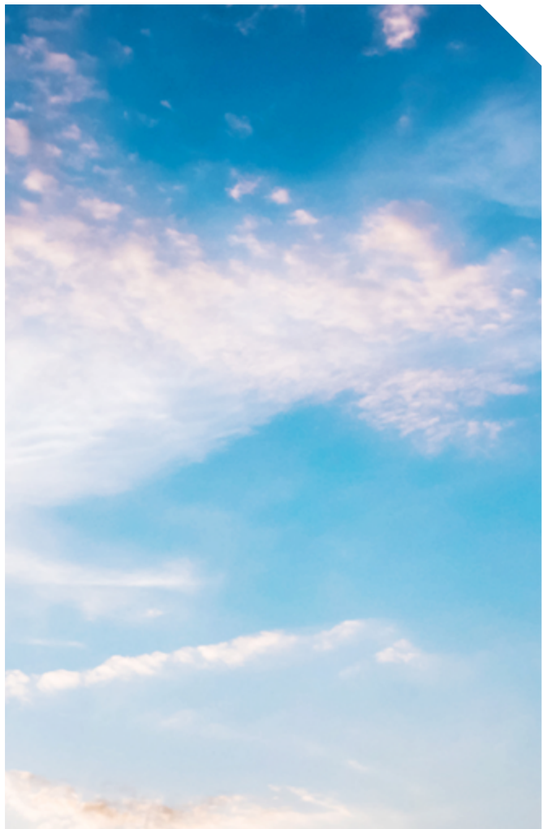
Protection of the atmosphere

Minimisation of air pollution is a priority for Sistema Group. In 2022, the volume of air pollutant emissions amounted to 29,410 thousand t, up 7.6% from 2021.

Emissions of NOx, SOx and other significant pollutants into the atmosphere by the Group companies, t

GRI 305-7





1 The data for 2020 is provided for Sistema and its assets operating in the sectors of timber industry, private healthcare, agriculture, hospitality and high technology.
2 The data for 2021 is provided for Sistema and its assets operating in the sectors of telecommunications, residential property development, timber industry, agriculture, commercial property management, power grid services, hospitality, high technology and "other".
3 The data for 2022 is provided for Sistema and its assets operating in the sectors of residential property development, timber industry, agriculture, pharmaceuticals, commercial property management, power grid services, hospitality and high technology.

Emissions of NOx, SOx and other significant pollutants into the atmosphere by the Group companies

GRI 305-7

	2022		2021		2020	
	Volume of emissions, t	Share of emissions, %	Volume of emissions, t	Share of emissions, %	Volume of emissions, t	Share of emissions, %
NO_x	4,015.24	13.65	1,710.67	6.76	3,006.00	14.41
SO_x	2,018.53	6.86	7,386.61	29.18	2,191.00	10.50
Persistent organic pollutants (POP)	0.54	0.002	124.01	0.49	6.07	0.03
Volatile organic compounds (VOC)	362.08	1.23	777.81	3.07	298.40	1.43
Hazardous air pollutants (HAP)	6,429.87	21.86	7,547.00	29.82	5,913.00	28.35
Particulate matter (PM)	1,461.70	4.97	9,114.66	28.02	8,503.00	40.77
Other standard categories of air emissions identified in relevant regulations	15,122.07	51.42	672.33	2.66	941.00	4.51
Total	**29,410.02**	**100.00**	**27,333.09**	**100.00**	**20,858.47**	**100.00**

The Group companies are consistently reducing the environmental impact of their production facilities. As part of their efforts to improve air quality Sistema's assets are continuously monitoring the concentration of harmful pollutants, implementing new environmental projects and upgrading equipment to achieve the zero level of emissions into the atmosphere.

In 2022, Sistema's **telecommunications asset** launched a video surveillance system for controlling emissions at the production facilities located in three districts of the city of Chelyabinsk. The system consists of more than ten digital high-definition IP cameras installed at high points with a large field of view along the perimeter of several production facilities. Cameras are monitoring production facilities on a 24-hour basis to analyse the levels of gas and other emissions. Some of the cameras are equipped with infrared light, making it possible to monitor the situation in any whether conditions and at any time of the day. Recordings from the cameras and information about the recorded events are stored in a video archive for further analysis. To ensure prompt detection of harmful pollutants in the air the company is planning to deploy mobile air quality control stations that would continuously monitor the concentration of emissions and pollutants.

The **timber asset** is consistently improving environmental indicators in Sokol, the Vologda region. As part of its commitment to the improvement of air quality in the region the company conducted an overhaul of its equipment in 2022. This made it possible to considerably reduce sulfur dioxide emissions and lignosulphonate[1] dust in a number of pulp production shops. At the same time, the efficiency of gas purification reached 99.77%.

In 2022, the timber asset operating in Segezha completed the overhaul of recovery boilers and the replacement of electrostatic precipitators with a total value of RUB 2bn. The collection of solid lime dust particles by the new filters will become almost complete (over 99%).

The asset is also working to resolve the issue of burning non-condensable gases. The project is expected to take several years with total investments reaching RUB 3bn. Special sensors will monitor the air quality in the buffer zone. After the works are completed, the bad-smelling emissions of hydrogen sulfide will be completely eliminated.

In 2022, the timber asset also implemented an environmental project in Kirov. The current fleet of diesel electric forklifts will be replaced with new electrical machines. This is the first simultaneous upgrade of all forklifts at the production facility. The total investments in the project amount to RUB 85.6m. The phasing out of diesel fuel will help achieve zero emissions into the atmosphere, and the expected economic effect from the project will be RUB 16.8m a year.

1 Lignosulfonate is a byproduct of wood pulp production in the timber industry, which is derived from lignin, a natural polymer.

Preservation of biodiversity

GRI 304-2 GRI 304-3

Sistema Group companies are aware of the vital importance of biodiversity and consistently invest in projects and initiatives aimed at creation of infrastructure for the protection of natural sites and the habitats of endangered species.

Preservation of aquatic biodiversity

GRI 304-3

The companies of Sistema Group are actively involved in the preservation of aquatic biodiversity and restoration of aquatic biological resources.

In the summer of 2022, the **power grid asset** together with a partner in the oil industry in the Republic of Bashkortostan released about 20,000 young sterlets in the Belaya river. The project was carried out for the purpose of restoration of aquatic biological resources.

In the autumn of 2022, in an effort to preserve valuable fish species (Siberian sturgeon, sterlet, whitefish, tugun) released over 12,000 young fish in the Yenisey river. The project was carried out together with the Yenisey Territorial Administration of the Federal Agency for Fishery. Over three years Sistema's production facilities operating in the Krasnoyarsk region released over 320,000 young sturgeons and graylings in the Yenisey river and its tributaries.

The **high-tech asset** of Sistema signed an agreement with the Centre for Monitoring Fisheries and Communications as part of providing informational support for the fishing industry in 2022. The partnership is aimed at the development of remote satellite monitoring of fishing boats and water areas to preserve aquatic bioresources.



Reforestation and soil remediation

GRI 304-1 GRI 304-3 SASB RR-FM-160a.4

Sistema's assets conduct annual reforestation activities in the regions of their operations with due consideration for the transformation of natural habitats and the state of landscapes classified as protective forests. The Group companies are actively implementing the principles of sustainable forest management and monitoring the supply chain.

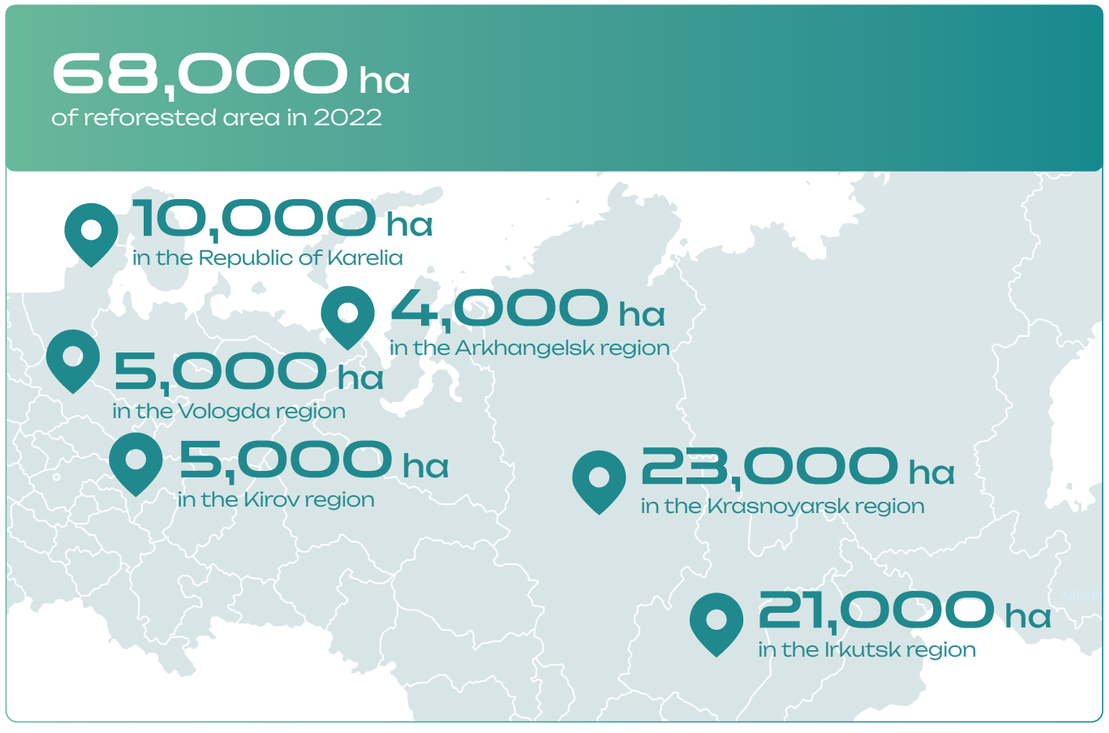
In December 2022, the **timber asset** started migrating to the domestic forest certification system based on the forest management and forest use standard SFMRU/38200-ST-1:2022 of the Forest Certification Development Centre and the ISO 38200:2018 standard "Chain of custody of wood and wood-based products". Unlike the previous standards FSC and PEFC, the new system takes into account the risks inherent to the forests of the Russian Federation. The company is planning to obtain certification for 100% of the forests leased from the state. Being a member of the UN Global Compact, the timber asset is taking part in the development of the national system of voluntary forest certification on the basis of the UN sustainable development goals.

In 2022, the timber asset increased the reforestation area by 97%, up to 68,800 ha.

The asset's reforestation activities are mainly focused on preserving the abundance and variety of flora and fauna in forests. Experts identify valuable ecosystems and perform annual monitoring of forests. The places that are essential for maintaining biodiversity are included in the forest management plans of the company. The company's operations are scheduled on the basis of such plans, which include logging and construction of haulage roads.

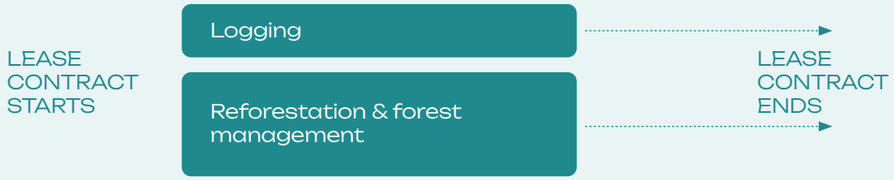
In July 2022, the asset opened its first tree nursery centre in the town of Sharya in the Kostroma region. The nursery in the Kostroma region will meet the company's demand for planting materials that are needed for conducting reforestation activities in the Kostroma, Kirov and Vologda regions. Moreover, the nursery will support the reproduction of coniferous species that have the highest value in terms of the environment and timber production. The company is using 40% of ball-rooted seedlings in its artificial reforestation works, which is twice the number required by the law. In 2022, the company grew 2 million spruce seedlings. In 2023, the nursery will increase the production of seedlings twofold, up to 4 million a year, and in 2024 it is planning to produce 6 million seedlings a year. The company invested RUB 129m in the project, and in future it is planning to create tree nurseries in other regions where it operates.

In 2022, following negotiations with the Natural Resources and Ecology Ministry of the Republic of Karelia the company suspended its logging operations near the future specially protected natural area Maximyarvi. In December 2022, the company proposed changes to the forest plan, forestry regulations and forest use plans in order to exclude the forest plot from the logging plans and the list of leased forests and to include it in the future specially protected natural area Maximyarvi. Moreover, under an agreement with environmental organisations, a moratorium was imposed on part of the lease, including the leased area on the Onega peninsula. The most valuable forests in the Arkhangelsk region with a total area of 120,000 ha were excluded from the logging plans and remain intact, which reduces the impact on the ecosystem and helps preserve biodiversity.



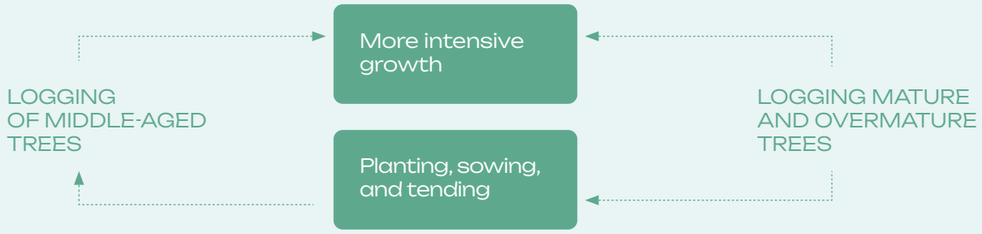
Extensive vs intensive forest management

Extensive model



Although reforestation and forest management measures are required from timber companies by law, they mean certain losses for businesses and so make them eligible to receive compensation once the plantings become exploitable

Intensive model



A system of economically sound reforestation and forest management measures aimed specifically to grow the desired species

The intensive forest management model comprises a system of both economically and environmentally sound exploitation steps that limit environmental impact on unexploited forests of high conservation value, sustain biodiversity and natural ecosystems, and reduce the risks of wildfire. In the longer term, the approach leads to greater forest productivity, encourages effective industrial production, and contributes to socio-economic evolution.

In 2022, the **agricultural asset** carried out a comprehensive project for restoring shelterbelts in the Stavropol and Rostov regions. The aggregate planted area will exceed 160 ha, including 100 ha of land in the Zimovniki district, the Rostov region, and 60 ha in the Ipatovo district of the Stavropol region. The agricultural holding purchased 290,000 saplings. Moreover, in October 2022, the employees of the enterprise planted 80 saplings in the city park on the Planting Day in the Rostov region. Forest plantings make it possible to maintain soil fertility, enhance crop yields and improve the environment in the region. The planting of trees in the Zimovniki district of the Rostov region will increase the yields of wheat by 10% in 2025–2028. The area of shelterbelts is expected to expand until 2030, making it possible to boost gross crop yields by more than a third. The project for restoration of shelterbelts is being implemented as part of the asset's sustainable development strategy until 2030. The company is planning to minimise the use of soil resources, decrease water and energy consumption and increase the share of renewable energy sources. The project's costs are estimated at RUB 11.5m.

The application of innovative technologies in the agricultural business makes it possible to drastically enhance its effectiveness and make it more environmentally friendly, while maintaining soil fertility.

Over the recent several years, Sistema's **agricultural asset** ensured a six-fold increase in the share of arable land cultivated by using a no-till farming technology. No-till farming is an agricultural technique in which the soil is left undisturbed by tillage and the crop residue is left on the soil surface. Reducing the number of mechanical operations and lowering fuel consumption helps minimise the impact of farming on the natural ecosystem. The no-till farming technique maintains and enhances soil fertility due to increasing the content of productive moisture and activating soil microflora. The no-till technology is used in the Rostov and the Stavropol regions, where the company operates.

In the autumn of 2022, the agricultural asset launched a project for reclamation of saline soils in the Stavropol and Rostov regions. At the initial stage of the project the soil's chemical content will be analysed in order to select the right reclamation technique. The soil is restored by using phosphogypsum in combination with crop residue, which helps improve soil quality. The soil reclamation process will take approximately two or three years.

In 2022, the **telecommunications asset** launched a project for combating desertification in the Astrakhan region. The company's volunteers joined forces with scientists and planted more than 4,000 calligonum bushes and other plants. The drought-resistant plants will help improve sandy soil and stop the desertification process, which causes frequent dust storms in the region. The company is planning to create IT infrastructure that will speed up the processing of information about the state of natural habitats and make it possible to prepare forecasts, develop recommendations for fighting environmental issues, including desertification and droughts.



Protection of animals, birds and insects

Sistema's **power grid asset** is taking preventive measures to protect birds against electric shocks and electricity consumers against power outages caused by birds. For this purpose, it uses self-supporting insulated wire in the design, construction and upgrade of overhead transmission lines. This helps ensure effective protection of birds against getting electrocuted when coming into contact with wires. In 2022, the company fitted more than 100 km of overhead transmission lines with self-supporting insulated wire. The company installed 211 bird protection devices on transformer substations, 2,415 bird repelling devices and 3,122 barrier-type devices to protect insulator strings from bird droppings.

At the end of December 2022, the employees of the power grid asset rescued a lynx that they caught on the premises of a power station located within city boundaries. The predator's being on the premises posed a threat not only to the people around but also to the animal, as it could have been injured by the high-voltage equipment installed at the plant. The animal was handed over to specialists and delivered back to the forests of the Blagoveshchensk district.

In 2022, the **telecommunications asset** of Sistema implemented its own IoT solution Celsium for round-the-clock climate monitoring at the bee farms of the Birsk district in Bashkortostan. Smart sensors are keeping track of the key parameters influencing the state of hibernating bee colonies in a real time mode. The collected data on microclimate inside the special bee hives where bees spend the winter is accessible via a mobile application or on the web interface of Celsium. In the event of a sudden deviation from the target parameters the apiary manager gets an alert in the mobile application and can promptly address the issue. This makes it possible to monitor apiaries in real time, reduce the risks of bee farms and maintain the number of bee colonies.

Involvement of employees in environmental campaigns

Sistema's employees are actively involved in the environmental campaigns organised by the company. Sistema holds annual sports, environmental and charitable events aimed at protection and restoration of plants and trees.

In the summer of 2022, **SCF** organised its regular charity race #ZaLes in an online format. This eco-friendly initiative is based on the principle of "running with meaning" with SCF transferring funds to the ECA environmental organisation which then plants trees for each participant. As a result of the race, SCF raised and transferred RUB 500,000 to plant more than 5,000 various trees under the "Southern Green Belt of Russia" project. In the autumn of the reporting period, the agricultural and banking assets of Sistema planted 2,000 trees (500 oak saplings and 750 acacia and ash trees) in the Rostov region.

In the autumn of 2022, SCF organised the "Winter Garden to Every Home" campaign in St Petersburg. The campaign was aimed at preserving plants in the Leningrad Youth Palace. Volunteers prepared plants, moved them to places with favourable conditions and handed them over to local activists. Volunteers also helped activists to repot the plants and provided them with useful tips on taking care of house plants. The residents of St Petersburg took more than 1,000 plants to their homes. A prizes-for-all lottery was organised for the activists and participants of the campaign, who were awarded a total of 500 gifts and prizes from Sistema Charitable Foundation and Sistema's property development asset.

In November, SCF reported on the results of the EcoProsvet quest — a joint educational project of Sistema Charitable Foundation and ECA Green Movement. During two months 786 employees from 17 companies of Sistema Group tested their eco habits and transformed their working environment step by step. The tasks of the quest covered all the key areas of an eco-friendly lifestyle: conscious consumption, the impact of transport on the environment, waste sorting, food sharing, cyber hygiene. The quest also included a competitive element: the participants were assigned scores for performing tasks and checking the reports of other employees. In the two months of the project the participants' lifestyles became more environmentally friendly, with many employees deciding to go beyond the basic track of the programme and creating their own projects for reducing the carbon footprint of their offices.

In the autumn of 2022, the employees of the **timber asset** of Sistema in the Kirov region took part in the "Preserving the Forest" campaign. The company is actively implementing reforestation works on the leased forest land. The volunteers and participants of the enterprise's youth council planted about a hundred pine saplings provided by the Forest Ministry of the Kirov region.

In 2022, 30 young families from Sistema's subsidiary in the Irkutsk region planted 100 pine saplings to create a commemorative alley in Ust-Kut. A plate with the name of the family was installed at each tree. The planting campaign is expected to take place on an annual basis.

RUB 500,000
was allocated by Sistema Charitable Foundation to plant more than 5,000 various trees under the "Southern Green Belt of Russia" project

1,000 saplings
were given to St Petersburg residents under the "Winter Garden to Every Home" campaign



Promoting a responsible approach to the environment

Sistema aims to step up its efforts in the area of promoting environmental awareness among the residents in the regions where Sistema's enterprises operate and regularly organises various educational and entertainment events. In September 2022, as part of the charitable festival Sistema Fest **SCF** organised a family environmental festival in Omsk in partnership with the Green Movement of Russia (ECA). Sistema Fest is a charity project that combines the best practices of Sistema Group companies, social partners and the city administration. The main goal of the festival is to raise the environmental awareness of the public. The educational and entertainment programme included environmental master classes, seminars and lectures, eco quests. The participants were also invited to play the environmental table game on the lifecycle of waste and learn about the use of recycled materials. The guests of the festival could also make the first step toward conscious consumption: calculate their carbon footprint with the help of an eco calculator and take part in clothes sharing and collection of materials for recycling.

From November to December 2022, the **residential property development asset** supported the environmental marathon Useful City organised in Novosibirsk. During two months the residents of Novosibirsk used the interactive online service +1City to perform tasks on responsible consumption of resources and reduction of negative impact on the environment, visit online lectures, learn more about the planet's health and its influence on people's well-being. All marathon participants received commemorative gifts.

In the reporting period, Sistema's **telecommunications asset** joined forces with the Moscow zoo to launch a free national online environmental programme for children as part of its Generation M federal charitable project. Under the programme children and teenagers were able to attend a free online course on rare animal species and take part in a competition called "Zoo Laboratory" in four subjects: Siberian Tiger, Orangutan, Dalmatian Pelican, Snow Leopard. The telecommunications asset makes the most of the modern technologies offered by the charity online platform to raise children's awareness about the importance of taking care of plants and animals and motivate them to make their contribution to the preservation of wildlife.

The company also collaborated with the creators of the popular cartoon "The Fixies" to launch a free national environmental programme that will provide children with more insights about the environment and introduce them to the concept of conscious consumption. The programme is designed to teach school children to apply simple eco-friendly routines in their every-day lives. The most active participants were invited to take part in a creativity competition called "Discovering the World with the Fixies" with prizes to be awarded to the winners in two categories.



Waste management and circular economy

Industrial waste management

GRI 306-1 GRI 3-3

Sistema Group companies are striving to switch to zero-waste production wherever possible, increasing the level of environmental friendliness through the use of recycled materials, and reducing plastic consumption.

Most of the waste produced by Sistema and its portfolio companies is either low hazard or non-hazardous to the environment. In 2022, 99.97% of waste across the Group was **class 4 or 5** (non-hazardous). The total waste volume was 2.5 m t.

Total waste of Sistema Group by Russian waste hazard class, t

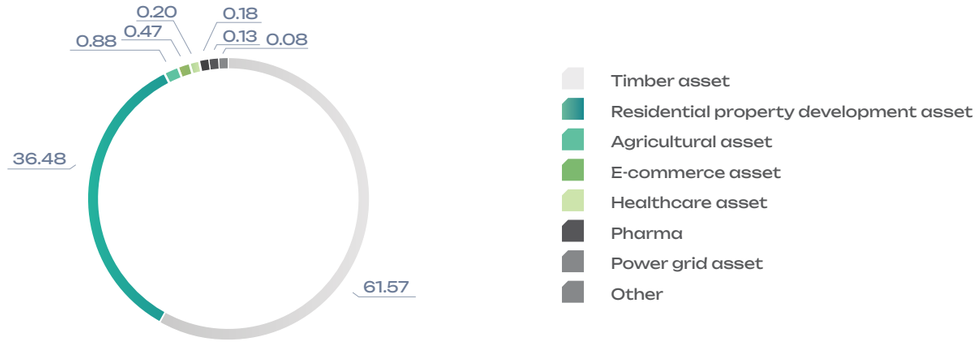
GRI 306-3 UNCTAD B.2.3

Types of emissions	2022[1]	2021[2]	2020[3]
Hazardous, including:	**627.80**	**485**	**298.5**
Class 1	3.3	9.2	10.6
Class 2	51.5	76.3	58.6
Class 3	573.0	399.5	229.3
Non-hazardous, including:	**2,505,396.55**	**1,652,692.6**	**931,872.2**
Class 4	333,331.8	190,409.4	409,700.8
Class 5	2,172,064.8	1,462,283.1	522,171.4
Total	**2,506,024.3**	**1,653,177.6**	**932,170.7**

Hazardous waste management and utilisation are invariably in compliance with applicable laws and regulations.

Total waste by disposal method in 2022, %

GRI 306-2



1 The data for 2022 is provided for Sistema and its assets operating in the sectors of e-commerce, residential property development, timber industry, private healthcare, agriculture, pharma, commercial property management, power grid services, high technology and "other".
2 The data for 2021 is provided for Sistema and its assets operating in the sectors of telecommunications, e-commerce, residential property development, timber industry, private healthcare, agriculture, commercial property management, power grid services, high technology and "other".
3 The data for 2020 is provided for Sistema and its assets operating in the sectors of e-commerce, residential property development, timber industry, private healthcare, agriculture, pharma, commercial property management, high technology and "other".

Total waste by disposal method in 2022[1], %

SASB TC-TL-440a.1 GRI 306-4 GRI 306-5

Waste disposal methods	Total weight of waste of Sistema Group	Total weight of hazardous waste of Sistema Group	Total weight of non-hazardous waste of Sistema Group
1. Disposal	0.24	0.09	0.24
1.1 Landfill	0.24	0	0.24
1.2 Recovery, including energy recovery	0	0.09	0
1.3 Incineration	0	0	0
1.4 Composting	0	0	0
2. Reuse	0.03	0	0.03
3. Storage on premises	0	0.03	–
4. Transferred to third parties	98.89	98.80	98.89
4.1 For disposal and decontamination	23.65	32.66	23.52
4.2 For storage	11.15	66.09	10.36
Other	0.84	1.09	0.84
Total	**100**	**100**	**100**

In 2022, Sistema's **timber asset** implemented a pilot project for accelerated processing of sawdust into organomineral fertilisers at the Irkutsk region's largest timber processing enterprise. The enterprise will be able to switch to completely zero-waste production and minimise sawmill waste. The fertiliser obtained as a result of sawmill waste reclamation may be of interest to agricultural producers in the Irkutsk region and neighbouring regions. The use of organomineral fertilisers from wood waste gives a high increase in grain yields and makes the land fertile again.

In the Vologda region, the timber asset launched a new boiler plant using sawmill waste at a wood processing plant for the production of laminated wood structures for house building. Each year, 60,000 cu m of bark will be utilised at the new equipment. The energy generated is used to heat 89 apartment buildings near the plant. After the launch of the boiler the production became completely waste-free, which significantly increases the economic efficiency of the enterprise. Earlier, the company built a pellet plant, which processes sawdust into biofuel. Thanks to the new boiler and the existing pellet facilities, the mill began to operate as a closed-cycle enterprise.

In Kirov, the timber asset's plywood mill increased its environmental friendliness by using plastic, paper, overwrap, plastic bottles and cardboard from the enterprise as secondary materials.

Sistema's **power grid asset** in the Republic of Bashkortostan is systematically replacing outdated oil-filled substation equipment with modern gas-insulated equipment. Gas-insulated circuit breakers are fire-safe, lightweight and quiet, plus there is no risk of oil spillage. The maintenance-free period of operation of gas-insulated circuit breakers is up to 15 years. In 2022, three oil circuit breakers were replaced. The overhaul has significantly reduced environmental risks and risks of equipment damage both during operation and during routine switching.

The fintech direction of Sistema's **telecommunications asset** minimises its negative environmental impact by reducing waste and carbon footprint. With nearly 1.8m virtual cards issued, the asset reduced its plastic consumption by 8.8 t in 2022. Increased capabilities for accepting payment with virtual cards will contribute to a steady increase in demand for virtual cards in 2023, helping to further reduce the asset's needs in plastic and therefore reducing plastic waste.

1 The data for 2022 is provided for Sistema and its assets operating in the sectors of , e-commerce, residential property development, timber industry, private healthcare, agriculture, commercial property management, power grid services, high technology and "other".

Environmental campaigns for waste collection and recycling

Sistema Group organises environmental campaigns to collect and recycle waste. The Group companies organise the collection of recyclable materials, take part in cleaning cities and water bodies from waste, introduce waste sorting at production facilities, and clean the environment from plastic waste.

To draw attention to the issue of waste management, the **agricultural asset** held a recycling week in autumn 2022. The company's employees brought 140 kg of waste paper and dozens of boxes from office equipment to a mobile recycling drop-off site.

The agricultural asset also held a waste sorting campaign in Rostov-on-Don in autumn 2022. Twelve mobile drop-off sites in the city accepted glass, waste paper, plastic, old electrical appliances, Tetra Pak packaging and rags for recycling. More than 330 people took part in the environmental campaign and collected almost 2 t of recyclable materials. Throughout the year, the company's employees participated in environmental initiatives as volunteers. On average, volunteers collected up to 1.5 t of rubbish per day. This charity project helped recycle 13.2 t of household waste in 2022. The company also implemented an internal project called "Green Office", collecting waste paper and waste batteries of various types.

In 2022, employees of the **power grid asset** collected 63 kg of plastic bottle caps as part of a regional environmental and charitable project; they will be used as raw materials for the production of plastic products. Proceeds from the sale of recycled plastic go to charity: to children's hospices and to persons with disabilities.

In the summer of 2022, ecologists of the power grid asset in Bashkortostan took part in the nation-wide campaign to clean the banks of water bodies "Water of Russia 2022" as part of the federal project "Preservation of Unique Water Bodies". They cleaned 200 m of the lake shoreline in the village of Podymalovo, the Ufa district, collecting 3.2 cu m of environmentally hazardous waste: from plastic bottles and bags to fire hydrants.

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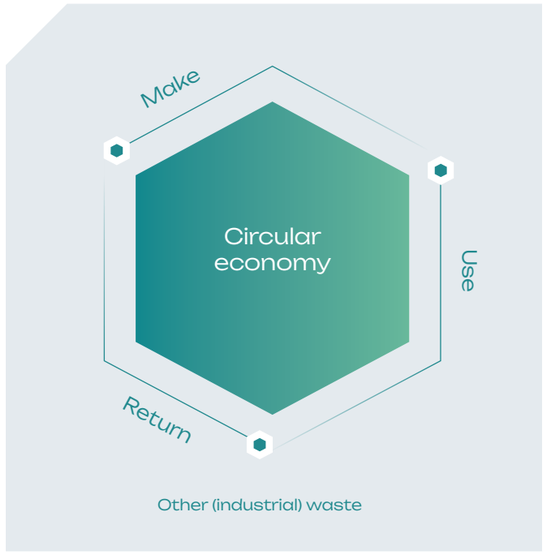
Volunteers of the **timber asset** in Ust-Kut, the Irkutsk region, took part in the regional environmental campaign "Say NO to rubbish". They collected more than 6 t of rubbish for recycling. A total of about 30 t of waste was collected in the Irkutsk region as part of this campaign in 2022.

The town of Segezha in the Republic of Karelia joined the international environmental movement "Clean Games" on the initiative and with the financial support of Sistema's timber asset. About 70 local residents took part in the team competitions on rubbish collection and sorting. They collected about 2.4 t of plastic, metal and glass waste, and sorted waste batteries separately. All the collected rubbish was recycled.



Circular economy and bioenergy

Sistema Group is actively implementing bioenergy and circular economy technologies in production processes. Circular (cyclical) economy is an alternative to a traditional economy in which consumption and production go through a closed-loop cycle: resources are used to their maximum, there is no accumulation of waste and adverse impact on the environment is minimised. However, circular economy aims not only to reduce environmental impacts, but also to promote economic efficiency and create new business opportunities.



>7,750 t
collected and transferred to responsible contractors for recycling and disposal by the telecommunications asset's enterprises

UNCTAD B.5.1

Sistema's **timber asset** aims to extract maximum value from wood resources and decrease its impact on the environment by implementing measures designed to ensure that 100% of wood is recycled. One of the company's activities is production of pellet fuels. Pellets are an environmentally friendly renewable energy source in high demand across the world. The use of pellets makes it possible to reduce the consumption of fossil fuels and solve the problem of waste disposal.

In November 2021, a new pellet plant was opened in Sokol Vologda region with an annual capacity of 65,000 t. More than a mere addition to the product portfolio, the move made the company's industrial cluster in the town of Sokol an eco-friendly facility and became an important element in the closed-loop production cycle. The project ensures the environmental safety of the company's business (bark burning) and the useful utilisation of sawdust into finished products (pellets). Pellet sales totalled 259,000 t in 2022, doubling year-on-year. The growth in pellet production and sales in 2022 was due to the consolidation of previously acquired assets.

In response to changing market conditions and geopolitical challenges, the timber asset is considering opportunities to expand the geography of supplies and modify logistics to meet business needs. Potential export destinations include Turkey, Serbia and Asian markets, mainly South Korea, which is characterised by significant pellet consumption.

In 2020, the **telecommunications asset** set the goal of introducing the principles of circular economy into its business processes. In 2022, the company continued to implement and scale up environmentally significant initiatives of the comprehensive ecosystem project "Life Cycle Laboratory". Thanks to the wide implementation of the waste sorting system at the company's facilities, over 7,750 t of recyclable materials were collected and transferred to responsible contractors for recycling.

The asset also implements technologies that increase the service life of IT equipment. In partnership with SuperWave, 362,600 electronic devices were refurbished under the customer equipment refurbishment[1] programme in 2022, while 22,396 kg of plastic and 18,745 kg of electronic components were transferred for responsible disposal.

1 The process of restoring, repairing and reselling electronics at a significant discount; the term "refurbished" denotes the condition of an item.

GRI 3-3

Since 2014, the **e-commerce asset** has been implementing its recycling programme for organised collection, preparation and recycling of materials. It involves nine fulfilment centres of the company, as well as more than 20 partner companies. In 2022, the company managed to recycle a record 36,000 t of waste, or about 66% of the company's total waste (including waste generated in fulfilment centres, sorting centres, dark stores and own pick-up points). The share of recycled waste is one of the company's KPIs for monitoring the effectiveness of the waste management system.

At the beginning of 2022, the e-commerce asset and Synergetic launched an environmental initiative with a special vehicle ("Ecomobile") stopping near pick-up points in Moscow to collect household waste (plastic, batteries, paper, etc.) from residents for recycling.

"Green" office

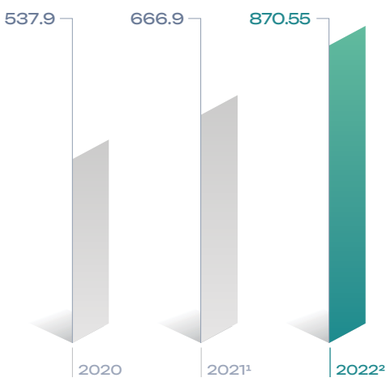
Sistema Group companies use the latest environmental safety, energy saving and energy efficiency technologies, introduce electronic document management, and stop using paper receipts.

In 2022, Sistema's **timber asset** implemented a comprehensive corporate programme called "Green Office". Special containers for waste sorting were installed in offices. Plastic cups were replaced with paper cups. Paper consumption has been kept to a reasonable minimum with 50% of documents converted to electronic form. Unused appliances and computers are switched to energy-saving mode. All office equipment is grade A, which means that 45% of energy is saved. Transition to A+ (saving 58% of energy) and A++ (67%) is planned in the future.

In the reporting year, the online document management of Sistema's **telecommunications asset** saved 6,000 trees, while the transition to electronic bills for subscribers in Moscow saved about 550 trees. With a multi-million subscriber base, the use of digital services is more convenient and environmentally friendly.

Sistema's **healthcare asset** switched to electronic document management for legal documents in 2022. This saves more than 50,000 sheets of paper and more than 70 trees every month.

Paper consumption, thsd t



The Group companies are carefully monitoring the use and consumption of paper as part of their activities.

870.55 thsd tonnes
total paper consumption at Sistema Group in 2022[3]

1 The data for 2021 is provided for assets operating in the sectors of residential property development, timber industry, commercial real estate management, power grid services and "other".
2 The data for 2022 is provided for Sistema and its assets operating in the sectors of e-commerce, private healthcare, timber industry, pharmaceuticals, commercial property management, power grid services and high technology. Higher paper consumption in 2022 is due to a greater number of portfolio companies included in the calculation perimeter.
3 Higher paper consumption in 2022 is due to a greater number of portfolio companies included in the calculation perimeter.

Climate change

Climate change is one of the major global problems. The main reason for climate change is increased emissions of greenhouse gases to the atmosphere. Greenhouse gases are emitted when using fuel and energy resources and in the course of production processes. Therefore, reduction of greenhouse gas emissions, increase of energy efficiency of production and decrease of products' energy intensity are important goals for businesses in order to reduce contribution to climate change.

The Group companies consistently implement measures in this area: adopt energy saving technologies, modernise production facilities and infrastructure, and broaden the use of alternative energy sources.

Carbon management and climate risk management at the Group companies

TCFD Strategy|b TCFD Governance|a TCFD Governance|b SASB RR-FM-450a.1 GRI 201-2

In order to fight climate change and assess absorption characteristics, the timber asset has been regularly calculating greenhouse gas emissions in compliance with the requirements of the GHG Protocol, the Intergovernmental Panel on Climate Change and national methodology for assessment of Scope 1, 2 and 3 emissions. The calculations are based on the internal system of climate reporting, which takes into account all aspects of the Group enterprises' operations. Data is recorded in accordance with GRI principles and with a breakdown for production and forestry emissions. Significant changes in the Company's perimeter in 2022 following big M&A transactions made it necessary to repeat taking inventory of emissions and adjust the methodology of the internal climate reporting system. The calculation methodology was also improved, making it as detailed as possible.

The timber asset's approach to carbon management and climate risk management is reflected in the Decarbonisation Strategy till 2030. By that time, the company plans to bring Scope 1 and 2 emissions to net zero taking into account carbon offsets. The results of regular taking inventory of greenhouse gases and their sources provide the basis for the road map of strategy implementation. In 2022, the road map of the Decarbonisation Strategy till 2030 was developed and updated, envisaging the following:

- implementing best practices in energy management (ISO 50001), advanced energy-saving technologies and best available technologies;
- fully using secondary fuels (bark, sawdust, black liquor, secondary resources of biological wastewater treatment) and other secondary energy resources;
- phasing out the use of heavy fuel oil and other fossil fuels by 2030;
- increasing the share of products with long useful life and those produced using recycled materials;
- using renewable energy sources.

In future, the company plans to prepare a climate project in one of the areas where it takes additional effort to reduce greenhouse gas emissions. It also intends to perform scenario assessment of its climate risks.

SASB FB-AG-110a.2

The Board of directors of the **agricultural asset** has an audit, finance and risk Committee that is responsible for managing risks related to sustainable development and climate. The company adopted a Sustainable Development Policy and set up a special commission for assessing the risks related to global climate change. In 2022, the company conducted an internal ESG audit and approved a sustainable development strategy till 2030. The strategy sets out the following priority objectives: promotion of innovative and climate-friendly development of the agricultural complex, ensuring the welfare of employees and improving living standards across Russia's regions, as well as building a responsible supply chain.



For the **telecommunications asset**, carbon management is an integral part of the ESG strategy. Climate agenda issues are included in ESG regulations and considered in the corporate governance system at four levels.

ESG committee of the board of directors	• Approval of strategic development areas
ESG Centre	• Coordination and operational control
Ecology functional group	• Implementation of key initiatives and technical control • Climate reporting
Working group on environment and responsible financing	• Formulation of a single climate strategy of the telecommunications asset • Development of a climate risk map • Implementation of initiatives aimed at reducing carbon footprint that require cross-functional interaction

The working group on environment and responsible financing of the telecommunications asset compiled a list of key risks (physical and transition) associated with climate change, in accordance with the recommendations of the TCFD.

Since 2019, the telecommunications asset has been annually disclosing its work to reduce greenhouse gas emissions on the international CDP (Carbon Disclosure Project) platform. Thus the company contributes to implementation of the initiative of the GSM Association to develop a road map for the telecom industry to achieve zero GHG emissions by 2050 to support the Paris Climate Agreement. The company discloses a broad range of environmentally important data about its activities, including resources consumption and direct and indirect greenhouse gas emissions. Every year, the company expands the scope of disclosed information and involves an increasing number of subsidiaries in public non-financial reporting.

GRI 308-2

Within the framework of the GSM Association, the company contributes to the development of a unified methodology for calculating the volume of indirect greenhouse gas emissions generated in the supply chain of telecommunications companies. The collaborative work should result in a GSMA Scope 3 Guidance containing practical recommendations for industry companies on calculating Scope 3 indirect emissions.

The **residential property development asset** carries out a number of projects aimed at reducing its carbon footprint. It uses CFD (computational fluid dynamics) computer modelling technology at initial stages of property design, which allows forecasting the main parameters needed to create energy efficient premises. On all later stages of a project information modelling technologies are used that help to increase efficiency of energy consumption and optimise greenhouse gas emissions.

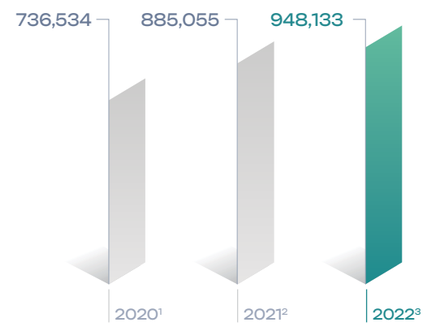
Building an efficient control system in the area of sustainable development, including with regard to climate risks, is an important focus for the **power grid asset** in the short term. Climate risks are controlled as part of regular activities of the strategy and sustainability committee of the board of directors. Matters related to the climate agenda are managed by the occupational safety and environment protection service. Its functions include introduction of technologies increasing energy efficiency, control over sources of environment pollution, complying with standards of pollutant emissions and making proposals on prevention of environmental risks in the course of work. Climate risks are identified, assessed and managed taking into account measured pollutant emissions and control over their change as part of industrial environmental monitoring.

Greenhouse gas emissions

Sistema Group companies are recording and monitoring greenhouse gas emissions. In 2022, direct greenhouse gas emissions stood at 0.95 million t of CO_2 equivalent.

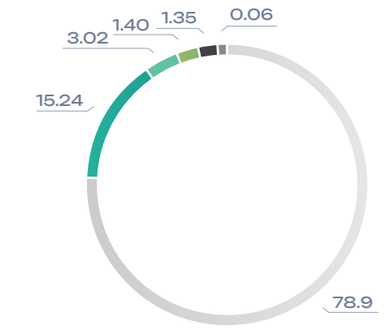
Direct greenhouse gas emissions (Scope 1), t of CO_2eq

GRI 305-1 TCFD Metrics and Targets b UNCTAD B.3.1 SASB FB-AG-110a.1

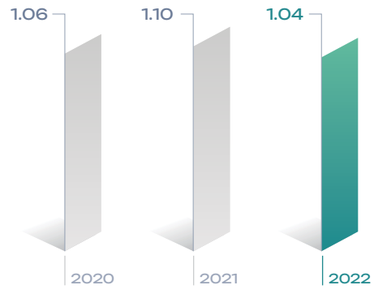


Increase of direct greenhouse gas emissions was related to the expansion of the data collection perimeter, and also adjustment of the GHG calculation methodology.

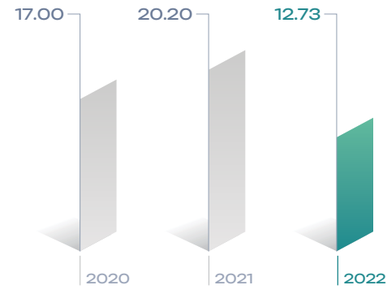
Sistema Group's direct GHG emissions in 2022 by company, %



GHG emissions intensity by consolidated revenue, t of CO_2eq/RUB m



Ratio of GHG emissions to the consumption of fuel and energy resources, t/thsd GJ



1 The data for 2020 data is provided for assets operating in the sectors of telecommunications, timber industry, agriculture, hospitality, high technology.
2 The data for 2021 is provided for assets operating in the sectors of telecommunications, timber industry, agriculture, power grid services, hospitality, high technology.
3 The data for 2022 is provided for assets operating in the sectors of telecommunications, timber industry, agriculture, pharma, power grid services, hospitality, high technology.

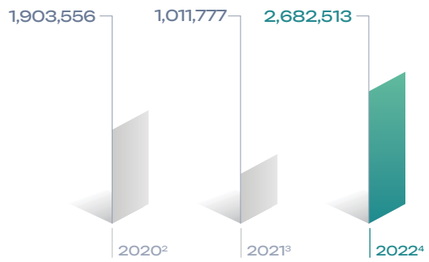
GRI 305-2 GRI 305-3 UNCTAD B.3.2

In 2022, indirect emissions amounted to 2.7 m t of CO_2 equivalent. The increase in indirect greenhouse gas emissions in 2022 compared to 2021 was due to expansion of accounting data of the timber industry.

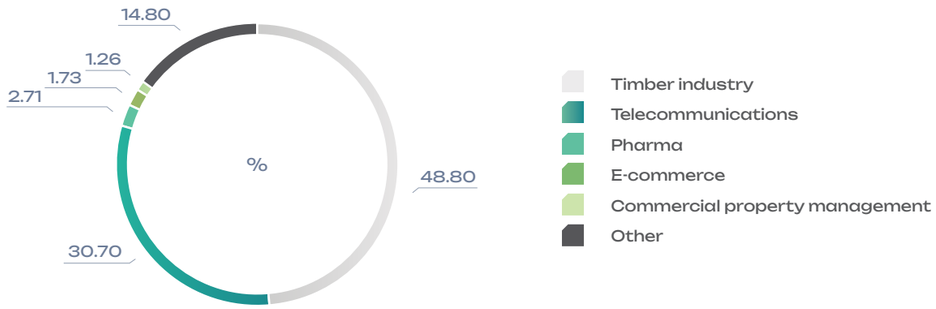
8,298.99
t of CO_2eq
in methane emissions in 2022[1]

Since 2020, Sistema has been disclosing climate data through the leading international carbon reporting platform CDP. For 2021, the Corporation received a B score (“Management”).

Indirect greenhouse gas emissions (Scope 2), t of CO_2eq



31,588.03
t of CO_2eq
in other indirect greenhouse gas emissions (Scope 3) in 2022[5]



1 The data for 2022 is provided for assets operating in the sector of agriculture. Determination of the main direction for methane is possible 28 months before the IPCC Fourth Assessment Report: Climate Change 2014 (AR5).
2 The data for 2020 is provided assets operating in the sectors of telecommunications, timber industry, agriculture, power grid services, high technology.
3 The data for 2021 is provided for assets operating in the sectors of telecommunications, timber industry, agriculture, power grid services, hospitality, high technology.
4 The data for 2022 is provided for Sistema and its assets operating in the sectors of telecommunications, e-commerce, residential property development, timber industry, private healthcare, agriculture, pharma, commercial property management, power grid services, hospitality, high technology and “other”.
5 The data is provided for assets operating in the sectors of telecommunications, private healthcare, hospitality.

Prevention of natural disasters



Prevention of forest fires

In 2022, Sistema's assets continued fighting forest fires, thus contributing to decrease of greenhouse gas emissions.

The **timber asset** continued its planned work to create fire control lines, to build and reconstruct fire safety roads, organise recreation areas in forests and install warning signs. The company has stations with fire safety equipment organised in all of its logging regions.

In 2022, the company took a set of measures to prevent forest fires in leased forests in the Kirov region. It acquired power pumps, fire hoses, cisterns, back-pack sprayers, foam generators and forestry torches. The branch's employees updated fire warning signs and organised stations with fire safety equipment at 150 recreation areas. They also created 132 km of fire control lines.

The company also conducted planned preparations for the fire season in the Vologda region. It made sure that fire-fighting equipment was in order, purchased personal protection equipment for employees and approved land patrolling routes.

In February 2022, the company upgraded the forest fire prevention system in the Irkutsk region. It installed fire detection and extinguishing systems to logging machines. The company is member of the fire-fighting headquarters of the Irkutsk region's government.

In April 2022, it opened its own fire station. Specialised vehicles were equipped with a high-pressure pump and a fire-fighting system with compressed air foam. The station created 30 additional jobs at the plant. The company plans to buy another rescue vehicle.

In the reporting year, 50 employees of the timber asset passed an exam for head of fighting big forest fires. They studied regulations related to fire protection of forests, the nature of forest fires, occupational safety and security. They also participated in practical lessons on ground reconnaissance, interaction with dispatcher stations, use of radio and providing first aid during fire fighting.

Sistema's companies also actively introduce digital technologies for fighting forest fires.

In 2022, the **high-tech asset** and its partners prepared research space satellites for launch under the Space-Pi project. Their thermal imaging cameras allow identifying forest fires and other natural disasters on the surface of the planet.

In April 2022, the **telecommunications asset** joined the Prometheus federal digital fire safety platform. The company provided its infrastructure for transmitting data from automatic fire fighting equipment to the platform. Use of the company's technologies made it possible to expand coverage and increase the system's capacity to enhance its reliability. A total of 20 facilities in four regions of Russia — shopping centres, schools, kindergartens, children's camps — were connected to the company's network in a test mode.

In May 2022, the telecommunications asset began testing an online fire monitoring system at the Bashkiria national park. In October, the company installed smart video cameras for early fire detection in forests in three districts of the Tver region. In the Vladimir region, a smart monitoring system also helped to reduce the area affected by fires.

The telecommunications asset's cameras have a field of vision of up to 35 km in a 360 degrees mode. The technology enables one person to monitor large forest areas remotely and, if a fire is detected, pinpoint its location, azimuth and area under fire and promptly send firefighters to location. The smart video monitoring system allows preventing almost 100% of fires and preserving forests.

Monitoring the environmental situation in the Arctic

In 2022, the **high-tech asset** created small spacecraft for various purposes. Nanosatellites monitor movements of vessels and dangerous ice bodies, and provide data from remote probing of water surface and atmosphere in the Arctic.

In August 2022, the high-tech asset launched a satellite for studying ice drifting and ship navigation in the Arctic. Its payload includes devices for an international IoT system and automated ship identification systems. A special web application shows on the map the position and track of the transmitter and the satellite's movement in the orbit. The project together with the automated ship identification system will increase safety and efficiency of navigation.

At the end of 2022, the high-tech asset completed assembly of a spacecraft titled Vizard-meteo. The nanosatellite will be launched to the orbit in 2023 to monitor spills of oil and petrochemicals in the Arctic and to forecast the situation along the Northern Sea Route. The nanosatellite will be able to monitor the environmental situation in the sea and forecast its development and dangerous meteorological conditions.



Energy management

GRI 3-3

To improve operational efficiency, Sistema Group companies implement energy saving technologies and choose more economical and environmentally friendly fuels.

Approaches and goals in the area of energy management and energy efficiency improvement are reflected in the following documents:

- Telecommunications asset's energy saving and energy efficiency strategy, and regional energy saving and energy efficiency programmes;
- Timber asset's long-term environmental security strategy for 2021–2025;
- Power grid asset's programme for energy saving and energy efficiency improvement.

Moreover, the enterprises of the Group's portfolio companies are undergoing the certification of their energy management systems under ISO 50001.

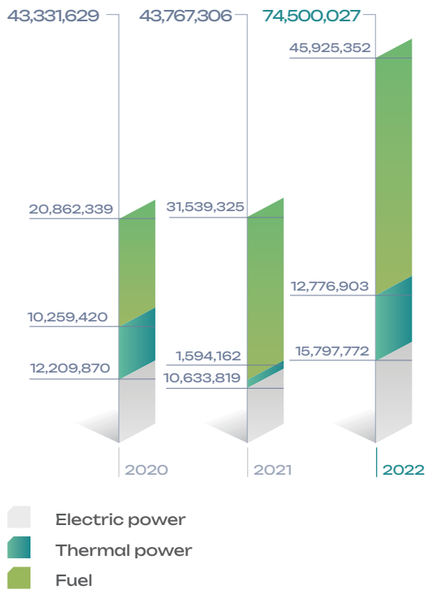
GRI 302-4

In 2022, the total consumption of fuel and energy resources 75 m GJ. Energy intensity across Sistema Group stood at 81.63 GJ/RUB m.

The Group companies are using different types of fuel and energy resources with fuels (boiler, furnace and motor types) for about 60% of the total consumption, electric power for 20%, thermal power — also for about 20%.

Consumption of fuel and energy resources at Sistema Group by type, GJ

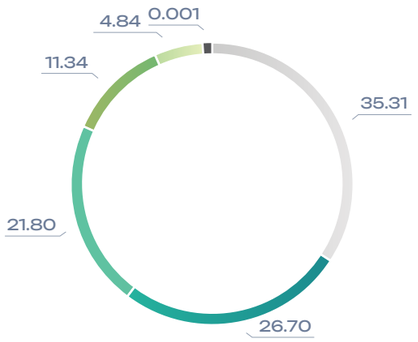
GRI 302-1



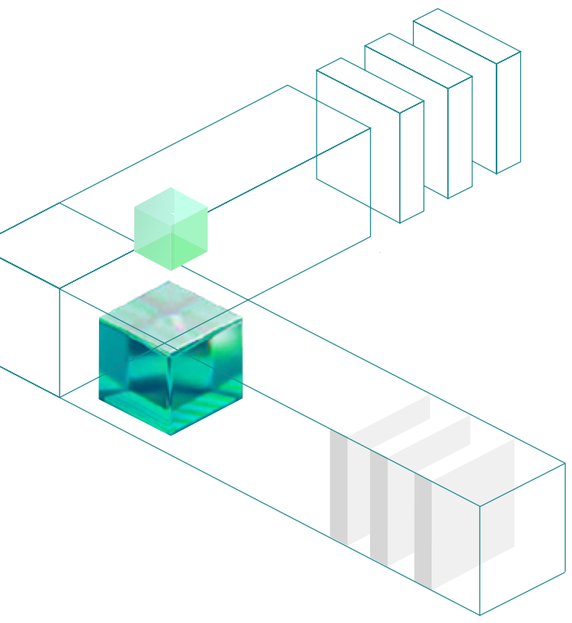


Timber asset is the leader in fuel consumption due to the specifics of the company's activities, the growth of production scale and the availability of its own boiler plants.

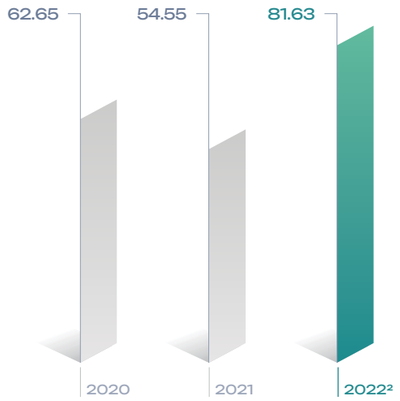
Fuel consumption by the Group companies by type of fuel, %



- Diesel and fuel oil
- Natural gas
- Renewable energy sources (biofuel)
- Petroleum
- Boiler and furnace fuel
- Other renewable energy sources[1]



Energy intensity of Sistema Group's consolidated revenue, GJ/RUB m



The Group companies regularly implement measures aimed at improving the energy efficiency of production and the reliability of power supply.

In 2022, the **timber asset** achieved a 9% reduction in Scope 1 greenhouse gas emissions. In addition, the share of own bark waste directed to combustion with energy recovery increased to 49%.

In 2022, the **telecommunications asset** completed the deployment of an energy efficient mobile NB-IoT network in all regions of operations, which ensured a 64% increase in revenues from the implementation of smart IoT solutions in electricity, utilities, logistics and other areas.

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Development of alternative energy

UNCTAD B.5.1 UNCTAD B.5.2 GRI 302-5

Sistema is building partnerships to develop hydrogen energy, while portfolio companies are increasing the share of energy consumption from renewable sources in order to reduce their carbon footprint.

In 2022, **Sistema** established two R&D units, the Hydrogen Technology Centre and the Hydrogen Energy Centre, together with the RAS. Sistema plans to create Russian technologies and equipment for hydrogen production, storage, transportation and application.

Sistema's **telecommunications asset** started using solar energy in remote sparsely populated settlements located in difficult terrain, such as gorges, where there is no alternative in the form of traditional energy sources. To send a signal to a destination, one of the communication facilities is installed in an open area and equipped with solar panels. The technology is already being used to provide Internet access to settlements in the Krasnodar region and in the Republic of Adygeya.

In 2022, Sistema's **timber asset** increased the share of biofuel in the production cycle of its plywood mill in the Kirov region by utilising wood waste. A bark waste shredding unit was commissioned. The resulting biofuel is used for subsequent combustion in a thermal oil unit and provides heat energy for the workshops.

In March 2022, Sistema's **agricultural asset** organised a meeting of alternative energy startups and investors in a speed dating format. The event included startups at the development stage with alternative energy solutions: wind energy, solar energy, biofuels, drone generators, geothermal and hydrogen energy, and infrastructure solutions. Investors were able to learn about 20 projects in two hours. The agricultural asset is actively introducing new technologies and automating production processes, so the selected projects may have the opportunity to launch a joint pilot using the company's premises, or receive financial support and other resources/expertise.



1 Other renewable energy sources include own generation of geothermal power, solar power, wind power and hydropower.
2 Higher energy intensity of Sistema Group's consolidated revenue in 2022 is due to higher consumption of fuel and energy by the timber and agricultural assets.

EV charging stations and infrastructure for electric cars and public transport

Due to the growing number of electric vehicles, Sistema's **high-tech asset** is actively developing EV charging infrastructure across the country. Today, its stations for electric cars and public transport are already operating in Moscow, Nizhny Novgorod, Ulyanovsk, Kuban and other regions.

By the end of 2022, Sistema's **high-tech asset**, together with its partners, commissioned about 90 EV charging stations in Kuban, including 76 in municipalities and 13 along the motorway from the Rostov region border to Novorossiysk. Fast charging allows an electric car to be charged to 80% of its battery capacity in an average of 40 minutes. The company provides full comprehensive maintenance of the installed charging stations.

In 2022, the high-tech asset signed an agreement with the government of the Rostov region, under which eight EV charging stations with 24/7 driver support were installed on the M-4 Don motorway.

Sistema's high-tech asset also signed an agreement with the government of the Lipetsk region to develop charging infrastructure for electric vehicles in the region.

The availability of charging stations opens up opportunities for the emergence of electric taxis and commercial electric transport in the region.

In 2022, the high-tech asset and the Rostov region government signed an agreement on the development of charging infrastructure for electric public transport and electric cars. The company started construction of four charging stations in the Rostov region.

In the reporting year, the high-tech asset launched five fast charging stations in the St Petersburg region. Some of the stations are located along the popular route to the Republic of Karelia.

The company also signed an agreement with a Russian manufacturer of electric vehicles to implement joint projects on transport electrification, operation and maintenance.

In view of the rapid growth in the share of electric vehicles, the residential property development asset includes EV charging infrastructure in designs of its residential complexes in Moscow.



Electric vehicles for public transport

In 2022, the **high-tech asset** continued to expand its network of EV charging stations for both passenger cars and public transport. The launch of electric transport and the expansion of the charging infrastructure network is part of the federal programme for the comprehensive development of urban electric public transport. In 2022, the high-tech asset installed 50 ultrafast charging systems for more than 270 electric buses in Moscow. The company also provided charging infrastructure for electric buses in Sochi, Rostov on Don and Volgograd. The 300 kW system with dynamic load balancing allows the battery to be charged to 80% in 20 minutes. All charging stations are united by a single control and monitoring system, which allows receiving reports on electricity consumption, conducting online monitoring of the network and battery condition of electric buses, and eliminating emergency situations.

The high-tech asset has organised the first serial production of electric vessels in Russia, with a design and development bureau and a shipyard with multi-line production. Ecobus is an ice-class model designed for use as electric "river trams" with a capacity of up to 50 people. The Ecocruiser 2.0 double-deck high-speed catamarans can accommodate up to 130 passengers. In 2022, Sistema contributed to the project to launch electric vessels with regular routes in Moscow. In the reporting year, several dozen berths with electric charging stations were installed and testing of domestic electric vessels began. These new routes will improve transport services and create alternative travel options for 1.5 million people living in 18 districts. In 2023, 15,000–16,000 passengers per day will be able to use the electric vessels.

In 2022, the high-tech asset began development of a hydrogen-powered electric catamaran. The use of hydrogen fuel will increase the range of the electric vessel. Investment in the project exceeded RUB 100m. The vessel is scheduled to be tested on the water in 2023.

In 2022, the high-tech asset's shipyard built an electric double-deck catamaran, a shore-based charging station and a slow charging station for the Krasnoyarsk region. The electric vessel can travel for more than four hours. In the reporting year, the company also entered into a cooperation agreement with the government of the Perm region to create electric powered water transport and develop charging infrastructure. Starting from 2023, the company's eco-friendly electric-powered vessels will perform regular river passenger services and pleasure cruises in several Russian cities. The company will also present a new Ecocruiser Hybrid vessel — a single-deck electric catamaran with a hybrid propulsion system for recharging batteries — in 2023. The symbiosis of a gas generator and an electric motor will increase efficiency, engine power and range.

500
electric buses
use the charging infrastructure of the high-tech asset



ANNEXES

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About the Report

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Standards compliance index

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Links to additional information.
Contacts

Annex 1. About the Report

GRI 2-3 GRI 3-2

Committed to the practice of annual disclosures of non-financial corporate information, Sistema hereby presents its 10th Sustainability Report. Since 2014, reports have been published annually, and the previous report, for 2021, was published in Q4 2022.

The purpose of this Report is to inform a broad range of interested parties of the principles, goals, results and plans of Sistema in the area of sustainability and corporate responsibility.

The Corporation has prepared this Report in accordance with the updated GRI Standards 2021 and the following documents and guidelines:

- the UN Global Compact;
- the framework of International Integrated Reporting Council (IIRC) used to describe the business model with respect to capital concept;
- UNCTAD's Guidance on core indicators for entity reporting on contribution towards implementation of the Sustainable Development Goals;
- recommendations of the Task Force for Climate-Related Financial Disclosures (TCFD) and the Carbon Disclosure Project (CDP);
- indicators of the Sustainability Accounting Standards Board (SASB);
- the Social Charter of the Russian Business;
- the basic efficiency metrics and the indices "Responsibility and Transparency" and "Sustainable Development Vector" developed by the Russian Union of Industrialists and Entrepreneurs (RSPP);
- Russian and global non-financial reporting practices of comparable companies (investment groups and conglomerates), as well as inquiries from the investment community and recommendations of ESG analysts regarding the Corporation's non-financial disclosures;
- ESG rating of sustainable corporate governance (Non-Profit Partnership AKR Yes-Strategy, Russian Regional Integrated Reporting Network, University of Perugia (Italy));
- recommendations issued by the Non-Financial Reporting Board of the RSPP following the public verification of Sistema's 2021 Sustainability Report.

The preparation of annual non-financial reports is governed by the order of Sistema's President that appoints the members of the cross-functional working group charged with the preparation of the report and sets forth the procedures that apply to such preparation. The Corporation is planning to develop and roll out across the Group a corporate standard for disclosure of non-financial information.

The Group's key assets also publish their own non-financial reporting.

Establishment of materiality

For the purposes of the 2022 Sustainability Report, material topics were identified on the basis of the analysis of ESG trends and risk events carried out in 2023. The list of risks is based on the previous survey conducted as part of preparation of the 2019 Sustainability Report. The list has been amended to include new trends in view of the relevant international and national agendas. A total of 38 forms were completed, including 11 by the Corporation's management and employees, 11 by the representatives of Sistema Group companies and 16 by external stakeholders (business and professional associations, business partners, investment community, academic community, public and environmental organisations). The analysis of the survey findings showed that 18 ESG trends and risk events should be recognised as the most probable and having the greatest impact on the Corporation.

In view of the revised approach to materiality used in GRI Standards 2021, the most significant ESG trends and risk events were considered as disclosure topics and covered in the corresponding modules under GRI Standards 2021.

↗ For more information about the updated survey of ESG trends and risk events, see the subsection "Identifying Material Risks and Trends in Sustainable Development" of this report.

Full list of topics

Material risks (topics)	GRI module
Economy	
19. Development of green manufacturing and construction technologies, smart cities, etc.	GRI 305: Emissions GRI 302: Energy GRI 303: Water and Effluents GRI 305: Emissions GRI 306: Waste GRI 304: Biodiversity
20. Non-compliance with laws in the social or environmental area or initiatives in this area resulting in fines and non-monetary penalties	GRI 416: Customer Health and Safety
21. Toughening of corporate customers' requirements to supply chains	GRI 308: Supplier Environmental Assessment GRI 414: Supplier Social Assessment
22. Risk of disruption of existing supply chains due to the geopolitical events of 2022	GRI 204: Procurement Practices
23. Import substitution and localisation of production (including government programmes aimed at increasing the competitiveness of Russian companies by subsidising export-oriented projects)	
24. A decrease in real disposable household incomes and consumer spending	GRI 203: Indirect Economic Impacts
25. Introduction of protective foreign trade barriers related to sustainable development (for example, carbon duties)	GRI 201: Economic Performance GRI 415: Public Policy
30. Breaking of existing economic ties, disruptions in the supply and delivery of goods	
31. Influence of geopolitical events on economic stability, including restriction of export opportunities	
Corporate governance	
41. Increased transparency, speed of dissemination and accessibility of information	
Society	
1. The younger generation of employees have drastically new expectations from their employers	GRI 202: Market Presence GRI 401: Employment GRI 402: Labour/Management Relations
2. Qualifications gap and labour shortage (due to changes in the labour market and employers' requirements, digitalisation)	GRI 404: Training and Education
4. Brain drain due to the geopolitical events of 2022	GRI 202: Market Presence GRI 401: Employment

Material risks (topics)	GRI module
● **7.** Increased role of the work environment and corporate culture to ensure employee motivation and productivity	GRI 403: Occupational Health and Safety GRI 405: Diversity and Equal Opportunity GRI 406: Non-discrimination GRI 407: Freedom of Association and Collective Bargaining
● **15.** Deterioration of standards of living and potential growth of social tensions in the regions where the company operates, rising economic and social inequality	GRI 203: Indirect Economic Impacts GRI 413: Local Communities
● **16.** Global and regional terrorism threats	
● **18.** An increase in the number of incidents related to confidentiality and personal data protection, online security	GRI 418: Customer Privacy
Environment protection	
● **39.** Environmental accidents at the Group's facilities	GRI 305: Emissions GRI 302: Energy GRI 303: Water and Effluents GRI 305: Emissions GRI 306: Waste GRI 304: Biodiversity

Reporting perimeter

GRI 3-1

This Report covers Sistema PJSFC and its key portfolio companies, broadly in line with the perimeter of the Corporation's consolidated financial statements, with clarifications given in case of any consolidation differences.

GRI 2-4

When data for the Group is disclosed, this Report specifies the perimeter of indicators and information on restatements/ recalculation of indicators and changes in the consolidation perimeter.

Number and share of GRI elements disclosed on a consolidated basis for the Group

	2022	2021	2020	2019
General disclosures	30	47	47	47
Topics (aspects)	18	19	16	17
GRI standards	69	50	49	46

Boundaries of information collection on GRI topics (portfolio companies)

GRI 2-2 GRI 3-2

Material risks	Sistema PJSFC	Telecommunications	E-commerce	Residential property development	Timber industry	Private healthcare	Agriculture	Pharmaceuticals	Commercial property management	Power grid services	Hospitality	High technology	Other assets	Funds
19. Development of green manufacturing and construction technologies, smart cities, etc.	+	+		+	+		+	+		+		+		
20. Non-compliance with laws in the social or environmental area, or initiatives in this area resulting in fines and non-monetary penalties			+	+	+	+	+	+						
21. Toughening of corporate customers' requirements to supply chains	+	+			+	+	+					+	+	
22. Risk of disruption of existing supply chains due to the geopolitical events of 2022	+	+	+	+	+	+	+	+	+	+	+	+	+	+
23. Import substitution and localisation of production (including government programmes aimed at increasing the competitiveness of Russian companies by subsidising export-oriented projects)	+	+			+	+	+					+	+	
24. A decrease in real disposable household incomes and consumer spending		+	+	+	+	+				+	+	+		
25. Introduction of protective foreign trade barriers related to sustainable development (for example, carbon duties)	+	+	+	+	+	+	+	+	+	+	+	+	+	+
30. Breaking of existing economic ties, disruptions in the supply and delivery of goods	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Material risks	Sistema PJSFC	Telecommunications	E-commerce	Residential property development	Timber industry	Private healthcare	Agriculture	Pharmaceuticals	Commercial property management	Power grid services	Hospitality	High technology	Other assets	Funds
31. Influence of geopolitical events on economic stability, including restriction of export opportunities	+	+	+	+	+	+	+	+	+	+	+	+	+	+
41. Increased transparency, speed of dissemination and accessibility of information	+	+			+	+	+	+		+		+		+
1. The younger generation of employees have drastically new expectations from their employers	+	+			+	+	+	+		+		+		+
2. Qualifications gap and labour shortage (due to changes in the labour market and employers' requirements, digitalisation)	+	+			+	+	+	+		+		+		+
4. Brain drain due to the geopolitical events of 2022	+	+			+	+	+	+		+		+		+
7. Increased role of the work environment and corporate culture to ensure employee motivation and productivity	+	+	+	+	+	+				+	+	+	+	+
15. Deterioration of standards of living and potential growth of social tensions in the regions where the company operates, rising economic and social inequality	+	+	+	+	+	+	+	+	+	+	+	+	+	+
16. Global and regional terrorism threats	+	+	+	+	+	+	+					+	+	+
18. An increase in the number of incidents related to confidentiality and personal data protection, online security	+	+	+	+	+	+	+	+	+	+	+	+	+	+
39. Environmental accidents at the Group's facilities														

GRI 2-5

Sistema's 2022 Sustainability Report has received external assurance from the Non-Financial Reporting Board of the Russian Union of Industrialists and Entrepreneurs.

We will consider the recommendations and comments received from the assurance provider during the preparation of our future reports.

Consideration of recommendations received from the Non-Financial Reporting Board of the Russian Union of Industrialists and Entrepreneurs regarding Sistema's 2021 Sustainability Report

Excerpt from the recommendations of the Non-Financial Reporting Board of the RSPP	Consideration and fulfilment of recommendations in the 2022 Report
Address the risks whose materiality may increase in the current geopolitical situation.	Taken into account. Management of ESG-risks. Sustainable supply chain. Localisation and import substitution.
Show the Corporation's response to external threats taking into consideration their industry-related characteristics.	Taken into account. Address of the Chair of the Board of Directors. Management of ESG-risks. Sustainable supply chain. Localisation and import substitution.
It is recommended that more detailed explanations should be provided regarding considerable changes in the presented indicators.	Partially taken into account in the Report.
It is recommended that the key results and management components in the area of sustainable development should be compared and consolidated for all the portfolio companies of the Corporation.	Taken into account. Strategic ESG priorities and sustainability management system.
It is recommended that the Corporation should disclose information about the assessment made by the boards of directors of portfolio companies and Sistema PJSFC of compliance with internal regulations on the economic, environmental and social impact in the reporting period.	This recommendation was passed on to the portfolio companies to make sure that they take it into account when preparing their reports (at present such information is not included in the consolidated non-financial information of Sistema's report).
It is recommended that the report should provide more information about the implementation of the development strategy of Sistema Charitable Foundation and the creation of a single coordinated charity programme of the Corporation, and provide more detail on the methodology used for assessing the effectiveness of social and charity initiatives of Sistema and its portfolio companies.	Taken into account. Strategic ESG priorities and sustainability management system. SCF's Annual Report.

Certificate of external assurance for the 2022 Sustainability Report of Sistema PJSFC



Annex 2. Standards compliance index

GRI index

Number	Indicator	Section/comment	Page
GRI 2. General disclosures 2021			
2-1	Organisational details	Sistema today	8
2-2	Entities included in the organisation's sustainability reporting	Annex 1. About the Report	227
2-3	Reporting period, frequency and contact point	Annex 1. About the Report	224
2-4	Restatements of information	Annex 1. About the Report	226
2-5	External assurance	Annex 1. About the Report	228
2-6	Activities, value chain and other business relationships	Sistema today	12
2-7	Employees	Sistema today Human capital	102
2-8	Workers who are not employees	The company does not account for workers who are not employees	
2-9	Governance structure and composition	Sustainable corporate governance	53
2-10	Nomination and selection of the highest governance body	Sustainable corporate governance	54
2-11	Chair of the highest governance body	Sustainable corporate governance	55
2-12	Role of the highest governance body in overseeing the management of impacts	Strategic ESG priorities and sustainability management system Human capital	39 109
2-13	Delegation of responsibility for managing impacts	Strategic ESG priorities and sustainability management system	39
2-14	Role of the highest governance body in sustainability reporting	Strategic ESG priorities and sustainability management system	39
2-15	Conflicts of interest	Ethics and anticorruption efforts	82
2-16	Communication of critical concerns	Strategic ESG priorities and sustainability management system	38
2-17	Collective knowledge of the highest governance body	Strategic ESG priorities and sustainability management system	38
2-18	Evaluation of the performance of the highest governance body	Strategic ESG priorities and sustainability management system	38
2-19	Remuneration policies	Human capital	109

Number	Indicator	Section/comment	Page
2-20	Process to determine remuneration	Human capital Sistema's Annual Report for 2022	109
2-21	Annual total compensation ratio	Human capital	109
2-22	Statement on sustainable development strategy	Address of the top management	3
2-23	Policy commitments	Strategic ESG priorities and sustainability management system	38
2-24	Embedding policy commitments	Strategic ESG priorities and sustainability management system	38
2-25	Processes to remediate negative impacts	Ethics and anticorruption efforts Human rights and stakeholder engagement	82 92
2-26	Mechanisms for seeking advice and raising concerns	Ethics and anticorruption efforts	82
2-27	Compliance with laws and regulations	Ethics and anticorruption efforts Operational environmental efficiency	89 195
2-28	Membership in associations	Participation in international and industry initiatives	32
2-29	Approach to stakeholder engagement	Human rights and stakeholder engagement	93
2-30	Collective bargaining agreements	Human capital	112
GRI 3. Material topics 2021			
3-1	Process to determine material topics	Annex 1. About the Report	224
3-2	List of material topics	Annex 1. About the Report	225
GRI 201. Economic Performance 2016			
3-3	Management of material topics	About Corporation	6
201-1	Direct economic value generated and distributed	Sistema today	9
201-2	Financial implications and other risks and opportunities due to climate change	Climate change	211
201-3	Defined benefit plan obligations and other retirement plans	Human capital	112
201-4	Financial assistance received from government	Socio-economic development of local communities	144
GRI 202. Market presence 2016			
3-3	Management of material topics	Human capital	102

Number	Indicator	Section/comment	Page
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Strategic ESG priorities and sustainability management system Human capital	45 109
202-2	Proportion of senior management hired from the local community	The portfolio companies of the Group hire employees primarily from local communities and organise local training programmes where necessary. People from other geographies are hired only where finding the right specialist locally is impossible	
GRI 203. Indirect economic impacts 2016			
3-3	Management of material topics	Innovation management. Digitalisation	74
203-1	Infrastructure investments and services supported	Strategic ESG priorities and sustainability management system Innovation management. Digitalisation Socio-economic development of local communities Smart homes, cities and industries	17 47 77 148 176
203-2	Significant indirect economic impacts	Innovation management. Digitalisation Socio-economic development of local communities	77 142
GRI 204. Procurement practices 2016			
3-3	Management of material topics	Sustainable supply chain. Localisation and import substitution	80
204-1	Proportion of spending on local suppliers	Sustainable supply chain. Localisation and import substitution	69
GRI 205. Anti-corruption 2016 (additional topic)			
3-3	Management of material topics	Ethics and anticorruption efforts	
205-1	Operations assessed for risks related to corruption	Ethics and anticorruption efforts	88
205-2	Communication and training about anti-corruption policies and procedures	Strategic ESG priorities and sustainability management system Ethics and anticorruption efforts	49 88
205-3	Confirmed incidents of corruption and actions taken	Strategic ESG priorities and sustainability management system Ethics and anticorruption efforts	47 87
GRI 207. Tax 2019 (additional topic)			
3-3	Management of material topics	Socio-economic development of local communities	140

Number	Indicator	Section/comment	Page
207-1	Approach to tax	Socio-economic development of local communities	143
207-2	Tax governance, control and risk management	Socio-economic development of local communities	143
207-3	Stakeholder engagement and management of concerns related to tax	Socio-economic development of local communities	142
207-4	Country-by-country reporting	Strategic ESG priorities and sustainability management system Socio-economic development of local communities	45 49 143 146
GRI 302. Energy 2016			
3-3	Management of material topics	Operational environmental efficiency Energy management	192 217
302-1	Energy consumption within the organisation	Sistema today Energy management	16 217
302-2	Energy consumption outside of the organisation	The Corporation does not account for energy consumption outside of the organisation	
302-3	Energy intensity	Strategic ESG priorities and sustainability management system Energy management	47 218
302-4	Reduction of energy consumption	Energy management	217
302-5	Reductions in energy requirements of products and services	Energy management	219
GRI 303. Water and effluents 2018			
3-3	Management of material topics	Operational environmental efficiency	
303-1	Interactions with water as a shared resource	Operational environmental efficiency	192
303-2	Management of water discharge-related impacts	Operational environmental efficiency	192
303-3	Water withdrawal	Sistema today Strategic ESG priorities and sustainability management system Operational environmental efficiency	16 46 193
303-4	Water discharge	Sistema today Strategic ESG priorities and sustainability management system Operational environmental efficiency	17 46 193
303-5	Water consumption	Operational environmental efficiency	192
GRI 304. Biodiversity 2016			
3-3	Management of material topics	Operational environmental efficiency	
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Operational environmental efficiency	200
304-2	Significant impacts of activities, products and services on biodiversity	Operational environmental efficiency	19
304-3	Habitats protected or restored	Operational environmental efficiency	
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	The Corporation does not account for Red List species	
GRI 305. Emissions 2016			
3-3	Management of material topics	Climate change	
305-1	Direct (Scope 1) GHG emissions	Sistema today Strategic ESG priorities and sustainability management system Climate change	17 49 213
305-2	Energy indirect (Scope 2) GHG emissions	Climate change	214
305-3	Other indirect (Scope 3) GHG emissions	Climate change	214
305-4	GHG emissions intensity	Climate change	213
305-5	Reduction of GHG emissions	GHG emissions were not reduced in 2022	
305-6	Emissions of ozone-depleting substances (ODS)	The Group companies do not use ozone-depleting substances on an industrial scale	
305-7	Nitrogen oxides (NOx), sulphur oxides (SOx) and other significant air emissions	Operational environmental efficiency	198,199
GRI 306. Waste 2020			
3-3	Management of material topics	Waste management and circular economy	206
306-1	Waste generation and significant waste-related impacts	Operational environmental efficiency Waste management and circular economy	198 206
306-2	Management of significant waste-related impacts	Waste management and circular economy	206
306-3	Waste generated	Waste management and circular economy	206
306-4	Waste diverted from disposal	Waste management and circular economy	207
306-5	Waste directed to disposal	Waste management and circular economy	207
GRI 308. Supplier environmental assessment 2016			
3-3	Management of material topics	Operational environmental efficiency	
308-1	New suppliers that were screened using environmental criteria	Sustainable supply chain. Localisation and import substitution	67
308-2	Negative environmental impacts in the supply chain and actions taken	Sustainable supply chain. Localisation and import substitution Climate change	67 212
GRI 401. Employment 2016			
3-3	Management of material topics	Human capital	102

Number	Indicator	Section/comment	Page
401-1	New employee hires and employee turnover	Strategic ESG priorities and sustainability management system Human capital	46 107
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Human capital	110
401-3	Parental leave	Human capital	110
GRI 403. Occupational health and safety 2018			
3-3	Management of material topics	Health and safety	129
403-1	Occupational health and safety management system	Health and safety	129
403-2	Hazard identification, risk assessment and incident investigation	Health and safety	129
403-3	Occupational health services	Health and safety	129
403-4	Worker participation, consultation and communication on occupational health and safety	Health and safety	129
403-5	Worker training on occupational health and safety	Health and safety	132
403-6	Promotion of worker health	Health and safety	132,133
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Health and safety	129,130
403-9	Work-related injuries	Sistema today Health and safety	17 131
403-10	Work-related ill health	Strategic ESG priorities and sustainability management system Health and safety	45 131
GRI 404. Training and education 2016			
3-3	Management of material topics	Human capital	113
404-1	Average hours of training per year per employee	Sistema today Strategic ESG priorities and sustainability management system	17 46
404-2	Programmes for upgrading employee skills and transition assistance programmes	Human capital	113
404-3	Percentage of employees receiving regular performance and career development reviews	Human capital	116
GRI 405. Diversity and equal opportunity 2016			
3-3	Management of material topics	Human capital	102
405-1	Diversity of governance bodies and employees	Sistema today Sustainable corporate governance Human capital	16 55 104
405-2	Ratio of basic salary and remuneration of women to men	Strategic ESG priorities and sustainability management system	46
GRI 406. Non-discrimination 2016			
3-3	Management of material topics	Human capital	102
406-1	Incidents of discrimination and corrective actions taken	No incidents of discrimination were registered in 2022	
GRI 407. Freedom of association and collective bargaining 2016			
3-3	Management of material topics	Human capital	102
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	No operations or suppliers in which the right to freedom of association and collective bargaining may be at risk were identified	
GRI 413. Local communities 2016			
3-3	Management of material topics	Socio-economic development of local communities	140
413-1	Operations with local community engagement, impact assessments, and development programmes	Socio-economic development of local communities	140
413-2	Operations with significant actual and potential negative impacts on local communities	Socio-economic development of local communities	140
GRI 415. Public policy 2016			
3-3	Management of material topics	Responsible investment strategy and approaches	36
415-1	Political contributions	The Corporation does not finance political parties, organisations and movements (pursuant to the Code of Ethics)	
GRI 416. Customer health and safety 2016			
3-3	Management of material topics	Responsibility for products	171
416-1	Assessment of the health and safety impacts of product and service categories	Responsibility for products	171
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	No incidents were identified	
GRI 418. Customer privacy 2016			
3-3	Management of material topics	Confidentiality and personal data protection	137
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Confidentiality and personal data protection	137

Compliance with the UN Global Compact principles

Areas	UN Global Compact principles	GRI indicator	Section	Page
Human rights	Businesses should support and respect the protection of internationally proclaimed human rights Businesses should make sure that they are not complicit in human rights abuses	2-25 2-29 3-3	Participation in international and industry initiatives Human rights and stakeholder engagement	32 91
Labour relations	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	2-30	Human rights and stakeholder engagement Human capital	91 102
Environment	Businesses should undertake initiatives to promote greater environmental responsibility Businesses should encourage the development and diffusion of environmentally friendly technologies	2-28 302-4	Participation in international and industry initiatives Climate change Energy management	32 211 217
	Businesses should undertake initiatives to promote greater environmental responsibility	2-28	Participation in international and industry initiatives Climate change	32 211
Anticorruption	Businesses should work against corruption in all its forms, including extortion and bribery	205-2 205-3	Ethics and anticorruption efforts	80

UNCTAD indicators[1]

Indicator	Section/comment	Page
Economic area		
A.1.1. Revenue	Sistema today	8
A.2.1. Taxes and other payments to the Government	Strategic ESG priorities and sustainability management system Socio-economic development of local communities	45 49 143
A.3.1. Green investments/products	Strategic ESG priorities and sustainability management system Operational environmental efficiency	45 49 194
A.3.2. Community investment	Strategic ESG priorities and sustainability management system Socio-economic development of local communities	45 148
A.3.3. Total expenditures on research and development	Innovation management. Digitalisation	77
A.4.1. Percentage of local procurement	Sustainable supply chain. Localisation and import substitution	69
Environmental area		
B.1.1. Water recycling	Operational environmental efficiency	190
B.2.3. Hazardous waste	Waste management and circular economy	206
B.3.1. Greenhouse gas emissions (Scope 1)	Strategic ESG priorities and sustainability management system Climate change	49 211
B.3.2. Greenhouse gas emissions (Scope 2)	Climate change	212
B.5.1. Renewable energy sources	Waste management and circular economy Energy management	209 219
B.5.2. Energy efficiency	Energy management	219
Social area		
C.1.1. Proportion of women in managerial positions	Human capital	104
C.2.1. Average hours of training per year per employee	Strategic ESG priorities and sustainability management system	46
C.4.1. Percentage of employees covered by collective agreements	Human capital	112
Institutional area		
D.1.1. Number of board meetings and attendance rate	Strategic ESG priorities and sustainability management system Sustainable corporate governance	49 56
D.1.2. Number and percentage of women board members	Strategic ESG priorities and sustainability management system Sustainable corporate governance Human capital	46 55 104

1 https://unctad.org/system/files/official-document/diae2019d1_en.pdf.

Indicator	Section/comment	Page
D.1.4. Number of meetings of audit committee and attendance rate	Strategic ESG priorities and sustainability management system Sustainable corporate governance	49 53
D.1.5. Compensation: total compensation per board member (both executive and non-executive directors)	Sistema's Annual Report for 2022	
D.2.1. Amount of fines paid or payable due to settlements	Operational environmental efficiency Ethics and anticorruption efforts	89 195

SASB index

Asset management and custody activities

Topic	Indicator	Code	Section	Page
Employee diversity and inclusion	Percentage of gender and racial/ ethnic grouprepresentation for executive management, non-executive management, professionals, and all other employees	FN-AC-330a.1	Sustainable corporate governance Human capital	55 104
Incorporation of environmental, social, and governance factors in investment management & advisory	Description of approach to incorporation ofenvironmental, social, and governance (ESG) factors in investment and/ or wealthmanagement processes and strategies	FN-AC-410a.2	Responsible investment approach	24
Business ethics	Total amount of monetary losses as a result oflegal proceedings associated with fraud, insider trading, anti-trust, anti-competitivebehaviour, market manipulation, malpractice, or other related financial industry laws or regulations	FN-AC-510a.1	Ethics and anticorruption efforts	80 89

Biotechnology & pharmaceuticals

Topic	Indicator	Code	Section	Page
Access to medicines	Description of actions and initiatives topromote access to health care products forpriority diseases and in priority countries asdefined by the Access to Medicine Index	HC-BP-240a.1	Access to products, services and information Customer experience	163 168

Forestry management

Topic	Indicator	Code	Section	Page
Ecosystem services & impact	Area of forestland certified to a third-partyforest management standard, percentagecertified to each standard	RR-FM-160a.1	Responsibility for products	171
	Description of approach to optimising opportunities from ecosystem services provided by forestlands	RR-FM-160a.4	Operational environmental efficiency	200
Climate change adaptation	Description of strategy to manage opportunities for and risks to forest management and timber production presented by climate change	RR-FM-450a.1	Climate change	211

Telecommunication services

Topic	Indicator	Code	Section	Page
Data Privacy	Description of policies and practices relating to behavioural advertising and customer privacy	TC-TL-220a.1	Confidentiality and personal data protection	138
Data Security	1) Number of data breaches, 2) Percentage involving personally identifiable information, 3) Number of customers affected	TC-TL-230a.1	Confidentiality and personal data protection	137
	Description of approach to identifying andaddressing data security risks, including use of third-party cybersecurity standards	TC-TL-230a.2	Confidentiality and personal data protection	138
Product end-of-life management	(1) Materials recovered through take backprograms, percentage of recovered materialsthat were (2) reused, (3) recycled and (4) landfilled	TC-TL-440a.1	Waste management and circular economy	207

Agricultural products

Topic	Indicator	Code	Section	Page
Greenhouse gas emissions	Gross global Scope 1 emissions	FB-AG-110a.1	Climate change	213
	Discussion of long-term and short-termstrategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	FB-AG-110a.2	Climate change	211

TCFD indicators

Indicator	Section	Page
Governance		
a) The board's oversight of climate-related risks and opportunities	Climate change	211
b) Management's role in assessing and managing climate-related risks and opportunities	Climate change	211
Strategy		
a) Description of the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	ESG risk management	65
b) The impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning	Climate change	211
Risk management		
a) The organisation's processes for identifying and assessing climate-related risks	ESG risk management	60
b) The organisation's processes for managing climate-related risks	ESG risk management	60
Metrics and targets		
b) Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions and the related risks	Climate change	213

WEF indicators[1]

Topic	Indicator	GRI indicator	Section	Page
Governing purpose				
Governing purpose	Setting purpose Purpose-led governance	2-23	Responsible investment approach	23–31
Quality of governing body	Governance body composition	405-1	Sustainable corporate governance	52–58
Stakeholder engagement	Material issues impacting stakeholders	2-25	Human rights and stakeholder engagement Annex 1. About the Report	91–91 224–230
Ethical conduct	Anticorruption	2-15 2-23 2-24 2-25 2-26 2-27 205-1 205-2 205-3	Ethics and anticorruption efforts	80–90
Planet				
Climate change	Greenhouse gas emissions	305-1 305-2 305-4 305-5 305-6	Climate change	211–212
	TCFD implementation		Annex 2. Standards compliance index	231–245
	Paris-aligned GHG emissions targets		Climate change	211–212
Nature loss	Land use and ecological sensitivity	304-1	Operational environmental efficiency	192–205
Freshwater availability	Water consumption and withdrawal in water-stressed areas		The Group companies do not operate in regions where water resources are scarce	
Air pollution	Air pollution	305-7	Operational environmental efficiency	192–205
Solid waste	Single-use plastics	306-1 306-2 306-3 306-4 306-5	Waste management and circular economy	206–210
Resource availability	Resource circularity		Waste management and circular economy	206–210

1 https://www3.weforum.org/docs/WEF_IBC_Measuring_Stakeholder_Capitalism_Report_2020.pdf.

Topic	Indicator	GRI indicator	Section	Page
People				
Dignity and equality	Diversity and inclusion	405-1	Human capital	102–128
	Wage level	202-1	Human capital	102–128
	Risk for incidents of child, forced or compulsory labour		Incidents of forced and child labour or related risks were not identified.	
	Discrimination and harassment incidents and the total amount of monetary losses		No incidents of discrimination were registered in 2022	
	Human rights review, grievance impact & modern slavery		Human rights and stakeholder engagement	91–97
	Living wage		Human capital	102–128
Health and well-being	Health and safety	403-1 403-2 403-3 403-4 403-5 403-6 403-7 403-9 403-10	Human capital Health and safety	102–128 129–136
	Employee well-being		Health and safety	129–136
Skills for the future	Training	404-2	Human capital	102–128
Prosperity				
Employment and wealth generation	Absolute number and rate of employment	401-2	Human capital	102–128
	Economic contribution	202-1 201-4	Sistema today Socio-economic development of local communities Human capital	9–19 140–153 102–128
	Financial investment contribution		Responsible investment approach	23–31
	Infrastructure investments and services supported	203-1	Responsible investment approach Innovation management. Digitalisation Smart homes, cities and industries Socio-economic development of local communities	23–31 75–89 176–185 140–153
	Significant indirect economic impacts	203-2	Innovation management. Digitalisation Socio-economic development of local communities	75–89 140–153
Innovation of better products and services	Total R&D expenses		Innovation management. Digitalisation	75–89

Topic	Indicator	GRI indicator	Section	Page
Community and social vitality	Total tax paid	201-1	Sistema today Socio-economic development of local communities	8–19 140–153
	Additional tax remitted	201-1	Sistema today Socio-economic development of local communities	8–19 140–153
	Total tax paid by country for significant locations	201-1	Socio-economic development of local communities	140–153
	Total social investment		Socio-economic development of local communities	140–153

Annex 3. Links to additional information

Official website of Sistema PJSFC	https://sistema.com/
Sistema's Annual Report for 2022	https://e-disclosure.ru/portal/FileLoad.ashx?Fileid=1801142
Key documents	
Code of Ethics	https://sistema.com/upload/iblock/a88/a88ca7236ff614b76d55301d71424270.pdf
Corporate Governance Code	https://sistema.com/upload/iblock/bb7/bb739face86602f8c96d937a5d936e09.pdf
Sustainability Policy	https://sistema.com/upload/iblock/0b6/0b6ebeabe7c86c5ccb7f3bb96b76c45c.pdf
Corporate Social Responsibility Policy	https://sistema.ru/upload/iblock/d75/d75ee1306de39042a30ae4f7424761ee.pdf
Anticorruption Policy	https://sistema.com/upload/iblock/d34/d34551df29c5701501fc715e814d01116.pdf
Environmental Policy	https://sistema.com/upload/iblock/3a8/n6ceomgl3p88f4eyoqxr6boqm86ujbeb/Sistema_Environmental-Policy.pdf
Human Rights Policy	https://sistema.com/upload/iblock/70d/tejazhtom0mt8b3eugvucqwkcmvnx03l/Sistema_Human-Rights-Policy.pdf
Terms of Reference of the Strategy and Sustainability Committee	https://sistema.com/upload/iblock/214/0cz3o4162nityp8s4euvrwinpmu5ph7z/Annex-2.-TERMS-OF-REFERENCE-OF-THE-STRATEGY-AND-SUSTAINABILITY-COMMITTEE-OF-THE-BOARD-OF-DIRECTORS.pdf
Terms of Reference of the Nomination, Remuneration and Corporate Governance Committee	https://sistema.com/upload/iblock/83f/jizu559sjc0j5pe2zbtk5u0s3cjrxeb9/Annex-4.-TERMS-OF-REFERENCE-OF-THE-NOMINATION_-REMUNERATION-AND-CORPORATE-GOVERNANCE-COMMITTEE.pdf
Terms of Reference of the Audit, Finance and Risk Committee	https://sistema.com/upload/iblock/4a1/yp1fvukjtxefucqw5t9ntvkt7wvwjbn1/Annex-3.-TERMS-OF-REFERENCE-OF-THE-AUDIT_-FINANCE-AND-RISK-COMMITTEE-OF-THE-BOARD-OF-DIRECTORS.pdf
Other corporate documents	https://sistema.com/about/corpmanage/docs

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