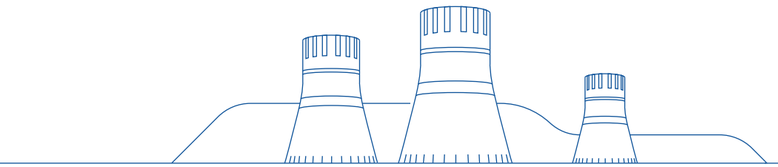
ROSATOM

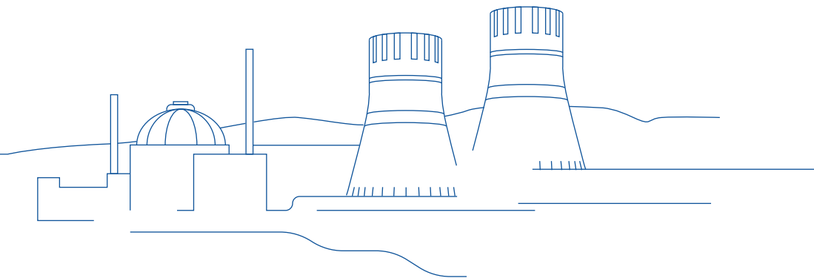
2022

SUSTAINABILITY REPORT

ROSATOM

Sustainability Report





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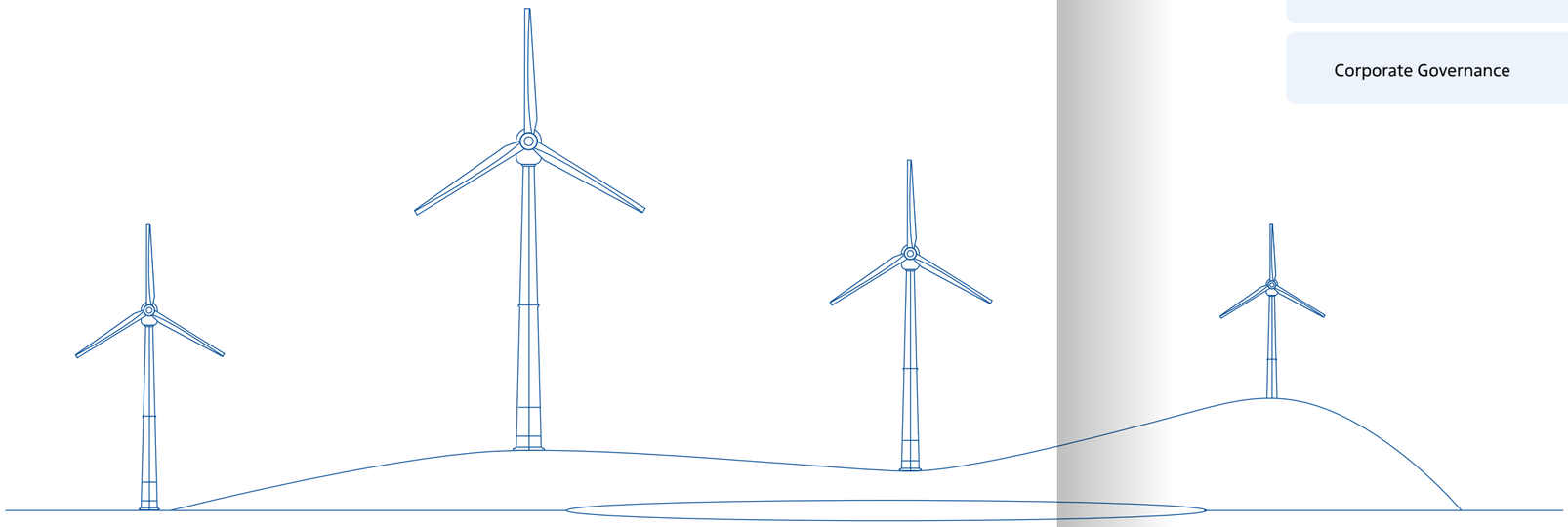


STATEMENT OF THE DIRECTOR GENERAL

Dear colleagues!

In 2022, the future of the sustainable development agenda in Russia was the subject of intense discussion, as it was questioned whether it was still relevant to Russian companies in the current environment. However, ROSATOM has never called this into question, as our commitment to sustainability principles is not determined by external demands; indeed, environmental and social responsibility and the highest safety standards have been part of our company's DNA throughout its history.

As an international company, we see that sustainable and green products are in demand on various markets literally in every country worldwide. This is driven first and foremost by the need for stability and demand for solutions that help to improve the quality of life. Most of our product areas are relevant in some way to sustainable development; these include NPP construction and clean energy supply; solutions for small-scale nuclear power generation designed to provide power supply to remote areas; water purification and desalination plants, wind power, environmental solutions, development of the Northern Sea Route, nuclear medicine and isotope products, and energy storage systems, including for electric vehicles.

We are working systematically to increase the share of green products in our product line. In 2022, the share of green revenue from new businesses totalled about 40%. We are building a sustainability management system in nuclear organisations, with more than 20 organisations implementing annual sustainability action plans.

Our operations and our products contribute to improving the standard of living in our regions of operation both in Russia and abroad; at the same time, we strictly adhere to the principle of zero harm to people's life and health. These principles have historically governed our operations. Now these practices are underpinned by a universally understood framework, namely that of sustainable development, which serves as a frame of reference encouraging continuous maturity improvement, and we will continue to work towards this goal.

Alexey Likhachev

Director General of ROSATOM

ROSATOM'S ESG SNAPSHOT

~20%

share of nuclear power as a low-carbon energy source in Russia

~7%

of total GHG emissions are prevented annually by NPPs in Russia

7

wind farms in Russia with a total capacity of 780 MW

27

nuclear towns and cities with a total population over two million people

32%

share of women among ROSATOM's employees

Vision Zero

principle governing ROSATOM's operations

67%

of employees in the industry have undergone training

RUB 313 BN

spending on procurement from small and medium-sized businesses

6.8X

the volume of recycled and reused water exceeds the volume of water withdrawal

*According to the OECD, the share of women in the global nuclear industry totals about 25%. Gender Balance in the Nuclear Sector. https://www.oecd-nea.org/jcms/pl_78831/gender-balance-in-the-nuclear-sector

In the course of its operations, State Atomic Energy Corporation Rosatom (hereinafter referred to as ROSATOM or the Corporation) is committed to global sustainable development priorities and adheres to the 10 principles of the UN Global Compact. ROSATOM contributes to the achievement of the UN Sustainable Development Goals (SDGs) through its product line, its financial and economic performance and its efforts to ensure the sustainability of internal environmental, social and governance processes.

Organisations in the industry adhere to the Unified Industry Policy on Sustainable Development; the Policy is available on the website at https://www.rosatom.ru in the Sustainability section.

Overall, ROSATOM's operations contribute to the achievement of all 17 of the UN SDGs. Given the scale of the Corporation's business and individual NPP construction projects, the following Goals are of key importance:

Given the nature of its operations, the nuclear industry also directly contributes to the achievement of the following SDGs:

ROSATOM attaches special importance to preventing the risk of any aspect of its operations having a negative impact on the following SDGs:

ROSATOM's progress in the sphere of sustainable development in accordance with the 10 principles of the UN Global Compact is presented in the following sections:

Environment	**Environment and Safety** – Environmental policy – Air pollutant and greenhouse gas emissions – Radiation safety – Energy efficiency – Water use and wastewater discharge – Industrial and consumer waste management – Biodiversity and land rehabilitation
Human Rights **Labour**	**Social Aspect** – Labour relations – Talent development – Occupational health and safety – Human rights – Employee health – Developing the regions of operation – Corporate volunteering
Anti-Corruption	**Corporate Governance** – Public reporting – Supply chain and procurement procedures – Code of Ethics – Anti-corruption policy – Audit and internal control – Data protection

1

KEY RESULTS IN 2022

~ 40 %

SHARE OF GREEN REVENUE FROM ROSATOM'S NEW BUSINESSES

1 KEY RESULTS IN 2022

In early 2022, a strategic session titled 'Sustainability Principles in the Nuclear Industry' was held for top 30 executives, which resulted in the drafting and publication of a memorandum of commitment of executives in the nuclear industry to the principles of sustainable development.

In 2022, the Russian Analytical Credit Rating Agency (ACRA) rated ROSATOM at ESG-3 and assigned it to the ESG-B category, which corresponds to a very high environmental, social and governance score (the assessment was solicited, and the Corporation participated in the rating process). The assessment took into account information on the performance of ROSATOM's five key Divisions: Mining, Sales and Trading, Fuel, Engineering and Power Engineering Divisions, given their significant contribution to the company's overall performance.

Executives' Memorandum of Commitment:

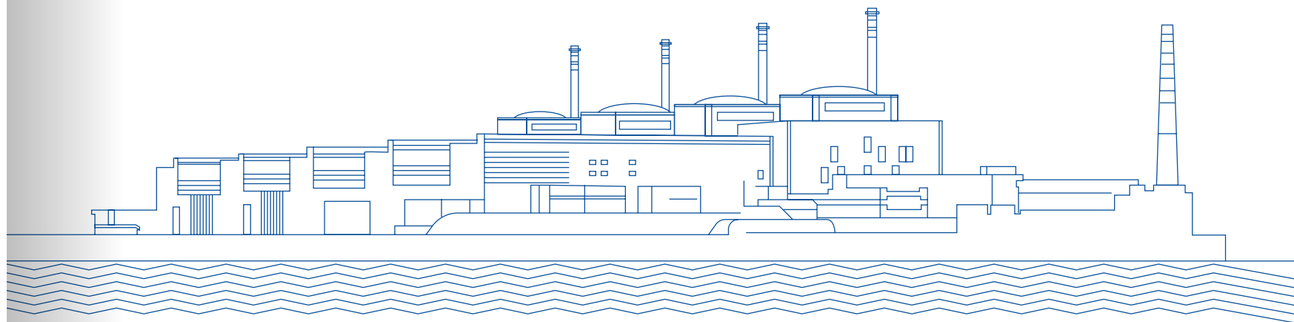
In 2022, ROSATOM joined the National ESG Alliance, which comprises companies leading the Russian ESG agenda. The National ESG Alliance aims to maintain and develop the sustainable development agenda in Russia.

In 2022, ROSATOM continued to apply green finance instruments; overall, by year-end 2022, it had raised 19 external green loans (ESG loans and green bonds) totalling more than RUB 200 billion to refinance WPP construction projects and the Akkuyu NPP construction project (Turkey).

As part of its focus on increasing the share of green products in its product line, ROSATOM monitors ESG performance across its key product areas. To do so, the company has established an internal ESG certification procedure. In 2022, more than 20 product areas underwent certification, including small NPPs, wind power, the smart city, nuclear medicine, etc. In 2022, product areas that underwent internal sustainability certification and had their green status confirmed accounted for about 40% of total revenue from new businesses.

For details, see section 1.2 'Sustainable Development Management' (Chapter 1 'Strategic Report') of ROSATOM's Public Annual Report for 2022.

PRODUCTS UNDERWENT INTERNAL ESG CERTIFICATION PROCEDURE



2

CONTRIBUTION TO THE ACHIEVEMENT OF THE UN SUSTAINABLE DEVELOPMENT GOALS

5 GW

TARGET INSTALLED CAPACITY OF ROSATOM'S PORTFOLIO OF OVERSEAS WIND FARMS BY 2030

2 CONTRIBUTION TO THE ACHIEVEMENT OF THE UN SUSTAINABLE DEVELOPMENT GOALS

ROSATOM's products are aimed at improving the quality of people's lives and contribute to the achievement of the UN Sustainable Development Goals, each in their own way. When developing new businesses, ROSATOM focuses particularly on environmental impacts, value creation for end users and assessment of product solutions in terms of their alignment with the UN SDG priorities.

One of the strategic priorities of ROSATOM's business is to develop low-carbon energy solutions that contribute to climate action. In addition to conventional nuclear power, ROSATOM's portfolio also includes wind power. In addition, the Corporation is developing hydrogen-based solutions.

Examples of ROSATOM's products and their contribution to the achievement of the UN SDGs

- NPPs AND SMRs
- WIND POWER
- HYDROGEN
- WASTE MANAGEMENT
- INTERNATIONAL LOGISTICS
- NUCLEAR MEDICINE; ISOTOPES
- MULTIPURPOSE IRRADIATION CENTRES

Nuclear power

Given the scale of the contribution of the nuclear power industry to implementing the Paris Agreement and reducing the carbon footprint in Russia and globally, the climate agenda is a major priority for ROSATOM as it is an important aspect of sustainable development.

In 2022, ROSATOM actively assisted in preparing and hosting the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27) in Sharm El Sheikh (Egypt). The conference was attended by more than 33,000 participants, including national leaders and global companies. The highlight of ROSATOM's programme at COP27 was the Energy Day, which included a public discussion titled 'Nuclear Energy Contribution to the Prosperity of Africa'. During the discussion, speakers from Egypt, Nigeria, Ghana, South Africa and other countries examined both applied solutions that the nuclear industry can offer to support the development of African countries and challenges involved in adapting these solutions. A separate pavilion, #Atoms4Climate, was provided for the nuclear power industry at the conference venue for the first time in the COP history. In addition, COP27 resulted in the adoption of a resolution prioritising the development of low-carbon energy sources not limited to renewable energy.

In the context of sustainable development, it is important that sustainability should be recognised in official documents at the national level.

Nuclear power qualifies as green in Russia's Taxonomy and in China's Green Bond Endorsed Projects Catalogue. Important developments in 2022 included the establishment of detailed criteria in the EU Sustainable Finance Taxonomy for nuclear power to qualify as a transitional activity. In late 2022, South Korea published a national Taxonomy, in which nuclear power is listed as a green economic activity, provided that it meets a number of criteria. In addition, January 2023 saw the publication of the EAEU Taxonomy, in which nuclear power is also listed as a green activity, provided that it meets basic sustainability criteria.

As part of an analysis of ESG requirements for nuclear power, in 2022, ROSATOM conducted a detailed analysis of compliance of Russian nuclear technologies with the criteria established in the Complemen-

NUCLEAR POWER IN RUSSIA

Nuclear power is the largest source of low-carbon green energy in Russia: in 2022, power generation at ROSATOM's NPPs reached a new all-time high of 223.4 billion kWh, or 19.9% of the country's total electricity output in the Unified Power System of Russia. At year-end 2022, 35 nuclear power units at NPPs and a floating thermal nuclear power plant (FTNPP) with a total installed capacity of 29.6 GW were in operation in Russia.

DEVELOPMENT OF SMALL-SCALE NUCLEAR POWER GENERATION

To provide power supply in remote regions, ROSATOM is developing solutions for small-scale nuclear power generation. The project to build a pilot SMR with a RITM-200N reactor unit in the Sakha Republic (Yakutia) is underway. A positive opinion has been obtained from the State Environmental Expert Review Board for supporting materials for the licence for the placement of the NPP; the construction of offsite infrastructure has been initiated.

The SMR project will provide a clean, efficient and stable source of energy for remote Arctic regions of the Sakha Republic, which will help to improve the standard of living in local communities, reduce the share of hydrocarbon-based sources in the energy system and promote the development of social infrastructure, regional industry and entrepreneurship.

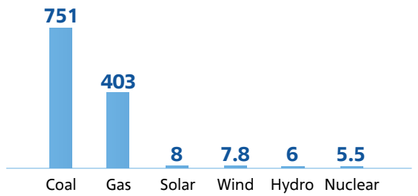
tary Delegated Act (CDA) to the EU Taxonomy. Compliance of Russian nuclear technologies and projects with the requirements of the EU Taxonomy has been confirmed through the following groups of criteria: confirmation of the minimum level of greenhouse gas emissions, safety guarantees for the NPP operation stage, commitment to closing the nuclear fuel cycle, and safe radioactive waste management and NPP decommissioning. The findings of the analysis are publicly available on ROSATOM's website.

Lowest greenhouse gas emissions

Nuclear power generation is a source of low-carbon energy that meets base load power demand. Nuclear power generation does not produce direct CO_2 emissions, which puts it on a par with renewable energy sources, such as wind power. The operation of all NPPs in Russia currently helps to prevent emissions exceeding 100 million tonnes of CO_2e per year (109.5 million tonnes of CO_2e in 2022).

The nuclear power industry plays a vital role in the achievement of global climate targets as it ensures steady 24/7 power generation for 60 years, with a potential for service life extension.

Greenhouse gas emissions*



** Minimum values over the life cycle (g CO_2e/kWh); the average value is shown for nuclear power.*

Source: UNECE

Safe operation

The safety of people and the environment is ROSATOM's top priority. Both national and international regulations on the use of nuclear energy set the strictest and most comprehensive safety requirements.

ROSATOM continuously improves its technological solutions and the safety of nuclear power plants at all stages of their life cycle. Russian-design reactors feature a combination of active and passive safety systems that minimise the likelihood of accidents and prevent the risk of damage from a hurricane, a flood, an earthquake and other disasters. ROSATOM's technological solution based on the VVER-1200 technology (in commercial operation since 2017) is the world's most advanced reactor technology currently in commercial operation (Generation 4 reactors with a closed fuel cycle); it complies with all post-Fukushima safety requirements.

Safety of fuel solutions and the CNFC

ROSATOM is working to improve materials and technologies used in the nuclear fuel cycle; these efforts are focused primarily on improving the safety of nuclear technologies. The development of accident tolerant fuel (ATF) is high on the agenda of the global nuclear community. TVEL Fuel Company is actively developing accident tolerant fuel for light-water reactors. It is exploring options that have a high readiness level, including new approaches to both fuel cladding materials and fuel matrices.

As part of its efforts to enhance the safety and reliability of existing technologies, the nuclear industry is actively developing technological solutions for a closed nuclear fuel cycle (CNFC). In 2021, ROSATOM started the construction of the BREST-OD-300 reactor, which does not use natural uranium and enables the disposal of long-lived radioactive waste. The BREST-OD-300 reactor will form part of the Pilot and Demonstration Energy Facility (PDEF), which will be of crucial importance for the entire global nuclear industry. This nuclear technology hub of the future comprises three interconnected facilities that are unique in the world: a fuel fabrication/refabrication module that will produce uranium/plutonium fuel; the BREST-OD-300 power unit and an irradiated fuel reprocessing module. In 2022, the first stage of a training and information centre was commissioned, and a unique test bench for the main coolant pump of the BREST-OD-300 reactor was put into operation at the site of JSC SCP.

DEVELOPMENT OF CNFC TECHNOLOGY

The PDEF is being built as part of ROSATOM's strategic project code-named Proryv ('Breakthrough'), which is focused on creating a new technological platform for the nuclear power industry. It involves the widespread adoption of technologies for the recycling of nuclear materials. This will considerably increase the availability of feedstock for the nuclear power industry and will help to address the issue of spent nuclear fuel and radioactive waste accumulation by reusing SNF reprocessing products instead of storing them and by drastically reducing the volume and radioactivity of waste.

Safe RAW and SNF management and technological solutions for nuclear decommissioning

ROSATOM's operations are underpinned by the principles of responsible use of natural resources in order to preserve them for future generations. State-of-the-art technological solutions enable by-products of reprocessing and spent materials to be reused in the production cycle to manufacture new materials and products.

The key principles underlying the management of radioactive materials include safe and responsible RAW management and waste minimisation. ROSATOM's organisations perform the full range of RAW management tasks, from processing to disposal, including removal, transportation and characterisation, RAW stabilisation for disposal (conditioning) and burial, as well as construction of RAW storage and disposal facilities.

CONTRIBUTION OF NPP CONSTRUCTION PROJECTS TO SUSTAINABLE DEVELOPMENT

Each of ROSATOM's NPP construction projects contributes to the achievement of sustainable development goals. NPPs are a stable and safe low-carbon energy source. Economic benefits from NPP construction projects include GDP contribution totalling billions of US dollars, tax payments to the national budget of the customer country and orders placed with local suppliers. For the country's population, benefits from a construction project include primarily jobs, social programmes and training provided to local specialists.

An NPP construction project is not confined to a nuclear power plant. It also includes multiple infrastructure programmes, such as building educational and healthcare facilities and upgrading transport infrastructure. The project involves numerous industries and makes an overall contribution to improving the standard of living in the customer country.

Contribution of the Akkuyu NPP construction project to sustainable development in Turkey

Akkuyu NPP

Akkuyu NPP is the first nuclear power plant in Turkey and the world's first NPP project based on the BOO model.

The power plant is being built in Mersin Province on the southern coast of Turkey.

The power plant will comprise four Generation III+ VVER power units with a capacity of 1,200 MW each.

Construction time frame under the IGA: 2018 – 2028*	NPP installed capacity: 4,800 MW	Power generation: 35 billion kWh per year

Contribution of the NPP to the country's sustainable development goals

1. GDP growth

About $7 billion
(~1% of the country's GDP) – estimated contribution of the project to Turkey's GDP during the NPP construction period

2. Tax revenue

More than $2 billion
in additional tax payments to the national budget during the construction period

3. Share of locally hired employees

~80%
of employees at the construction stage will be hired from the local population in Turkey**

4. Local suppliers

More than 400
local companies have been included in the list of suppliers for the project (with ~40% of construction and installation work and supplies to be carried out by Turkish suppliers)

5. Energy supply

More than 15 million
people (~18% of the country's population, or roughly the population of Istanbul) can be provided with electricity thanks to Akkuyu NPP

6. Increase in low-carbon energy production

A 6 p.p. increase
(to 48%) in the share of **low-carbon sources** in the total electricity output will be achieved after the NPP is commissioned

7. Training of local residents

About 600
Turkish nuclear specialists will undergo training at Russian universities as part of a targeted personnel training programme for Akkuyu NPP***

8. Reduction in greenhouse gas emissions

About 18 million tonnes of CO_2e – annual reduction in emissions (~3.4% of the current level)**** **due to the replacement of power generation from other sources as a result of NPP operation**

* Under the Intergovernmental Agreement between Russia and Turkey, the first power unit is to be commissioned within seven years after all required permits have been obtained. Given that the licence for the construction of power unit No. 1 was obtained in April 2018, power unit No. 1 is to be commissioned in 2025. Subsequent power units are to be commissioned at one-year intervals.
** With a total of more than 25,000 people to be employed at the construction site at the peak of construction.
*** In addition, support is provided for the development of the national educational system by enhancing vocational education programmes to train graduates of Turkish technical colleges and involve them in the project.
**** The four power units of Akkuyu NPP (currently under construction) will help to prevent carbon dioxide emissions equivalent to emissions from almost 10 million vehicles per year.

ESG projects being implemented at the Akkuyu NPP construction site

ENVIRONMENTAL AND BIODIVERSITY CONSERVATION PROJECTS

Environmental monitoring

- The status of terrestrial and aquatic flora and fauna and marine life is monitored
- Annual environmental monitoring reports are prepared and submitted to the industry regulator, the Nuclear Regulatory Authority of the Republic of Türkiye (NDK)

Environmental infrastructure

- Industrial and household waste is sorted and transferred for processing
- Water intake facilities are equipped with fish screens that prevent fish from swimming or getting drawn into them

Other

- AKKUYU NUCLEAR is a partner in a project to monitor, protect and save sea turtles living in the vicinity of the NPP construction site

PROJECTS TO SUPPORT AND DEVELOP SOCIAL INFRASTRUCTURE

Education

- A school has been opened for 390 students, including both children of employees of AKKUYU NUCLEAR JSC and other school students in the region
- The company supports schools and preschools in its region of operation

Housing and related infrastructure

- The company plans to build a residential area for the personnel (at least 6,290 people), including apartment buildings, a school, a nursery school, catering facilities, a clinic with a pharmacy, shopping facilities, a sports facility, children's playgrounds and sports grounds, a laundry, a hairdressing salon and a community centre

Healthcare

- The company supports healthcare institutions in its region of operation
- A first-aid post functions at the site
- Voluntary health insurance is arranged for employees

PROJECTS TO DEVELOP TRANSPORT INFRASTRUCTURE

Road infrastructure

- The Akkuyu NPP project is driving the development of road infrastructure in Mersin Province, including the renovation of a road connecting the Gülnar district centre and the NPP construction site: narrow sections have been widened; road markings have been repainted; fences have been installed on steep slopes and at dangerous turns; the enforcement of speed limits has been enhanced. Collectively, these measures have helped to make the road considerably safer

Marine infrastructure

- To support the implementation of the project, a pier has been built at the NPP construction site, making it possible to deliver heavy equipment directly to the site without increasing the burden on the region's transport infrastructure

Wind power

In order to diversify its product solutions in the sphere of low-carbon power, ROSATOM has been developing the wind power business since 2017.

In 2022, six wind power plants with a total capacity of 720 MW currently in operation in the Republic of Adygea, the Stavropol Territory and the Rostov Region produced more than 1.960 billion kWh of electricity.This helped to prevent emissions exceeding 680,000 tonnes of CO_2 equivalent.

On 19 December 2022, ROSATOM's seventh wind farm, the 60 MW Berestovskaya WPP, was put into operation. Thus, by year-end 2022, seven wind farms with a total capacity of 780 MW were in operation.

In 2023, ROSATOM plans to commission the 160 MW Kuzminskaya WPP and the 95 MW Trunovskaya WPP. As a result, the number of wind farms managed by JSC NovaWind will reach nine wind power plants, while their total installed capacity will exceed 1 GW.

ROSATOM produces 2.5 MW wind turbines in-house. At year-end 2022, local content in equipment produced by the Corporation stood at 68%.

Plans for 2023 also include the first project acquisitions outside Russia. In accordance with ROSATOM's international business strategy, the target for the total installed capacity of overseas wind farms to be owned by the Corporation by 2030 has been set at 5 GW.

GREEN BONDS

2022 saw the placement of the second green bond issue in the industry as part of the Wind Power programme. The bond issue has a par value of RUB 9 billion. Its compliance with international standards developed by ICMA and the criteria set in the Russian Taxonomy of Green Projects has been verified by the Expert RA rating agency. The bonds have been listed on the Moscow Exchange.

Hydrogen

In 2018, hydrogen energy production was included in the list of prioritised areas of scientific and technological development of the nuclear industry. ROSATOM has technological and research capabilities required for developing key hydrogen production techniques: electrolysis, which is one of the most environmentally friendly hydrogen production techniques, and steam methane reforming, which involves the use of CO_2 capture technology.

In January 2023, the Government of the Russian Federation and ROSATOM signed a cooperation agreement providing for the implementation of a programme focused on domestically developed technologies for the production and handling of hydrogen, the start of mass production of Russian electrolysis units of various capacity by 2030 and work on a project to build a nuclear power plant for hydrogen production equipped with high-temperature gas-cooled reactors and chemical processing facilities.

In February 2022, entities of ROSATOM and other companies established the National Hydrogen Energy Development Union, which will be tasked with promoting cooperation between businesses and research institutes in order to develop hydrogen energy in Russia, coordinating the efforts of market players, supporting the implementation of the National Hydrogen Programme, and formulating proposals for regulations on support to be provided to the sector jointly with government agencies.

Energy storage systems

A separate business area controlled by ROSATOM, Energy Storage Systems, was established in 2020. It is focused on lithium-ion batteries for electric vehicles, as well as stationary energy storage systems for uninterruptible and emergency power supply and energy storage systems for renewable energy.

In October 2022, the construction of Russia's first 'gigafactory' started in the Kaliningrad Region; the factory will produce lithium-ion batteries (cells) and assemble battery modules. The factory will meet the demand of Russian electric vehicle producers for lithium-ion traction batteries; it will also produce stationary energy storage systems for the power grid and for industrial enterprises. The first batteries will come off the production line in 2025.

The first stage of the 'gigafactory' will have a capacity of 4 GWh per year, supplying lithium-ion batteries for up to 50,000 electric vehicles.

Environmental solutions. Waste management

The Ecology National Project is a national project of the Russian Federation aimed at creating a safe and comfortable living environment, dismantling the most hazardous legacy facilities that cause environmental damage and developing a system for hazardous waste management. As part of the Ecology National Project, ROSATOM is responsible for the implementation of the Infrastructure for the Management of Hazard Class 1 and 2 Waste Federal Project and participates in the implementation of the Clean Country and Preservation of Lake Baikal Federal Projects.

The development of an integrated system for hazard class 1 and 2 waste management in Russia involves building a secure system for managing the entire process chain, from waste generation to waste processing into recycled products, as well as building the relevant infrastructure for hazard class 1 and 2 waste processing. The Corporation is creating seven environmental technology parks. The environmental technology parks will have a total throughput of 350,000 tonnes of waste, which will help to address the national shortage of capacities for the processing of highly hazardous waste. The environmental technology parks are scheduled to be commissioned by the end of 2024.

PRESERVATION OF LAKE BAIKAL

Remediation of the site of the Baykalsk Pulp and Paper Mill

OJSC Baykalsk Pulp and Paper Mill (OJSC Baykalsk PPM or BPPM) is situated on the southern shore of Lake Baikal in the Slyudyansky District of the Irkutsk Region. The enterprise was put into operation in 1966. Two landfill sites were built for waste disposal (the Solzansky and Babkhinsky landfills), where a series of storage tanks were installed. Over more than 40 years of operation of the mill, more than 6 million tonnes of industrial waste, mainly lignin sludge (insoluble solid fibre residue from the pulping process), were accumulated in 13 landfill cells. In addition, the captive CHPP of the enterprise produced a large amount of ash as a result of coal combustion. Solid household waste and construction waste was also dumped into the landfill cells. A major environmental hazard is also posed by black liquor, which is stored mainly at BPPM's wastewater treatment facilities.

ROSATOM is implementing a project aimed at environmental improvement of Lake Baikal, which involves reducing the area of land with a high and extremely high level of environmental contamination. Top-priority measures have been implemented at the BPPM site to lower the water level above the sludge layer. To do so, local wastewater treatment facilities have been installed; utility networks have been built for collecting water above the sludge layer from the landfill sites and discharging treated water into the centralised sewerage system of the town of Baykalsk. These measures have helped to prevent an environmental catastrophe that could have damaged the unique ecosystem of Lake Baikal, namely the overflow of sludge water and contamination of Lake Baikal with hazardous waste from OJSC BPPM.

In 2022, the water level above the sludge layer in landfill cells was lowered by 60 centimetres. About 70,000 cubic metres of sludge water was treated and transferred to municipal wastewater treatment facilities in Baykalsk.

Development of the Northern Sea Route. International logistics

In 2018, ROSATOM was assigned the functions of the infrastructure operator of the Northern Sea Route (NSR). Its responsibilities include managing navigation along the NSR, building infrastructure facilities, providing navigational and hydrographic support and ensuring the safety of navigation in the challenging Arctic environment.

ROSATOM operates the world's only nuclear-powered icebreaker fleet, which is a low-carbon type of marine transport, as it uses nuclear energy.

In 2022, cargo traffic along the NSR totalled 34.117 million tonnes (against a target of 32 million tonnes), including 24 million tonnes transported by vessels escorted by nuclear icebreakers. Cargo traffic along the NSR is projected to reach 80 million tonnes by 2024 and might increase to 110 million tonnes by 2030.

ROSATOM is developing the Eurasian Container Transit project, which will supplement existing transport routes and will make global supply chains more resilient. As the Eurasian Container Transit route is shorter, it will help to reduce the environmental footprint of marine transport. In addition, the new transport corridor will help to attract investment in the Arctic, which will support job creation and an improvement of macroeconomic and social performance indicators in the Russian Arctic.

ENVIRONMENTAL MONITORING ALONG THE NSR

In 2022, further progress was made on the project to conduct comprehensive studies and environmental safety monitoring above and below water along the NSR. Specialists from the Marine Research Centre of Lomonosov Moscow State University carried out environmental monitoring at 50 sites along the Northern Sea Route. The findings of the monitoring indicate that pollutant concentration in the atmosphere, seawater and bottom sediments does not exceed maximum permissible limits, which means that operations at the current stage of development of the NSR and navigation intensity do not make any negative impact.

In 2022, ROSATOM continued to implement the Clean Arctic initiative, which is aimed at developing an integrated clean-up programme for the Arctic regions. Large-scale environmental clean-ups have been conducted in the northern regions of Russia since 2021 on the initiative of Dmitry Lobusov, the captain of the *50 Let Pobedy* nuclear icebreaker, who has suggested conducting a 'large-scale Arctic clean-up'.

In 2022, the crew of the *Sevmorput* nuclear-powered container ship assisted a representative of the Murmansk Marine Biological Institute of the Russian Academy of Sciences (MMBI RAS) with data collection along the NSR. The ship went from Saint Petersburg to Petropavlovsk-Kamchatsky via Murmansk. Studies conducted during the voyage were focused on assessing the status of populations of sea mammals, birds and polar bears along the entire length of the Northern Sea Route.

Nuclear medicine and isotope products

Business areas prioritised by ROSATOM include the development of nuclear medicine. Solutions for nuclear medicine offered by the Corporation include the manufacture of equipment for diagnostics and therapy, raw radioisotopes for medical applications, the production of radiopharmaceuticals from the radioisotopes, as well as design and construction of nuclear medicine centres.

By selling raw isotopes and finished isotope products for healthcare, science and industry, ROSATOM makes it possible to provide high-technology medical care and improve the quality of life of at least 2.5 million people per year.

JSC National Technical Physics and Automation Research Institute (NIITFA) has launched the mass production of the first Russian linear particle accelerator, Onyx, which is designed to provide remote radiation therapy for cancer patients in radiology departments of cancer clinics of all levels using advanced techniques (with 80 units to be manufactured by 2030), as well as the Brachium gamma radiation therapy facility for brachytherapy, which forms part of a standard set of equipment for radiation therapy departments of cancer centres (with 75 such facilities to be manufactured by 2030). This will make it possible to provide radical treatment and palliative care for 700,000 to 1 million patients.

The Tula Regional Cancer Centre has been the first in Russia to receive a BRACHIUM gamma radiation therapy facility, which is designed for cancer treatment using the contact radiation therapy method, and has carried out the first radiation therapy procedures.

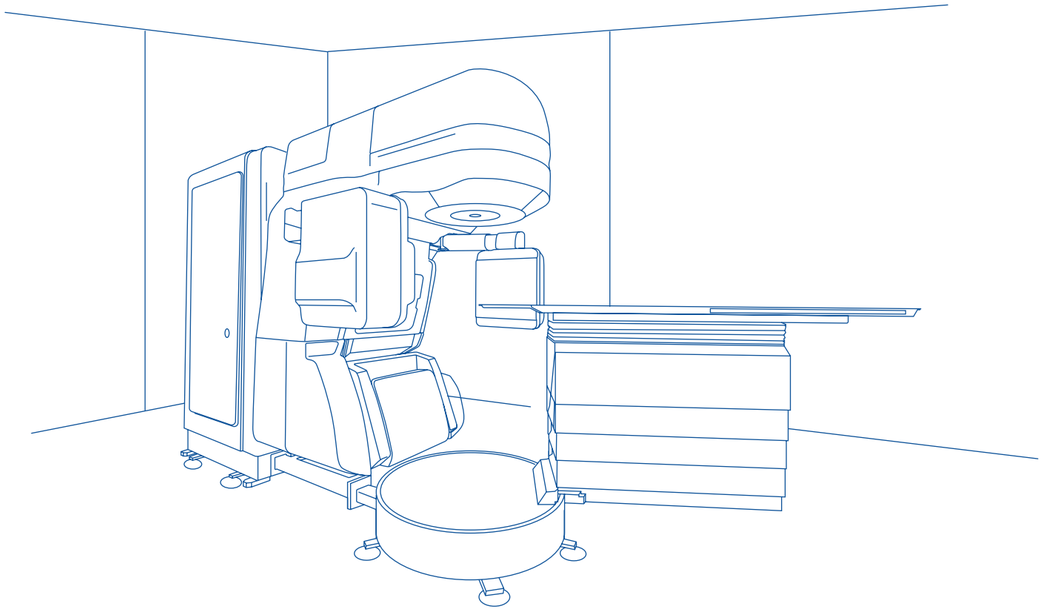
In 2022, a registration certificate was obtained from the Federal Service for Surveillance in Healthcare (Roszdravnadzor) for the ONYX radiation therapy facility. At the same time, the development of a pilot ONYX remote radiation therapy facility (KLT-6) by JSC NIITFA is nearing completion. The project will help to promote the widespread use of new medical techniques and domestically produced equipment in clinical practice, guarantee a higher quality of treatment for cancer patients and reduce dependence on expensive imported equipment.

As part of a programme to establish a federal network of radionuclide diagnostics and therapy centres with a capacity of up to 100 beds by 2030, healthcare centres with a capacity of 40 beds each are under construction in Ufa and Lipetsk. This will make it possible to increase the number of cancer patients covered by high-technology medical care by at least 38,000 people by 2030.

Multipurpose irradiation centres

ROSATOM builds multipurpose centres in Russia and abroad which specialise in the processing of products using ionising radiation. This technology is in demand in agriculture, where it is used for the treatment of seeds and food products in order to extend their shelf life, prevent spoilage and protect them against insect pests. In healthcare, the technology is widely used for the sterilisation of medical products.

Irradiation of cereal seeds results in a significant increase in crop yields (up to 20%), which enhances food security and contributes to hunger reduction.



3

ENVIRONMENT AND RADIATION SAFETY

192.70
HECTARES
AREA OF FORESTS RESTORED IN 2022

3 | ENVIRONMENT AND RADIATION SAFETY

ENVIRONMENT

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.

Environmental policy

ROSATOM seeks to align its operations with the 'Do No Significant Harm' principle, which involves minimising environmental pollution, the negative impact on ecosystems and risks to human health.

The **Uniform Industry-Wide Environmental Policy of ROSATOM and Its Organisations (2008[1])** (hereinafter referred to as the Environmental Policy) is the main regulatory document in the sphere of environmental safety and environmental protection in the nuclear industry. It sets out the goals and key focus areas in the sphere of environmental safety and environmental protection in the regions where nuclear facilities are located. A three-year Comprehensive Plan for the Implementation of the Environmental Policy for the period from 2022 through 2024 was approved in 2022. It includes organisational, operational and technical measures to be implemented by the Corporation and its organisations in order to improve the environment and the standard of living.

ROSATOM pursues a responsible environmental policy underpinned by the precautionary principle. The policy prioritises the preservation of natural ecosystems and stipulates that the latest scientific achievements must be used to ensure environmental safety and that environmental aspects of operations of organisations in the industry must be transparent and the relevant information must be made publicly available. ROSATOM's organisations, including JSC Rosenergoatom, JSC TENEX, JSC TVEL, JSC Atomenergomash, JSC Atomredmetzoloto, etc. have obtained certification confirming compliance of their environmental management systems with the ISO 14001 international standard and regularly undergo recertification audits to confirm their compliance with this standard.

Environmentally relevant organisations of ROSATOM publish environmental safety reports on an annual basis. These reports provide information on their environmental performance, including emissions and discharges, industrial and consumer waste and radioactive waste, progress in the implementation of the environmental policy, the development and implementation of management systems and industrial environmental control systems, as well as engagement with government agencies (including local governments), environmental non-governmental organisations, research and social institutions and local communities. The reports are publicly available.

1. The years of approval of the first versions of the documents are indicated.

Pollutant and greenhouse gas emissions

In 2022, pollutant emissions into the atmosphere totalled 39,100 tonnes; the pollutant capture rate reached 89.6%. In 2022, ROSATOM's organisations accounted for 0.2% of the total emissions in the Russian Federation[2].

Pollutant emissions into the atmosphere[3], '000 tonnes

	2020	2021	2022
Total, including:	38.0	37.0	39.1
Particulate emissions	14.2	13.5	11.7
NO_x emissions	6.1	7.4	10.0
SO_2 emissions	11.6	9.8	10.7
CO emissions	3.3	3.8	4.3
Hydrocarbon emissions, including:	2.2	2.1	2.0
Methane emissions	0.8	0.7	0.7
Volatile organic compounds	1.2	1.3	1.0
Other gaseous and liquid compounds	0.6	0.4	0.4

Pollutant emissions into the atmosphere increased by 2,100 tonnes compared to 2021 as data on the branch of JSC RIR in Ozersk were recorded for the full reporting year (the branch has been included in the scope of organisations controlled by the Corporation as from September 2021).

ROSATOM is taking steps to reduce pollutant emissions into the atmosphere from its organisations as part of an Action Plan to Minimise the Negative Impact of ROSATOM's Organisations on the Environment until 2025. Measures implemented by ROSATOM's organisations as part of the plan included the following:

- JSC CDBMB (Mechanical Engineering Division) reduced pollutant emissions into the atmosphere by up to 99.5% by installing three cantilever-type fume extraction systems in the welding area of a building;
- Protective casings were installed for flange joints of oil pressure lines of turbine unit No. 1 in the Seversk branch of JSC RIR.

For details, see section 5.4 'Environmental Safety' (Chapter 5 'Safety Report') of ROSATOM's Public Annual Report for 2022.

Greenhouse gas emissions

ROSATOM has conducted a pilot calculation of greenhouse gas emissions for 2022 for its entire corporate scope in accordance with international methodologies (Scope 1 and Scope 2). In 2022, greenhouse gas emissions[4] totalled 20.4 million tonnes of CO_2e, including direct emissions (Scope 1) totalling 17.5 million tonnes of CO_2e.

2. Calculated based on data provided in the Government Report on the Status and Protection of the Environment of the Russian Federation in 2021.
3. Pollutant emissions are reported by ROSATOM's organisations using chemical analysis methods or automatic gas analysers.
4. Including PJSC Quadra – Power Generation, which was included in ROSATOM's scope of consolidation in 2022.

The major share of the Corporation's direct greenhouse gas emissions (about 88.5%) is produced by JSC RIR, which manages heating networks in the towns and cities in which ROSATOM operates (mainly coal- and gas-fired CHPPs) to ensure steady energy supply to consumers. As part of its efforts to improve energy efficiency, ROSATOM upgrades its power generation capacities.

Radiation safety

Safety is one of ROSATOM's values. ROSATOM seeks to ensure that its operations are completely safe for people and the environment as a matter of priority; the Corporation is responsible for process safety across the production chain, from uranium mining to decommissioning and RAW and SNF management.

Radiation safety management systems have been implemented at all facilities posing nuclear and radiation hazards; the use of these systems is a mandatory requirement.

The safety status of nuclear facilities is assessed based on the number and scale of recorded deviations in their operation, which are benchmarked against the IAEA International Nuclear and Radiological Event Scale (INES). Events on the scale are rated at seven levels: the upper levels (4–7) are termed 'accidents', while the lower levels are 'incidents' (2–3) and 'anomalies' (1). Events that have no safety significance are classified as below scale, at level 0. Events that have no safety relevance are classified as 'out of scale'.

No events rated at level 1 or higher on the international INES scale have been detected at Russian nuclear power plants since 2018.

In 2022, there were 37 deviations rated at level 0 and out of scale. All deviations were investigated in accordance with the established procedure.

In order to ensure the safe operation of the nuclear industry and protect employees, the local population and regions against the possible impacts of accidents (emergencies), ROSATOM operates and improves a functional subsystem for emergency prevention and response that covers the organisations (facilities) managed by ROSATOM and forms part of the integrated state system for emergency prevention and response. At year-end 2022, 16 professional and 57 volunteer emergency response teams had undergone certification and were in a state of readiness in ROSATOM. They comprise a total of 2,173 emergency response workers.

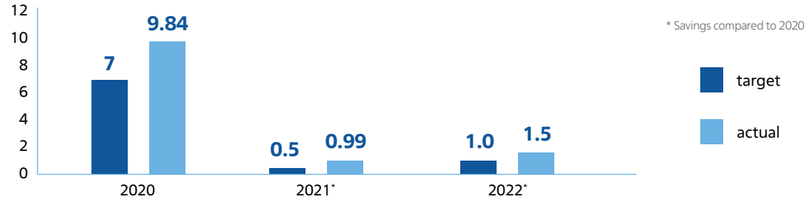
For details, see section 5.2 'Nuclear and Radiation Safety' and section 5.3 'RAW and SNF Management and Decommissioning of Facilities Posing Nuclear and Radiation Hazards' (Chapter 5 'Safety Report') of ROSATOM's Public Annual Report for 2022.

Energy efficiency

An energy conservation and energy efficiency improvement programme for the period from 2018 through 2022 was adopted in the industry in 2018. A programme for the period from 2023 through 2027 was approved in 2022.

To monitor progress on energy efficiency improvement measures, assess their outcomes and report on energy conservation, an Automated Energy Efficiency Management System (AEEMS) has been introduced in the industry. The number of ROSATOM's organisations covered by the AEEMS grows year by year (80 organisations in 2020; 124 in 2021; 134 in 2022).

Saving compared to 2015 and 2020, %



In accordance with the government programme of the Russian Federation titled 'Development of the Nuclear Power and Industry Complex', between 2015 and 2020, in 2021 and in 2022, ROSATOM set and achieved targets for the reduction in energy consumption as a percentage of the actual consumption volume in 2015 and 2020 respectively.

In 2022, the actual reduction in energy consumption compared to 2020 totalled 1.50%. Actual savings totalled RUB 0.56 billion (excluding VAT) in monetary terms and 2,508,652.09 GJ in physical terms.

For details, see section 2.3 'Energy Efficiency' (Chapter 2 'Business Development Report') of ROSATOM's Public Annual Report for 2022.

Water use and wastewater discharge

The basic principle behind NPP operation is that a nuclear reaction produces a large amount of heat, which is used to heat water and transform it into steam. Modern NPPs use a system comprising two circuits: there is no contact whatsoever between water in the primary circuit and water in the secondary circuit. This helps to improve NPP safety and prevents radioactive contamination of water discharged to the eventual destination.

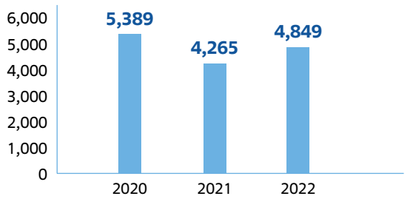
Volume of recycled and reused water, million m³

Indicator	2020	2021	2022
Total volume of recycled and reused water, million m³	36,308.2	37,974.6	37,623.7
Water withdrawal, million m³ (% of recycled and reused water)	6,059.2 (16.7%)	4,979.2 (13.1%)	5,536.1 (14.7%)
Total, million m³	42,367.4	42,953.8	43,159.8
Share of recycled and reused water in water withdrawal, %	599.2	762.7	679.6

In 2022, wastewater discharge by ROSATOM's organisations totalled 4,849.3 million m³, with clean water compliant with regulatory requirements accounting for 95.6% of the total volume, while the share of treated wastewater compliant with regulatory requirements and contaminated wastewater stood at 0.7% and 3.7% respectively. Wastewater discharge increased by 584.8 million m³ compared to 2021 due to an increase in discharges from Leningrad NPP into the Gulf of Finland in the Baltic Sea.

Clean water compliant with regulatory requirements accounts for more than 95% of the total wastewater discharge; therefore, wastewater discharge by ROSATOM's organisations does not have any significant impact on water bodies and related habitats of local flora and fauna.

Wastewater discharge, million m³



An Action Plan to Minimise the Negative Impact of ROSATOM on the Environment until 2025 is being implemented in the industry. Measures implemented in 2022 as part of the plan to reduce the discharge of pollutants into water bodies included the following:

- PJSC PIMCU (Mining Division) carried out comprehensive tests of process equipment and process lines of the mine water treatment plant at Mine No. 6 in the pre-commissioning and operating modes;
- In the Volgodonsk branch of JSC AEM-Technologies (Mechanical Engineering Division), pipelines, floatation units and tanks of industrial wastewater treatment facilities were flushed, which enabled a 5% increase in the efficiency of industrial wastewater treatment;
- In JSC Chepetsk Mechanical Plant (Fuel Division), the use of recycled water for equipment cooling was introduced in the granulation section of workshop No. 5, which reduced water consumption by 9,213 m³ per year.

For details, see section 5.4.6 'Water Use' (Chapter 5 'Safety Report') of ROSATOM's Public Annual Report for 2022.

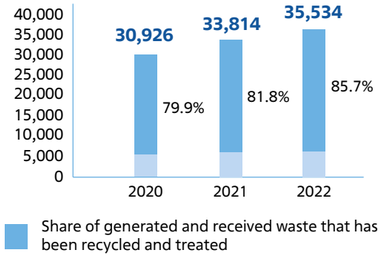
Industrial and consumer waste management and disposal

In the course of its operations, ROSATOM seeks to reduce industrial and consumer waste generation (including radioactive waste) and expand the application of closed-cycle production technology.

In 2022, nuclear organisations produced 35.5 million tonnes of industrial and consumer waste, which is 1.7 million tonnes (5.0%) more than in 2021.

99.98% of the generated waste is hazard class 4 and 5 waste (low-hazard and virtually non-hazardous waste). An increase in the volume of waste generated in 2022 was due to an increase in the amount of loose overburden produced in PJSC PIMCU (a uranium mining company forming part of ROSATOM's Mining Division). Most of the waste is class 5 waste, which is the least hazardous.

Waste generated and recieved by ROSATOM, '000 tonnes



85.7% of the total amount of waste generated and received by ROSATOM's organisations was recycled; 0.004% was treated.

For details, see section 5.4.7 'Industrial and Consumer Waste Management' (Chapter 5 'Safety Report') of ROSATOM's Public Annual Report for 2022.

SORTING OF RADIATION-CONTAMINATED MATERIALS (FUEL DIVISION)

In June 2022, a system for continuous sorting and characterisation of radiation-contaminated materials (FREMES) was put into operation at the industrial site of the Angarsk Electrolysis Chemical Plant (Fuel Division). It will enable an 80% reduction in the amount of radioactive waste (bulk materials such as soil and crushed building structures) transferred for permanent isolation.

Biodiversity and land rehabilitation

All of ROSATOM's organisations take steps to prevent the degradation of natural ecosystems in their vicinity as a result of their operation.

PRESERVING THE BIODIVERSITY OF AQUATIC ECOSYSTEMS

In 2022, ROSATOM's organisations took the following steps to replenish aquatic wildlife:

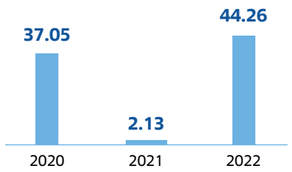
- At Balakovo NPP, the Saratov Reservoir was stocked with fish (78,800 juvenile grass carp, 78,800 juvenile silver carp, 158,900 juvenile common carp and 73,700 juvenile sterlets);
- At Beloyarsk NPP, the Beloyarsk Reservoir was stocked with fish (270,000 juvenile bighead carp);
- At Kalinin NPP, Lake Pesvo and Lake Udomlya were stocked with black carp bred during the year weighing a total of 1 tonne;
- At Novovoronezh NPP, 6 tonnes of juvenile silver carp were released into the cooling pond;
- At Rostov NPP, 419,000 juvenile grass carp, 856,000 juvenile common carp and 34,000 juvenile sterlets were released;
- At the FTNPP, 101,000 juvenile chum salmon were released into the Trezubets Stream (the Paratunka River basin) in the Kamchatka Territory;
- JSC Siberian Chemical Plant (Fuel Division) released 35 kg of juvenile fish into the Tom River;
- JSC Khiagda (Mining Division) released 163,000 grayling fry into the Ina River in the Barguzinsky District of the Republic of Buryatia.

Measures aimed at preserving the diversity of flora and fauna include the following:

- Equipping water intake facilities with fish screens in order to prevent young fish from swimming or getting drawn into them;
- Equipping transformer substations with special devices to prevent animals from entering the premises;
- Installing bird diverters on power lines;
- Ensuring that motor vehicles and special machinery travel on paved roads and providing special parking lots for them;
- Arranging waste accumulation sites compliant with technical and sanitary standards; removing waste and transporting it to designated locations in a timely manner;
- Taking measures to reduce noise impact, etc.

In 2022, JSC Khiagda (Mining Division) planted 700,000 pine tree seedlings in the Republic of Buryatia as part of compensatory reforestation efforts. The uranium mining enterprise assists Buryatia in restoring forests after wildfires.

Area of restored land, hectares



At the end of the reporting year, the area of disturbed land[5] totalled 7,600 hectares; this included land disturbed during mining, construction, disposal of industrial waste, survey work and other operations. In the reporting period, organisations in the industry implemented a set of measures to restore the productivity and economic value of disturbed land. The area of restored land totalled 44.36 hectares. Land rehabilitation measures are implemented as planned as part of decommissioning programmes in ROSATOM's organisations.

In 2022, ROSATOM's organisations carried out re-forestation activities, with the area of restored forests totalling 192.70 hectares (2021: 79.2 hectares).

For details, see section 5.4.8 'Impact on Local Flora and Fauna' and section 5.4.9 'Rehabilitation of Disturbed Areas' (Chapter 5 'Safety Report') of ROSATOM's Public Annual Report for 2022.

5. Land whose degradation has made it impossible to use it for its intended purpose, as permitted.

PRESERVING NATURAL BIODIVERSITY (SMOLENSK NPP, POWER ENGINEERING DIVISION)

The environmental policy of Smolensk NPP prioritises efficient and safe power generation with as little damage as possible to natural ecosystems and their functions. As part of the implementation of this policy, a project to assess the biodiversity of flora and fauna in the vicinity of the nuclear power plant was launched in January 2022 on the initiative of specialists from the environmental protection department with assistance from experts from LLC Institute of Design, Ecology and Hygiene.

The main goals of the project are to:

- Confirm that natural ecosystems remain unchanged and sustainable throughout the service life of the NPP;
- Minimise reputational risk and enhance the image of Smolensk NPP as a responsible and environmentally friendly enterprise;
- Enhance the confidence of the residents of Desnogorsk and the Smolensk Region in the operation of the nuclear power plant.

The assessment of the current status of local flora and fauna and biodiversity classification within the boundaries of the buffer area of Smolensk NPP is to be carried out in several stages between 2022 and 2025.

In 2022, the collection and analysis of data on the biodiversity of flora and fauna in the Smolensk Region was organised.

As part of biodiversity conservation efforts in the region, in 2022, more than 300 seedlings (meadowsweet, scarlet oak, maple, pine and lilac) were planted.

4

SOCIAL ASPECT

329,200

PEOPLE

AVERAGE HEADCOUNT

4 | SOCIAL ASPECT

HUMAN RIGHTS

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.

LABOUR

Principle 3. Businesses should uphold the freedom of association and the effective recognition 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.

The Social aspect (S) includes ensuring occupational and process safety, protecting the life and health of employees in the industry and developing human potential. ROSATOM implements social projects aimed at supporting employees in the industry and the residents of nuclear towns and cities and driving systematic improvements in the standard of living and health improvement for employees and their families, local communities and consumers of the Corporation's products in its regions of operation.

The top priority for the Corporation is to ensure occupational and process safety and to protect the life and health of employees in the industry; this is one of the key principles that ROSATOM is guided by in the course of its operations. ROSATOM has adopted the **Uniform Industry-Wide Social Policy (2013), the Uniform Industry-Wide Policy on Occupational Safety and Health (2013), the Uniform Industry-Wide Human Rights Policy (2022)** and the **Occupational Health and Safety Management System (2009)**, which is an important element of mutual obligations undertaken by ROSATOM, the Russian Union of Employers in the Nuclear Industry, Power and Science and the Russian Trade Union of Nuclear Power and Industry Workers.

ROSATOM provides optimal working conditions for its employees, with occupational hazards totally eliminated or exposure to such hazards not exceeding regulatory limits deemed safe for people. Organisations in the industry work systematically to improve safety performance; this includes reducing the occupational injury rate (which is more than five times lower than the national average), minimising employees' exposure to occupational hazards and ensuring contractor safety. Individual organisations in the industry, including JSC TENEX, JSC TVEL, JSC Afrikantov OKBM, JSC ZIO-Podolsk, etc., have undergone certification to confirm compliance of their occupational health and safety management systems with the ISO 45001 international standard.

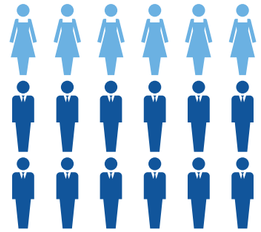
Social and HR policy focused on recruiting and retaining young professionals and highly skilled specialists, providing social assistance to employees, their families and veterans of the nuclear industry is an important part of ROSATOM's human capital management policy.

Labour relations

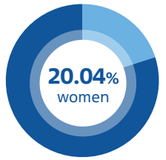
In 2022, ROSATOM and its organisations employed 329,200 people (average headcount), including 31,100 people in overseas organisations, branches and representative offices, with men and women accounting for 68% and 32% of the total headcount respectively (according to the OECD Nuclear Energy Agency, the average share of women in the global nuclear industry totals 24.9%).

29.3% of employees were aged under 35. 28.2% of employees were aged over 50.

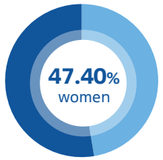
GENDER BALANCE in the industry



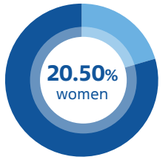
Executives



Specialists and white-collar workers



Blue-collar workers



32% | **Share of women in ROSATOM**

In 2022, personnel costs totalled RUB 556.45 billion, up by 25.4% compared to 2021. In 2022, the average monthly salary in ROSATOM increased by 11.4% compared to 2021 and totalled RUB 107,200 per month.

In 2022, ROSATOM was included in the 'platinum' category in the ranking of the best employers in Russia according to the Forbes business magazine.

ROSATOM was one of the winners of the 2022 Youth Time National Award for Youth Achievements in the Friend of the Young category.

ROSATOM adheres to the Industry-Wide Agreement on Nuclear Power, Industry and Science, which has been drafted and is being implemented jointly with the Russian Trade Union of Nuclear Power and Industry Workers (RTUNPIW). 130,514 employees of ROSATOM's organisations covered by the activities of the RTUNPIW, or 39.6% of the total headcount, are trade union members. The Agreement provides a basis for collective agreements concluded in nuclear organisations (collective agreements cover 79% of ROSATOM's employees). The Agreement stipulates the employer's obligations related to salary indexation, social benefits and safe working conditions; it also reflects the role of the industry-wide trade union, local trade union cells and trade union committees in maintaining social stability among the workforce of ROSATOM's organisations.

In order to encourage promising young specialists to work in the industry and to generate interest in STEM disciplines and engineering professions among school and university students, ROSATOM actively participated in federal events and projects. ROSATOM is a partner and co-organiser of the following projects: a nationwide student competition, Your Move; the Big Break Nationwide Competition for Schoolchildren; an academic competition, I'm a Professional; the Career Time nationwide campaign, as well

as the Russian Znanie Society. ROSATOM also has a presence in the Sirius Federal Territory and cooperates with the Sirius Educational Centre, the Sirius Lyceum and the Sirius University.

In 2022, the Andrey Sakharov Cultural and Education Centre Mayak Academy was opened in Nizhny Novgorod. This is a venue for educational and awareness-raising events organised by ROSATOM, the Russian Academy of Sciences and the government of the Nizhny Novgorod Region. In 2022, the Centre hosted 15 events in which more than 2,000 people participated in person.

Recruitment of young professionals is supported by ROSATOM's systematic youth talent development efforts at all levels, from kindergartens, schools and universities to enterprises.

Every year, more than 8 million school students from all constituent entities of the Russian Federation take part in events hosted by ROSATOM. As part of its engagement with students, ROSATOM actively cooperates with specialised educational institutions, including more than 40 colleges and universities, 18 of which form part of a consortium of core universities.

In 2022, ROSATOM's enterprises arranged internships and work placements for more than 8,700 students; about 2,500 university and college graduates were hired in the industry.

For details, see section 3.1 'HR Policy' and section 3.3 'Social Policy' (Chapter 3 'Social Report') of ROSATOM's Public Annual Report for 2022.

Talent development

The development of competences and employee training is one of the major priorities of ROSATOM's HR policy.

Training for specialists and executives in the industry is provided primarily by the Corporate and Technical Academies of ROSATOM. The portfolio of ROSATOM's Corporate Academy currently comprises more than 550 training programmes.

In order to develop sustainability competences, in 2022, a face-to-face training programme on sustainable development was launched for employees in the industry at ROSATOM's Corporate Academy. Representatives of 46 organisations of ROSATOM completed the training; the programme will be run on a regular basis. In addition, the sustainability section of ROSATOM's online training system, RECORD Mobile, is regularly updated.

67% of employees across the industry underwent training in 2022. The number of training hours per employee averaged 40.07 hours.

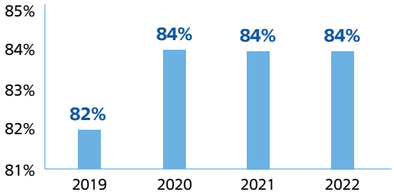
In 2022, ROSATOM's Corporate Academy launched a pilot project titled '[in]Visible Power' forming part of a leadership programme for female executives. This is the first leadership development programme for women in the nuclear industry. Its participants included 38 line managers from ROSATOM's subsidiaries and organisations. Following the conclusion of the project, a decision was made to scale it across the industry.

In 2022, the Corporation continued to develop distance learning and e-learning formats. The share of distance learning in the industry reached 37%.

Training remains accessible on any device anywhere 24/7 through the RECORD Mobile training platform. The RECORD Mobile platform is available as both a mobile app and a web app. In 2022, users of the platform completed 1,188,182 training courses totalling 1,351,230 man-hours (which is 13% more than in 2021).

In 2022, the employee engagement rate in the industry remained at 84%, on a par with the world's best employers.

Employee engagement rate



For details, see section 3.1 'HR Policy' (Chapter 3 'Social Report') of ROSATOM's Public Annual Report for 2022.

Human rights

ROSATOM actively supports and complies with employment standards pursuant to the legislation of the Russian Federation, industry-wide and internal regulations, and the Industry-Wide Agreement on Nuclear Power, Industry and Science.

None of ROSATOM's internal regulations contain any provisions barring people from being employed in the industry on the grounds of gender, ethnicity, background, the level of personal wealth, marital or social status, position, age, place of residence, attitude towards religion, political opinions or membership of public associations.

In 2022, ROSATOM developed and approved a Uniform Industry-Wide Human Rights Policy. Enterprises in the industry also apply the Code of Ethics and Professional Conduct for Employees of ROSATOM. The principles set out in these documents are aligned with the Constitution of the Russian Federation, the Universal Declaration of Human Rights, the Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, and the Voluntary Principles on Security and Human Rights.

ROSATOM and its organisations have adopted a responsible approach to respecting the rights and promoting the well-being of local communities in their regions of operation, cooperate with government bodies and treat local residents in their regions of operation with respect.

SOCIAL PROJECTS IN THE RUVUMA REGION, TANZANIA (SALES AND TRADING DIVISION)

Mantra Tanzania Ltd., a subsidiary of Uranium One Group (ROSATOM's international mining company managed by JSC TENEX), is implementing a uranium mining project in the Ruvuma Region, Tanzania. One of the company's major social initiatives is focused on protecting the rights and promoting the interests of vulnerable groups. Between 2016 and 2022, Mantra Tanzania Ltd. provided systematic support for the Mkomanile Craft inclusive entrepreneurship project (Namtumbo District, Ruvuma Region, Tanzania) involving girls from disadvantaged backgrounds. The company regularly purchased products manufactured as part of the project, provided funding for the purchase of the necessary materials and equipment and sponsored professional training for the participants of the project.

Employees are informed about a hotline operated by ROSATOM which can be used for submitting reports, including complaints and enquiries from individuals and organisations, to safeguard their right to apply in person and to submit individual and group enquiries to protect the rights and legitimate interests of the company, its organisations and their employees.

Complaints and enquiries can be sent by mail or email to executives of ROSATOM's organisations, including the Director General. The complaints and enquiries are recorded on the day of receipt and are reviewed within the time frame prescribed by Russian laws; investigations are conducted if necessary. A system is being developed to monitor the handling of enquiries/complaints and replies to them.

Complaints/enquiries related to social and labour relations, including complaints/enquiries related to human rights, are reviewed jointly with a representative body acting on behalf of employees. At the highest level (that of the industry), complaints/enquiries are reviewed by the Industry-Wide Commission for Social and Labour Relations; at the Division level, they are handled by commissions for social and labour relations established in the Divisions; at the level of organisations, this function is performed by commissions for social and labour relations and collective bargaining agreements in the organisations.

For details, see section 3.2 'Human Rights' (Chapter 3 'Social Report') of ROSATOM's Public Annual Report for 2022.

Occupational health and safety

In 2019, ROSATOM joined the Vision Zero international campaign and is working to achieve a zero injury rate in its organisations.

INDUSTRIAL EXOSKELETONS FOR NPP CONSTRUCTION PROJECTS (ENGINEERING DIVISION)

In 2022, industrial tests of exoskeletons were carried out at the site of Kursk NPP-2 and at the Ershovo practical training facility. The main goal of the project is to reduce the risk of workplace injuries and improve the productivity of construction and installation workers.

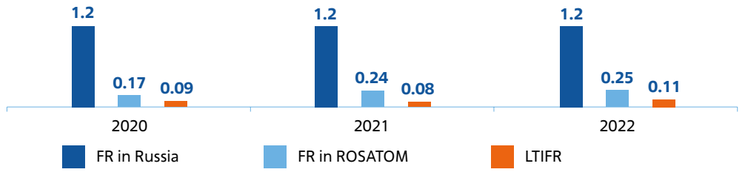
One of the fundamental priorities for ROSATOM is to protect the life and health of employees in the industry. Internal regulations adopted in ROSATOM and its organisations (primarily the Uniform Industry-Wide Policy on Occupational Safety and Health) are aimed at preventing workplace accidents and occupational diseases, systematically monitoring working conditions and occupational safety performance, ensuring the safety and protecting the health not only of employees of ROSATOM and its organisations, but also of employees of contractors and subcontractors involved in the operation of nuclear facilities. The requirements of the occupational health and safety management system (OHSMS) are binding on all employees and all persons who are on the premises of the Corporation and its organisations, in their buildings and structures.

In 2022, ROSATOM's organisations implemented preventive measures on an ongoing basis to enhance the workplace safety culture. However, there was a slight increase in the total number of accidents (by 4%), whereas the number of severe injuries and fatalities decreased by 19%.

ROSATOM works continuously to ensure compliance with instructions from the Director General on the implementation of safety measures to prevent any injuries, regardless of their severity. In addition, based on statistics on injury rates, ROSATOM has developed and implements the following on an ongoing basis:

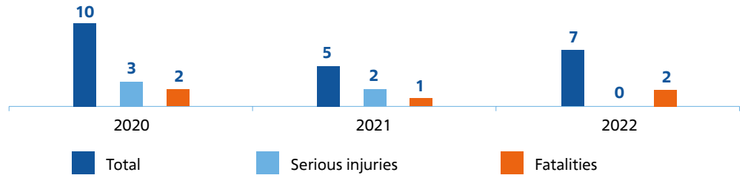
- A comprehensive programme of measures to prevent workplace injuries in the industry;
- Prioritised measures to prevent accidents during the operation of metal working machines in ROSATOM's organisations;
- Measures to prevent road accidents that are not related to operations but have negative consequences for employees.

In addition to the injury frequency rate (FR), ROSATOM also uses the lost time injury frequency rate (LTIFR). The LTIFR has been included in the KPI maps of all Division executives.



In 2022, the total number of injured persons in contractor organisations increased slightly; at the same time, there were no severe injuries, while the number of fatalities remains relatively stable.

Number of injured persons in contractor organisations



The injury rate in contractor organisations is relatively low due to cooperation between the occupational safety functions of customer organisations and contractors, as well as stricter safety requirements for contractors performing work at the production sites in the industry.

For details, see section 5.1 'Occupational Health and Safety' (Chapter 5 'Safety Report') of ROSATOM's Public Annual Report for 2022.

Employee health

As part of the Uniform Industry-Wide Social Policy, ROSATOM implements corporate social programmes focused on voluntary health insurance, voluntary insurance against accidents and illness, and health resort treatment for employees. Their main goal is to maintain and protect employees' occupational health, including rehabilitation and health improvement after occupational diseases and accidents.

In 2022, about 79% of employees in the industry (260,000 people) had quick access to medical care covered by voluntary health insurance. In 2022, 100% of employees who needed health resort treatment based on the findings of a regular health check-up were given vouchers for health resort and rehabilitation treatment.

The town of Usolye-Sibirskoye in the Irkutsk Region has hosted the AtomFest sporting event for two years in a row. The number of local residents participating in the event grows year by year: it increased from 4,000 people in 2021 to almost 6,500 people in 2022. In 2022, as part of the event, special shooting, darts and chess competitions were organised for people with disabilities.

In 2022, a mental health support hotline, psychologists' offices and onsite stress relief rooms continued to be available; more than 50 webinars on stress management and mental health practices were held for about 9,000 employees in the industry.

ROSATOM attaches great importance to encouraging its employees, their family members and residents of its regions of operation to regularly exercise and do sports. In 2022, more than 32,000 employees took part in large-scale sports and wellness events in the industry. The biggest events included the Atomiada sports event, the Running Race of Nuclear Towns and Cities and an online Running Race of the Divisions.

For details, see section 3.3.2 'Social Programmes' (Chapter 3 'Social Report') of ROSATOM's Public Annual Report for 2022.

Developing the regions where nuclear facilities are located

ROSATOM contributes to the social and economic development of the towns and cities where nuclear facilities are located in a number of ways. The Company makes a significant contribution to the energy security of a number of regions and is also a major taxpayer making tax payments to budgets of all levels. The Company makes a substantial economic impact on its regions of operation by creating a significant number of skilled jobs in the nuclear and related industries, providing not only employment, but also decent working conditions and remuneration.

22 out of 27 nuclear towns and cities (81%) have been assigned an urban environment quality rating indicating a favourable urban environment. The closed administrative and territorial formation (CATF) of Sarov was given the highest score (235 points).

For details, see Chapter 4 'Report on the Development of Nuclear Towns and Cities' of ROSATOM's Public Annual Report for 2022.

PROMOTING THE DEVELOPMENT OF USOLYE-SIBIRSKOYE

In 2022, ROSATOM continued to implement an approved industry-wide project to promote the development of Usolye-Sibirskoye. The project is scheduled to run until 2024.

The project includes both measures aimed at determining and developing the town's economic specialisation and industry-wide social initiatives covering Usolye-Sibirskoye since 2021 (ROSATOM's School, ROSATOM's Territory of Culture, educational projects of ROSATOM's Corporate Academy, etc.).

SCHOOL: THIRD AGE – THE WHOLE WORLD AHEAD

The project is aimed at encouraging senior citizens to be socially active in order to implement social projects, acquire new knowledge and skills, generate new employment ideas and develop creative abilities. The project has been run since 2019 in 13 nuclear towns and cities. More than 700 people have participated in the project. In 2022, 173 online and offline meetings were arranged and held for the participants of the project.

Corporate volunteering

In 2018, ROSATOM decided to launch a corporate volunteering programme and develop an integrated system for planning and implementing volunteer initiatives.

ROSATOM, jointly with volunteers from its key Divisions, has identified the following five main areas of volunteer activity: environmental conservation (awareness campaigns, clean-ups, planting of seedlings, waste management); supporting socially disadvantaged groups (low-income families, orphans, the elderly) and veterans; promoting a healthy lifestyle (blood donations, sporting events); career guidance and mentoring (lessons in schools, guided tours for the general public, intellectual games, competitions); intellectual volunteering (leveraging employees' professional skills in the regions of operation).

In 2022, the company conducted about 400 volunteer campaigns, including 12 industry-wide ones. There are a total of about 40,000 volunteers in ROSATOM. The total number of beneficiaries has exceeded 500,000 people.

For details, see section 3.4 'Corporate Volunteering' (Chapter 3 'Social Report') of ROSATOM's Public Annual Report for 2022.

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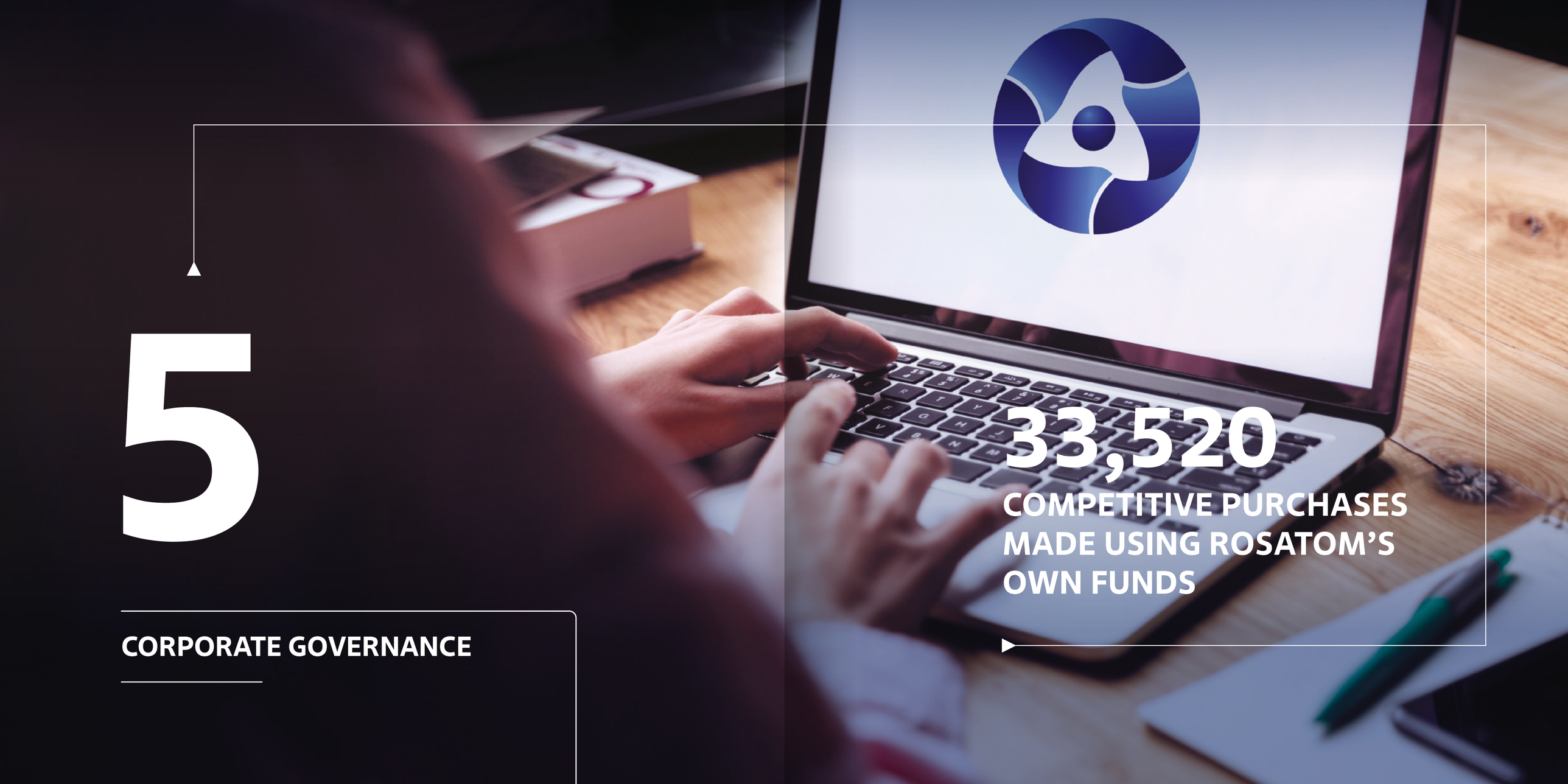
CORPORATE GOVERNANCE



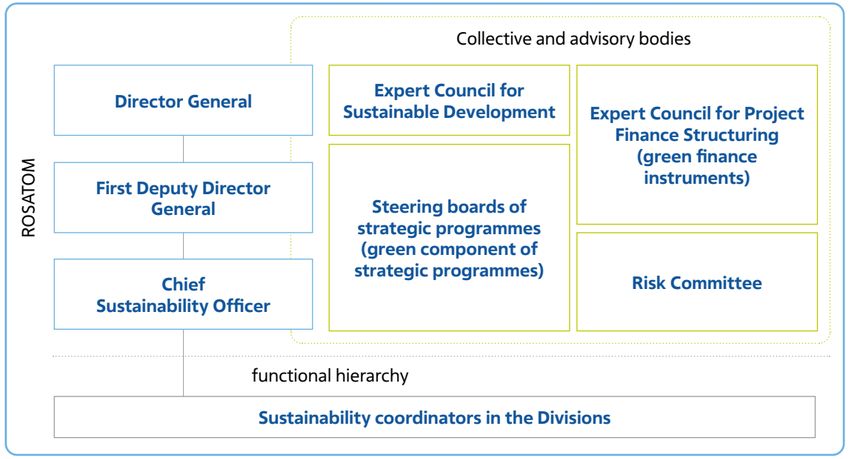
33,520

COMPETITIVE PURCHASES MADE USING ROSATOM'S OWN FUNDS

5 | CORPORATE GOVERNANCE

As part of the *Governance aspect (G)*, ROSATOM is building an integrated system of industry regulation and sustainable development standards and ensures the transparency of its business by disclosing as much information as possible.

ESG management system



In its production processes, ROSATOM focuses on making the procurement system transparent for suppliers and building a 'sustainable' supply chain, including a requirement for compliance with environmental and social standards. ROSATOM implements anti-corruption measures and introduces the principles of ethical business conduct on an ongoing basis.

ROSATOM has adopted the Uniform Industry-Wide Public Reporting Policy (2009), the Uniform Industrial Procurement Standard (2009), the Uniform Industry-Wide Anti-Corruption Policy (2015) and the Code of Ethics and Professional Conduct (2016). The **ROSATOM Production System** has been developed and adopted in the industry; it is designed to promote a lean manufacturing culture. A quality management system has been introduced, and international standards such as ISO 14001, ISO 9001 and other standards are applied.

Public sustainability reports are an integral part of ROSATOM's practices to ensure the transparency of its business; they also serve as a stakeholder engagement tool. Starting from 2010, ROSATOM and its organisations annually publish non-financial reports in accordance with the international GRI Standards.

ROSATOM has adopted a Code of Ethics and Professional Conduct for Employees. The Code of Ethics communicates the key values of the nuclear industry and defines the relevant ethical principles of employee conduct when interacting with a wide range of external and internal stakeholders. The rules of conduct set out in the Code concern combating corruption, protecting the Corporation's resources, property and information, occupational health and safety, industrial and environmental safety, conflict prevention and resolving conflicts of interest, as well as maintaining the corporate image.

ANTI-CORRUPTION

Principle 10. Businesses should work against corruption in all its forms, including extortion and bribery.

Anti-corruption policy

ROSATOM's anti-corruption efforts are governed by the National Anti-Corruption Plan for the period from 2021 through 2024 developed pursuant to the Decree of the President of the Russian Federation on the National Anti-Corruption Plan for the Period from 2021 through 2024. Enterprises in the industry also adhere to the Uniform Industry-Wide Anti-Corruption Policy.

In the reporting year, ROSATOM continued to support the professional development of executives responsible for preventing corruption and other offences, as well as managers and employees in the industry. Face-to-face training was provided for the following categories of employees stipulated in the National Anti-Corruption Plan:

- Persons newly hired by the Corporation and its organisations and appointed to positions involving responsibility for compliance with anti-corruption standards (more than 880 people);
- Employees in charge of procurement (more than 2,900 people);
- Employees responsible for preventing corruption and other offences (more than 5,900 people).

7,252 employees of ROSATOM and its organisations completed remote training courses.

An anti-corruption hotline is run successfully in the industry. All reports are investigated under the established procedure, and appropriate corrective measures are implemented.

For details, see section 1.12.4 'Prevention of Corruption and Other Offences' (Chapter 1 'Strategic Report') of ROSATOM's Public Annual Report for 2022.

Supply chain and procurement procedures

The Uniform Industrial Procurement Standard (UIPS) has been adopted in the industry. It is the main document that regulates the procurement activities of all nuclear organisations across all business areas and geographical regions. In addition, ROSATOM has approved a voluntary Supplier Code of Conduct, which sets out priorities in the sphere of sustainable development that suppliers are required to adhere to.

The UIPS stipulates that suppliers of goods, work and services must be selected impartially and efficiently through competitive tendering. ROSATOM and its organisations made 33,520 competitive purchases using their own funds (2021: 35,407); as part of the annual procurement programme, contracts were concluded with 24,354 counterparties.

PROMOTING SUPPLY CHAIN SUSTAINABILITY (SALES AND TRADING DIVISION)

Supply chain sustainability is one of the most frequent requirements for fuel products. Foreign customers conduct the relevant audits.

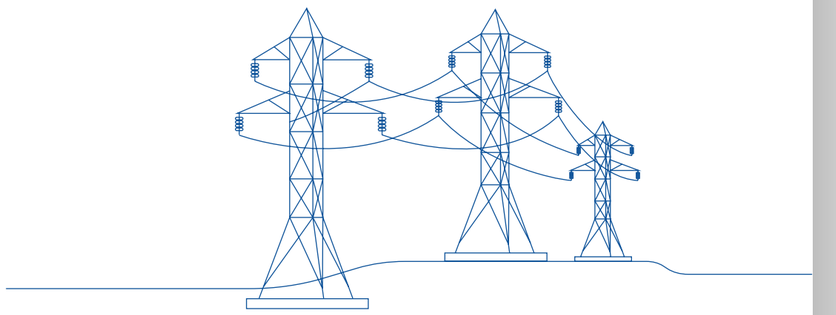
JSC TENEX (Sales and Trading Division) has implemented a system for monitoring the sustainability of its supply chains based on the provisions of the Supplier Code of Conduct of TENEX Group. In the reporting year, sustainability audits were conducted in enterprises in the uranium product supply chain, namely JSC SPb IZOTOP and Karatau LLP (Kazakhstan); an internal audit was conducted in JSC Uranium One Group; expert assistance was provided for an audit of JSC UECP (Fuel Division) conducted by a foreign customer. Corrective action plans have been developed and are being implemented to address irregularities detected during the audits.

In 2022, nuclear organisations concluded 40,707 contracts with small and medium-sized enterprises (2021: 65,441).

In 2022, ROSATOM continued to improve the procedure for conducting data reliability audits, which is a tool for confirming that a supplier is able to carry out a contract in good faith. To do so, manufacturers are audited by a commission set up by the customer and having the required competences and expertise regarding the contract being tendered. In 2022, 204 audits were conducted among manufacturers, contractors and service companies participating in procurement procedures.

The audit also included an assessment of sustainability maturity of 29 suppliers/contractors.

For details, see section 1.12.7 'Procurement Management' (Chapter 1 'Strategic Report') of ROSATOM's Public Annual Report for 2022.



CONTRACTS CONCLUDED WITH SMEs

Internal control and audit

In 2022, ROSATOM's specialised internal control bodies (SICBs) conducted 728 inspections in Russian nuclear organisations. Following the inspections conducted in 2022, the Internal Control and Audit Function developed 692 corrective measures and approved them for implementation.

It is worth noting that the percentage of significant instances of non-compliance with sustainability guidelines adopted in the industry in audited organisations decreased by 64% compared to 2021.

For details, see section 1.12.3 'Internal Control System' (Chapter 1 'Strategic Report') of ROSATOM's Public Annual Report for 2022.

Data protection

ROSATOM is a data processor and is on the register of data processors compiled by the relevant department of the Federal Service for Supervision of Communications, Information Technology and Mass Media; it complies with the provisions of Russian legislation. The Personal Data Processing Policy has been approved by Order No. 1/700-P of ROSATOM dated 3 July 2018.

To raise awareness among ROSATOM's employees with regard to matters related to personal data handling, the Corporation issues local regulations and has developed an introductory training course on personal data handling, as well as guidance handouts. ROSATOM also regularly sends out newsletters on matters related to personal data use and protection.

Contact Details

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State Atomic Energy Corporation Rosatom

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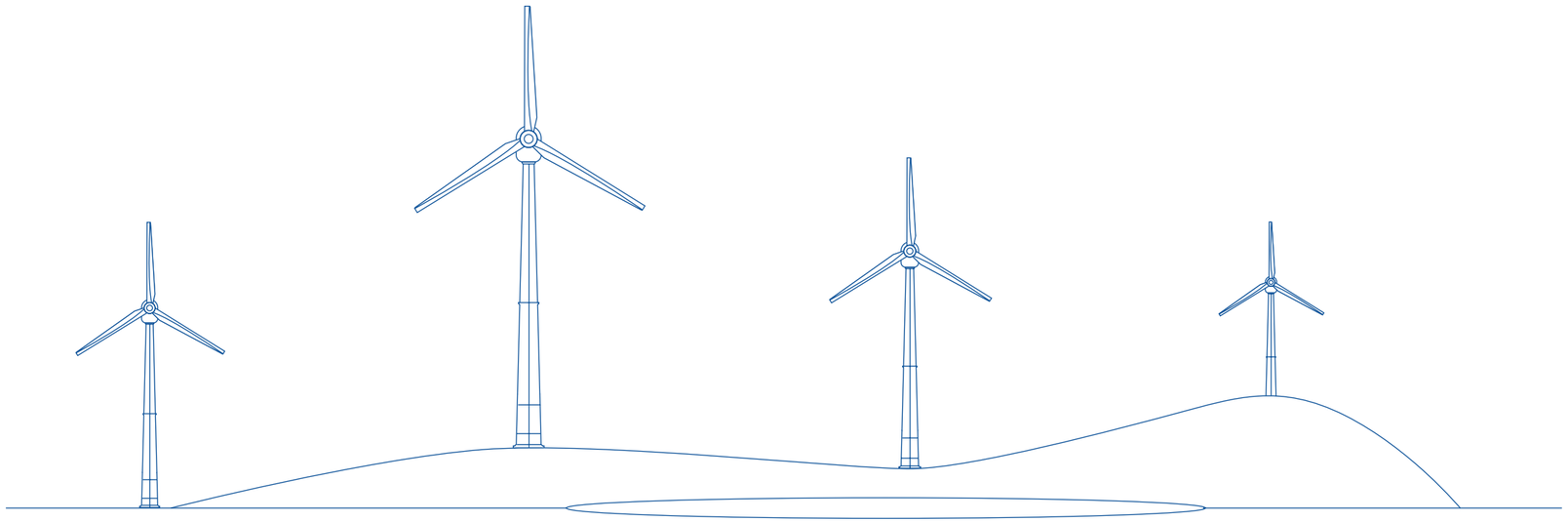

ROSATOM

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