Sustainable development

As the largest Russian energy holding fully aware of its responsibility to the government and society, RusHydro Group is focused on the development of socially responsible business, while pursuing a consistent policy of introducing sustainable development principles into its operational and management processes, keeping in line with Russian and international best practices. Sustainable development is an important value outlined in the Company's strategic goals.

The Company adheres to the corporate social responsibility concept as defined by ISO 26000. According to the standard, a company is responsible for the impact of its decisions and operations on society and the environment and must act in a transparent and ethical way that:

- promotes sustainable development, including public health and well-being;
- takes into account the expectations of stakeholders;
- complies with applicable laws and international standards of conduct;
- is integrated into the operation of the entire company and is applied with regard to its stakeholders.

One of RusHydro Group's strategic goals is to ensure the reliable and safe operation of its facilities, taking into account the economic feasibility of funds allocated for mitigating possible risks and reducing potential damage.

The Company is committed to increasing the share of renewables in the country's energy mix by means of commissioning new facilities and increasing the generation of clean energy, while also improving energy efficiency.

RusHydro Group's another priority is the development of the regions where it operates. RusHydro facilitates the growth of welfare, creating new jobs, paying taxes, and delivering positive multiplier effects by developing energy infrastructure (connection of new consumers to power grids, water supply, etc.). The Group companies support education, culture, sports, and environmental protection and provide assistance to socially vulnerable population groups across their footprint.

RusHydro Group has made an invaluable contribution to developing hydropower in Russia and to guaranteeing the country's energy security. RusHydro is the undisputed leader among energy companies in Russia and is also one of the world's largest organizations operating in the hydropower space.

The company places particular emphasis on developing the power industry in the Far East, a region with huge hydropower potential. If this potential is not harnessed, further economic and infrastructural development in this region of such significance to the Russian Federation would not be possible. RusHydro Group invests considerable funds in creating social infrastructure and implementing resource-saving and environmental technologies.

Naturally, RusHydro is a source of support and development for the industry's science and education. It presents an exemplary corporate culture, but, above all, it embodies the hard work of a cohesive team of true professionals.

Oleg Lushnikov,

Executive Director,
Hydropower of Russia Association

Sustainable development governance *[102-31]*

The responsibility for providing control, methodology support and regulation of RusHydro Group's steady low-carbon development, as well as preserving cultural heritage sites and biological diversity is assigned to member of the Management Board, First Deputy General Director – Chief Engineer[1] *[102-19]*.

Sustainable development activities are carried out by specialized units within the area of their functional responsibility *[102-20]*:

- social responsibility – personnel management unit (Deputy General Director for Personnel Management and Organizational Development);
- cooperation with government authorities in the regions of the Company's footprint and creation of a favorable social environment for the Company's efficient development – corporate communications unit (Director of Corporate Communications), Far East Division (Deputy General Director – Director of the Far East Division);
- economic responsibility – unit of economic planning and investments (Member of the Management Board, First Deputy General Director), unit of production activity (Member of the Management Board, First Deputy General Director – Chief Engineer), unit of capital construction (Deputy General Director for Capital Construction), and unit of financial and corporate law management (Member of the Management Board, First Deputy General Director);
- power generation, improvement of energy efficiency and environmental responsibility – unit of production activity (Member of the Management Board, First Deputy General Director – Chief Engineer);
- charity – corporate communications unit (Director of Corporate Communications).

Operation of RusHydro's different subdivisions and subsidiaries is coordinated at regular meetings of the working group on sustainable development to monitor the efficiency of implementation of key tasks in sustainable development for the period through to 2020 approved by RusHydro's Order No. 614 of September 11, 2017.

Key sustainable development issues are reviewed at the meetings of the Board of Directors and the Company's Management Board. The Committee on Reliability, Energy Efficiency and Innovation under RusHydro's Board of Directors plays an important role in RusHydro's sustainable development management and preliminarily reviews matters of long-term development of hydropower and energy based on other renewables ("RES"), as well as development of functional policies (technical, environmental, etc.), corporate standards in technical regulation, etc.

The Company has adopted a number of internal regulations outlining and governing the approach to sustainable development and corporate social responsibility ("CSR").

Internal regulations

CSR area	Internal regulations
Sustainable production	- RusHydro Group's Development Strategy until 2020 with an outlook until 2025; - RusHydro Group's Long-term Development Program for 2018–2022; - RusHydro Group's Technical Policy; - RusHydro's Regulations on the Working Group on Technical Standards; - Regulations on Managing Investing Activities Performed in the Form of Capital Investments; - RusHydro's Regulations on the Standardization System; - RusHydro's Regulations on Internal Controls.
Procurement	- The Uniform Regulations on RusHydro Group's Procurements and other internal regulations developed to provide further details, including the Methodology for Reviewing the Reliability (Business Reputation) and Financial Standing of the Bidders.

[1] Order No. 420 On Distribution of Tasks, Powers and Responsibilities among RusHydro's Managers dated June 15, 2018 (as amended by Order No. 688 dated August 22, 2019).

CSR area	Internal regulations
Corporate ethics and anti-corruption	• RusHydro's Code of Corporate Ethics; • RusHydro's Anti-Corruption Policy; • RusHydro's Regulations on the Prevention and Management of Conflicts of Interest; • Regulations on the Procedure to Report Presents Received by RusHydro's Employees during Official Events, Business Trips, etc.; • RusHydro's Regulations on the Committees for Compliance with the Corporate Ethics Standards and Management of Conflicts of Interest; • Rules of RusHydro's Line of Trust Operation; • RusHydro's Comprehensive Program of Anti-Corruption Activities for 2016–2019.
Environmental impact	• RusHydro Group's Environmental Policy; • Implementation Program for the Environmental Policy; • RusHydro's Program of Energy Saving and Increased Energy Efficiency through to 2020; • RAO ES East Subgroup's Energy Saving and Energy Efficiency Improvement Policy.
Health and safety	• RusHydro's Health and Safety Policy; • Policies on occupational health and safety of RusHydro's subsidiaries.
Charity	• The Company's Charity and Sponsorship Policy; • Charity and Sponsorship Policy of the Company's Subsidiaries.
Innovative development	• Innovative Development Program of RusHydro Group for 2016–2020 with an outlook until 2025; • RAO ES East's Innovative Development Program for 2016–2020 with an outlook until 2025; • Regulations on Design and Implementation of RusHydro's Innovative Development Program; • Regulations on R&D Management Process in RusHydro's Operations; • Regulations on the Intellectual Property Management Process in RusHydro Group; • Regulation on Planning and Monitoring the Progress of Activities as Part of the Innovative Development Programs of RusHydro Group and RAO ES East; • Regulation on Preparation, Adjustment and Monitoring of Implementation of Procurement Plans for Innovative and/or High-Tech Products; • Methodology for Assessment of Technical and Economic efficiency of Innovative Projects and the Temporary Procedure for Assessment of Technical and Economic Efficiency of Innovative Projects Implemented as R&D.
Personnel management	• RusHydro's Social Policy; • Regulations on RusHydro's Employee Training; • Regulations on Personnel Certification at RusHydro's Branches; • Regulations on the Database Formation of Candidates to Be Recruited at RusHydro's Branches; • Regulations on RusHydro's Talent Pool; • Concept of advanced human resource development From School to Workplace; • Regulations on RusHydro Group's Young Employees Community; • Employee Handbook for RusHydro's Executive Office; • Model Employee Handbook for RusHydro's branches; • RusHydro's Regulations on the Formalization System; • RusHydro's Regulations on the Management of Subsidiaries' Organizational Structures; • RusHydro's Guidelines on the Calculation of Meal Reimbursements for Branch Employees Working Multiple Shifts a Day; • Regulations on Improving Employee Housing Conditions at Branches of RusHydro; • Regulations on the Corporate Incentives (Benefits) for Employees of RusHydro's Executive Office; • Regulations on Private Pension Plan for Employees of RusHydro's Branches.

Commitment to UN Sustainable Development Goals

In 2015, the United Nations Member States adopted the 2030 Agenda for Sustainable Development (the "Agenda"), which set out 17 Sustainable Development Goals (SDGs) and 169 targets on the way to achieving them. The progress towards these goals and targets is monitored and expressed in quantifiable terms based on a set of global metrics. Member states follow the Agenda's principles to draw up national targets and metrics that are based on global benchmarks but take into account local conditions.

At the same time, the SDGs cannot be achieved through the efforts of governments and public organizations alone, so the UN encourages businesses, especially large and transnational companies, to adopt sustainable practices and include sustainability information in their reporting cycle.

RusHydro Group is fully in support of the Agenda, consistently integrating the most relevant SDGs into its operations. In 2019, the Company revised the list of relevant SDGs and worked out a number of quantitative indicators that will be disclosed going forward, helping to track RusHydro Group's contribution to the achievement of SDGs.

RusHydro's quantitative metrics are based on UNCTAD's Guidance on core indicators for entity reporting on contribution towards implementation of the Sustainable Development Goals[1], as well as certain GRI Standards disclosures that are annually disclosed by the Company[2]. RusHydro did not aim to disclose the maximum possible number of indicators; instead, the Company determined the ones that bear the most relevance to its operations and ensure zero overlap when it comes to SDG achievement.

The development status for national SDG achievement metrics is available on the Federal State Statistics Service website at: https://eng.gks.ru/

The Company shares ten principles on human rights, labor, anti-corruption, and the environment, and strives to ensure that the needs of the current generation will not compromise the opportunities of those who will come next. In 2017, RusHydro joined the UN Global Compact, the largest business initiative in sustainable development[3].

In June 2018, RusHydro joined the Association "National Network of the Global Compact", and Boris Bogush, Member of the Management Board, First Deputy General Director – Chief Engineer, was elected member of the Governing Board.

RusHydro Group's contribution towards the achievement of SDGs in 2019 *[EC] [OS]*

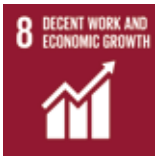
SDGs, targets	Relevant SDGs indicators	
	Disclosure	**Details**
 1.2	**GRI 202-1** Ratios of standard entry level wage by gender compared to local minimum wage	Depending on the region of operation, the entry level wage either **exceeds the minimum wage 14-fold** or at least equals it

[1] https://unctad.org/en/PublicationsLibrary/diae2019d1_en.pdf

[2] To compare certain GRI items and SDGs, the Company used, among others, SDG Compass (https://sdgcompass.org/)

[3] Resolution of the Board of Directors (Minutes No. 259 dated October 30, 2017).

SDGs, targets	Relevant SDGs indicators	
	Disclosure	**Details**
 3.8	**C.3.1.** Expenditures on employee health and safety	**RUB 2,464.7 mn**
	GRI 403-9 Occupational Health and Safety	26 accidents to RusHydro's staff that resulted in 28 injuries, including one fatality. The accidents caused injuries to two managers (men), four specialists (women), and 20 workers (men).
	GRI 403-10 Work-related ill health	Three cases of work-related ill health
	GRI 203-2 Infrastructure investments and services supported (partially)	Healthcare investments of **RUB 17.3 mn**
 4.3	**C.2.2.** Expenditure on training per year per employee	**RUB 3.7 thousand**
	GRI 404-1 Average hours of training per year per employee	Management: **102 hours** White-collar employees: **56 hours** Blue-collar employees: **50 hours**
 6.3, 6.4	**B.1.1.** Water recycling and reuse	**4.5 bn m³** recycled water supply **21.2 mn m³** reused water supply
	B.1.2. Water use efficiency	The ratio between water withdrawal and net added value is **3.9 thousand m³/ RUB mn**
	B.1.3. Water stress	No water is withdrawn in water-scarce areas
	GRI 303-4 Water discharge (by treatment type)	Waste water discharge into water bodies – **594.9 mn m³**, including: - 348.6 mn m³ standard clean - 203.4 mn m³ untreated - 33.7 mn m³ insufficiently treated - 9.2 mn m³ treated to standard quality at treatment facilities
 7.1, 7.2, 7.b	**A.3.1.** Green investment	**0.5%** of consolidated revenue
	GRI EU1 Installed capacity	**39,683 MW** For a breakdown by primary energy source and by regulatory regime, see Key production assets
	GRI EU2 Net energy output	**142.8 bn kWh** of electricity **30.0 mn Gcal** of heat For a breakdown by energy source and by regulatory regime, see Electricity and heat generation
	GRI EU23 Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services	The Group's businesses were involved in implementing the Target Model for Utility Connection to Electrical Grids approved by the Russian Government's Decree No. 147-r On target models for simplifying business procedures and enhancing investment appeal of the Russian regions dated January 31, 2017
	GRI EU28 Power outage frequency (SAIFI)	**0.74** For a breakdown by subsidiary, see Accident rate at RusHydro Group's facilities
	GRI EU29 Average power outage duration (SAIDI)	**1.03 h** For a breakdown by subsidiary, see Accident rate at RusHydro Group's facilities

SDGs, targets	Relevant SDGs indicators	
	Disclosure	**Details**
 8.2, 8.8	**A.1.1.** Revenue	**RUB 406.6 bn**
	C.4.1. Percentage of employees covered by collective agreements	**96%**
	GRI 401-1 New employee hires and employee turnoverв	**13,173 employees;** for turnover by age and gender, see Recruitment
	GRI 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	- voluntary health insurance; - insurance against accidents and diseases; - disability / temporary disability compensation; - maternity/paternity leave; - one-off financial aid; - other payments and benefits in accordance with collective bargaining agreements and in-house rules and regulations.
 9.3, 9.4, 9.5, 9.b	**A.1.2.** Added value	**RUB 190.4 bn**[1]
	A.3.3. Total expenditures on research and development	**RUB 2.8 bn**
	A.4.1. Percentage of local procurement	**99.9%**
	GRI 203-2 Infrastructure investments and services supported (partially)	RusHydro Group handed over **15 socially significant facilities** to Russian regions; for the results of construction activities under key investment projects, see Construction and modernization of production facilities
 11.a	**C.2.3.** Employee wages and benefits with breakdown by employment type and gender	The average salary stood at **RUB 78,575** The benefits package that includes private pension plans, VHI, insurance against accidents and diseases, and support in housing conditions improvement amounted to **RUB 31,667** thousand There is no statistics on wages and benefits by labor contract type, employment type, or gender
 12.5, 12.6	**B.2.1.** Reduction of waste generation	The aggregate waste generated by RusHydro Group's power facilities totaled **23.8 mn tonnes**, **down 19.6%** y-o-y.
	B.2.2. Waste reused, re-manufactured and recycled	Accumulated waste is collected by specialized contractors duly licensed to collect, transport and treat such waste.
	GRI 302-4 Reduction of energy consumption	**877 thousand m³** in gas savings **123 tonnes** of natural fuel in diesel fuel savings **46,535 tonnes** of equivalent fuel in savings of various fuel types **19,991 Gcal** in heat savings **74,610 thousand kWh** in electricity savings
	GRI EU12 Transmission and distribution losses as a percentage of total energy	**9.8%**

SDGs, targets	Relevant SDGs indicators	
	Disclosure	**Details**
 13.2	**B.3.1.** Scope 1 GHG emissions	**35.3 mn tonnes**
	GRI 305-7 Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	**231.7 thousand tonnes**
 15.1, 15.5	**GRI 304-3** Habitats protected or restored	Rehabilitated area – **4.0 ha**
	GRI 306-5 Water bodies affected by water discharges and/or runoff	**44 bodies** For a breakdown by water body size, see Biodiversity conservation
 16.5	**D.2.2.** Average hours of training on anti-corruption issues per year per employee	**653 employees** underwent training No records are kept on the length (in hours) of anti-corruption training; for a breakdown by region and employee share, see Anti-corruption efforts
	GRI 205-3 Confirmed incidents of corruption and actions taken	No corruption cases were confirmed at RusHydro Group during the reporting period
 17.1, 17.17	**A.2.1.** Taxes and other payments to the Government	**RUB 82.1 bn** For a breakdown by budget level and for the structure, see Tax payments
	A.3.2. Community investment	**0.4%** of consolidated revenue
	GRI 203-1 Significant indirect economic impacts	**RUB 1.48 bn**

Rushydro group's contribution to low-carbon economy in Russia [103-2] [OS]

A comprehensive approach to addressing RusHydro Group's sustainable development objectives ensures the most efficient transition to low-carbon development with minimal environmental impact.

The focus on a low-carbon economy above all relies on the development of renewable sources of energy. Using RES is a top priority for RusHydro Group, which keeps ramping up installed capacities by building new facilities and commissioning new generation units.

RusHydro, which is the operator of most of the country's HPPs, was among the first in Russia to start developing projects relying on geothermal, solar and wind power generation. One of RusHydro Group's objectives for 2016–2020 with an outlook until 2025 is to improve energy efficiency by using renewable energy sources. Most of the projects are implemented in isolated energy hubs of the Far Eastern Federal District outside of the Unified Energy System.

RusHydro Group's clean energy structure includes smaller HPPs with a capacity of up to 25 MW, geothermal, wind, and solar power plants.

Large HPPs, which make up 74% of RusHydro Group's total installed capacity, are also classified as sources of power generation with low per unit emissions of greenhouse gases.

Plans to finance construction of generation facilities for a low-carbon economy

Project	Start year	End year	Estimated total cost of investment project, RUB mn	Planned investments in 2020-2025 in forecast prices, RUB mn
Ust-Srednekanskaya HPP	1991	2023	76,927.3	23,369.4
Solar generation unit at Nizhne-Bureyskaya HPP	2019	2020	155.7	155.5
Ust-Dzhegutinskaya SHPP	2012	2020	1,684.2	433.8
Barsuchkovskaya SHPP	2012	2020	1,551.3	495.0
Krasnogorskaya SHPP-1	2017	2021	7,310.9	6,758.0
Krasnogorskaya SHPP-2	2017	2022	7,454.3	6,887.6
Verkhnebalkarskaya SHPP	2011	2020	3,706.1	483.9
Photovoltaic power system (Vladivostok, Primorsky Krai, Russky Island)	2020	2020	5.0	5.0
Development and testing of a hybrid container-type energy storage system as part of a distributed network with renewable energy sources (Vladivostok, Primorsky Krai, Russky Island)	2020	2020	18.0	18.0
Construction of a 0.3 MW wind turbine in Ust-Kamchatsk	2019	2021	185.3	150.8
Construction of a 900 kW wind power plant in Tiksi, Bulunsky District	2017	2020	290.0	12.7
Construction of a 3,000 kW diesel power plant with an energy storage unit for the wind diesel power station in Tiksi, Bulunsky District	2018	2021	1,458.7	704.4

1 Use of solar and wind power in isolated energy hubs

Since 2012, RusHydro Group has commissioned 19 solar power plants with a total capacity of 1.6 MW and four wind power plants with a total capacity of 3.6 MW in the Far Eastern Federal District.

Given the local specifics, none of the projects is standard by design, the 1 MW northernmost SPP in Batagay is not an exception. Our R&D specialists have designed prototype wind diesel and solar diesel power stations and tested a range of equipment, including energy storage units, all to be used in isolated energy hubs of the Far Eastern Federal District.

In 2019, RusHydro Group continued working on its project to erect a wind-diesel power plant in Tiksi, Republic of Sakha (Yakutia), including a new 3 MW diesel power plant, a wind turbine, and an energy storage system. The wind diesel power plant has a total capacity of 3.9 MW. In 2019, the project's second stage was underway to construct a modular diesel power plant with energy storage. Design, delivery of power generation equipment, and construction of the foundation for the power plant were all successfully completed.

Construction and upgrade of energy efficient hydropower facilities delivers savings in potential greenhouse gas emissions. In 2019, RusHydro Group's hydroelectric power plants generated a total of 110.1 bn kWh, helping to avoid consumption of up to 38 mn tonnes of equivalent fuel, or GHG emissions of more than 40 mn tonnes (around 2.3% of the total volume of emissions in Russia).

As part of a memorandum of understanding signed in 2017 with Japanese companies on the wind power project in Ust-Kamchatsk, Kamchatka Territory, the design phase was competed for the erection of the fourth cold climate resistant wind turbine from Komai with a single capacity of 300 kW. The automated process control system was also upgraded.

The construction of a 1.27 MW solar power plant at the site of Nizhne-Bureyskaya HPP is in the completion phase. The commissioning is scheduled for 2020. The project will help pilot test the technology for using RES at hydraulic structures as a way to reduce own consumption costs for HPPs.

In line with action plan No. 7456p-P9 dated August 15, 2019 to modernize diesel (coal and fuel oil) power generation in remote and isolated areas approved by Dmitry Kozak, Deputy Chairman of the Russian Government, work was initiated to organize contests for selecting RES-based upgrade projects in RusHydro Group using energy service agreements. The RES facilities covered by seven pilot modernization projects in the Republic of Sakha (Yakutia) have a planned capacity of 3.15 MW (to be updated after the competitive process is over).

For more information on plans to finance the construction of power generation for a low-carbon economy, see Appendix No. 22

2 Smaller HPPs

Smaller HPP projects are implemented and supported by many countries. Their benefits include a lower capital intensity, as compared to large HPPs, and availability of multiple suitable dam sites and watercourses.

RusHydro Group takes steps to develop minor HPPs, with capacity below 50 MW, in order to use their significant environmental potential, as lon as such projects can make maximum contribution to the protection of the environment. *[OS]*

In Russia, smaller HPPs have a potential of around 7,000 MW.

In 2019, the Government of the Russian Federation decided to extend the framework for RES support beyond 2024, with the single capacity of SHPPs growing to 50 MW and investments of RUB 30 bn allocated to smaller HPP projects. In 2020, the Government is expected to draft a list of regulations to support RES beyond 2024.

In 2019, RusHydro's Management Board approved the smaller HPP development program for 2020–2025, which aims to increase the company's value by making SHPP projects more competitive in the long run. The program's key focuses are project preparation and R&D, reduction in construction CAPEX, operational efficiency improvements, development and implementation of project support mechanisms.

Planned schedule for project commissioning as part of the existing RES support framework until 2024, MW

Project	2020	2021	2022	Total
Barsuchkovskaya SHPP	5.3	–	–	**5.3**
Verkhnebalkarskaya SHPP	10	–	–	**10**
Krasnogorskaya SHPP-1 and SHPP-1	–	24.9	24.9	**49.8**
Ust-Dzhegutinskaya SHPP	5.6	–	–	**5.6**
Total	**20.9**	**24.9**	**24.9**	**70.7**

3 RusHydro Group's EV charging infrastructure

Pursuant to decisions adopted by the Management Board in September 2019, RusHydro launched the first network of electric vehicle (EV) fast charging stations in the Far East. The EV charging network project is in line with the instructions issued by the President of the Russian Federation in his May 2018 Decree, and with the Russian Government's instructions on the development of the energy infrastructure in the Far East.

Ten charging stations were installed in Vladivostok, Ussuriysk and Artem of the Primorsky Krai (the leading region by number of electric vehicles), as well as in Blagoveshchensk of the Amur Region. For the convenience of EV owners, charging stations are located in the parking lots of supermarkets and shopping and entertainment centers, near the offices of RusHydro Group's single settlement centers, and at filling stations.

RusHydro's EV charging stations are hardware and software units powered by the latest technology such as remote process control, mobile application, and payment system. RusHydro is the first provider in Russia offering a comprehensive fast charging service for mass market EVs, which enables a partial battery top-up in just a few minutes and a full charge cycle of under 30 minutes.

The stations support a range of charging connectors, including: Japanese standard (DC) of 50 kW, European standard (DC) of 50 kW, and connector Type 1 / Type 2

Since the launch, RusHydro's EV charging stations have provided about 10,000 charging sessions. The aggregate amount of charge has allowed electric vehicles to travel over 300,000 km in total, saving more than 3,000 liters of hydrocarbon fuel,[1] which translates into some 70,000 kg savings in CO_2 emissions into the air.

On an annual basis, electric cars charged at RusHydro's operating charging stations will be able to travel more than 500,000 km annually, saving more than 5,000 liters of hydrocarbon fuel.

[1] Compared to gasoline-powered cars of the same class.

(AC), 22 kW. A single station can charge two EVs simultaneously.

Strong demand and extensive positive feedback from our clients, who would like to see the charging network expand going forward, confirmed the popularity of the new service.

To this end, in December 2019 RusHydro's Management Board resolved to further develop this high-tech line of business and approved the roadmap on expanding RusHydro's EV charging network in the Primorsky Krai, Amur and Sakhalin regions, Khabarovsk Territory, and other regions of Russia. In line with the roadmap, we are looking into potential locations of charging stations to enable EV travel between the key cities of the Far East and to provide people with access to the seashore during the summer vacation period.

4 Cooperation to combat climate change

Ratification of the Paris Agreement on climate change

One of the 2019 milestones was Russia's ratification of the Paris Agreement on climate.

The Paris Agreement was adopted in 2015 by 195 participants of the Paris forum. At that time, the parties agreed that they needed to mitigate global warming and hold the increase in the global average temperature by 2100 to well below 2°C above pre-industrial levels (19th century). The document also aims to limit the average temperature increase to 1.5°C. In 2015, scientists said that a larger temperature increase could lead to irreversible changes in the earth's ecosystem.

The Paris Agreement does not require the signatories to abandon the burning of fossil fuels (oil, gas and coal) for industrial purposes. However, it does require the countries to work on emission reduction and treatment, upgrade existing facilities with improved treatment systems, and adapt industrial production to climate change developments.

Back in late 2015, RusHydro supported an initiative to unite the efforts in Russia to reduce the impact on the environment and prevent climate change, signing the Statement of the Russian Business on the Negotiation Process and Adoption of a New Climate Agreement at the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC).

Since 2015, RusHydro has been a member of the Climate Partnership of Russia, which seeks to unite the efforts of businesses in the interests of transition to environmentally friendly technologies.

The Company annually reports on its greenhouse gas emissions under the Carbon Disclosure Project (CDP). The key objective of the CDP is to promote solutions that contribute to improvements in climate change by raising awareness of businesses, policy makers, and investors.

In 2019, RusHydro also continued its work, together with EuroSibEnergo, within the working group on developing a methodological approach to understanding global climate change processes in terms of greenhouse gas emissions from the surface of HPP freshwater reservoirs and evaluating their absorbing capacity.

Stakeholder relations

RusHydro Group strives to balance the interests of all the stakeholders. The Company keeps in touch with its stakeholders and systematizes and analyzes their requests, making sure that any relevant information is disclosed in full and on time. This approach allows for a timely response to probable risks associated with stakeholder relations.

In building a framework for successful relations with stakeholders, RusHydro Group follows four fundamental principles of the AA1000 *[102-43]* Series of Standards:

- **inclusivity** – relates to identifying stakeholders and their needs and arranging interaction with them on material sustainability topics;
- **Materiality** – relates to identifying and prioritizing the most relevant sustainability topics, taking into account the effect each topic has on the stakeholders;
- **Responsiveness** – relates to providing timely reaction from the Company to events related to material sustainability topics, expressed in specific actions or communication with the stakeholders;
- **impact** – relates to assessing the Company's positive and/or negative effect on sustainable development aspects and stakeholders' interests.

Given that each stakeholder group has and will continue to have a major impact on the Company's business, taking their interests into consideration when operating and planning across various timeframes is crucial for RusHydro Group's sustainable development.

In 2019, stakeholder relations were in line with Order No. 949 dated December 10, 2018 by the Chairman of the Management Board – General Director of RusHydro, which details the schedule, ways of interaction, and actions planned for stakeholders in 2019. *[102-43]*

In 2019, during the 2018 reporting campaign, a stakeholder map was compiled for the purposes of this annual report based on a survey of external and internal stakeholders. *[102-42]*

More details on actions adopted for relations with stakeholder groups are available in the following documents approved by the Company's executive documentation:

- list of key public events;
- Charity and Sponsorship Program;
- schedule of internal regulations development;
- IR Calendar.

Based on the 2019 performance, RusHydro issued a report on implementation of actions under the approved schedule.

Public hearings and stakeholders' opinions

When drafting its annual reports, RusHydro Group strives to ensure that the information it provides meets expectations of the stakeholders. In line with this principle, the Company holds annual public hearings to discuss the forthcoming report.

In April 2020, the draft 2019 Annual Report of RusHydro Group was presented at the public hearings attended by representatives of the Company, its partners in the energy sector, subsidiaries, environmental and public entities, trade unions, universities, local authorities, media, as well as consultants and auditors.

At the hearings, the stakeholders made proposals regarding information to be disclosed in the report.

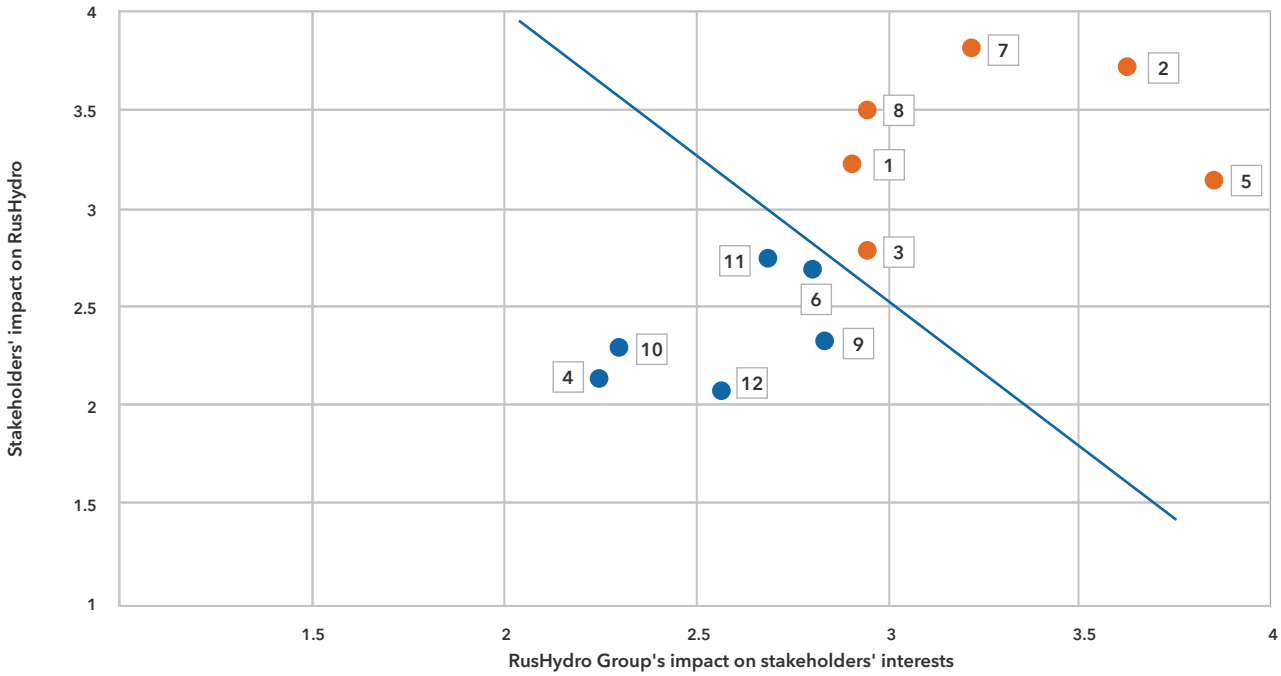
In addition, this report publishes the information (marked by special symbols) proposed for disclosure in previous reporting campaigns (including tendering results and public reporting ratings) or identified by surveying stakeholders as part of determining material topics of the 2019 Annual Report.

EC – taking into account recommendations of the expert community;

OS – taking into account recommendations of stakeholders other than the expert community.

Information on consideration of stakeholders' recommendations submitted at public hearings is available in Appendices No. 18 and No. 19; for Opinion on Public Assurance, see the Additional Information section.

Stakeholder map *[102-40]*



1 Shareholders and investors
2 Customers and consumers
3 Business partners, suppliers and contractors
4 Environmental organizations
5 Employees and trade unions
6 Professional associations and expert community
7 Government authorities
8 Regulators and infrastructure organizations
9 Educational institutions
10 Local communities
11 Media
12 Public social and charitable organizations

● Key stakeholders

RusHydro Group's stakeholder relations in 2019 *[102-21] [102-31] [102-33] [102-43] [102-44] [EC]*

Key mechanisms	Responses to requests and results of stakeholder relations in 2019
1. Shareholders and investors	
Key interests: dividend payouts, economic efficiency, business resilience, business process transparency	
● preparing and holding Annual General Meetings of Shareholders; ● preparing IR presentations and arranging IR activities; ● public reporting; ● maintaining business contacts with analysts of investment banks and other financial institutions; ● preparing press releases and information materials about the Company; ● arranging meetings between investors and the Company's management; ● preparing and conducting roadshows; ● disclosing information on the Company and its subsidiaries' websites in accordance with the disclosure rules as per resolutions of the Government of the Russian Federation; ● updating the relevant section on the Company's website at http://www.rushydro.ru/investors/.	The interaction focused on discussing RusHydro Group's strategic priorities and plans, including those related to the updated dividend policy, inclusion of the four Far Eastern projects in the TPP modernization program with a guaranteed rate of return, implementation of value growth initiatives, management efforts aimed at improving operational efficiency, and plans for asset modernization. For more information, see the Shareholder and investor relations

Key mechanisms	Responses to requests and results of stakeholder relations in 2019
2. Customers and consumers	
Key interests: reliable power supply, improved quality of products and services, high standards of service	
• Line of Trust; • mobile service centers; • online reception desk; • contact center; • personal accounts for consumers of guaranteed suppliers; • single information and settlement centers; • feedback on RusHydro Group's EV charging stations.	Agreements were implemented related to regional energy development, ensuring sustainable power and heat supply to consumers, as well as social and economic activities. For more information, see the Consumer interaction section In 2019, the majority of requests received through the Trust Line were about sales (36%) and procurement (34%). For more information on the Line of Trust, see the Providing for transparency and availability of information In line with its strategy to improve customer experience, RusHydro Group has been launching single settlement and information centers. The centers provide clients with a single payment document, which reflects charges for electricity, heating, cold water supply, sewage, removal of solid household waste and other utility services. As at the end of 2019, 45 centers were operational, including nine centers that opened during the reporting period. This project, along with the introduction of single payment documents, translates into a 20–30% increase in utility payment collection practice. Within the regions of their operation, companies of ESC RusHydro Subgroup provide services to about 60% of clients through internal and external interactive channels. Customers of ESC RusHydro Subgroup are actively exploring alternative ways of getting in touch with sales units, including through the Contact Center, which operates remotely. Consumers have the opportunity to ask a question directly to the operator or use the voice service powered by speech recognition and synthesis technology. Most of the inquiries focus on reporting utility meter readings (70%), while the second most popular area of interest is amounts due, incurred and recalculated under the client's personal account (15%) and requests for information are the third most popular reason for contact (5%). Clients that use RusHydro's EV charging network can benefit from a dedicated website (charge.rushydro.ru) with a detailed description of the project, charging instructions for electric cars, prices, answers to frequently asked questions and other useful information. Technical assistance is provided through the telephone support line accessible at 8-800-222-18-32 and a WhatsApp group where RusHydro experts are available online to provide assistance.
3. Business partners, suppliers and contractors	
Key interests: fair competition and responsible market behavior, transparent operations, including procurement	
• forums, exhibitions, conferences, dialogues; • open and competitive procurement procedures; • joint projects.	In 2019, RusHydro was a partner of the 16th Krasnoyarsk Economic Forum, "Arctic: Territory of Dialogue" 5th International Arctic Forum, Eastern Economic Forum, and was actively engaged in the Russian Energy Week International Forum (REW 2019), Second Russian-Chinese Energy Business Forum, and the St. Petersburg International Economic Forum. RusHydro Group signed several agreements with its partners, including: • PowerChina – on cooperation for the construction of pumped storage power plants in Russia and collaboration in third countries on design and engineering projects; • Osnova Holding – on implementation of projects for processing and disposal of ash and slag waste currently generated at coal-fired power plants in the Far Eastern Federal District; • Rosatom State Atomic Energy Corporation – on cooperation for the development and application of composite materials; • Far East Development Fund and Hevel Energoservice – on cooperation for the development of renewables and creation of autonomous hybrid power plants in the Far Eastern Federal District areas with decentralized power supply. For more information on the implementation of bidding procedures, see the Procurement

Key mechanisms	Responses to requests and results of stakeholder relations in 2019
4. Environmental organizations	
Key interests: environmental protection	
– environmental impact assessments; – environmental projects in the regions of operation; – interaction with specially protected natural areas; – charitable assistance to biodiversity conservation programs	In 2019, RusHydro Group supported 19 specially protected areas across the regions of its operation. The Company's donations help the areas implement a wide range of environmental measures aimed primarily at biodiversity conservation and environmental awareness raising for the younger generation, as well as actions that ensure regulation and sustainable use of biological resources important for biodiversity conservation; and assistance in protecting ecosystems and natural habitats of species maintaining viable populations in natural conditions. As part of the Ecological Paths project, seven tourist trails were laid out in 2019 in the Republic of North Ossetia – Alania, Perm and Stavropol territories, Amur, Volgograd, Saratov and Samara regions, with a total of 30 nature trails operating in 15 regions of RusHydro's operation as of date (as well as in Karachay-Cherkessia, Chuvashia, Kabardino-Balkaria, Yaroslavl, Novosibirsk, Moscow and Nizhny Novgorod Regions). PJSC RusHydro takes part in activities of the Ministry of Natural Resources working group, which addresses entrepreneurship and biodiversity preservation issues. Thus, Company representatives inform the participants of meetings on the efforts made to preserve the biodiversity. One of the working group's objectives is to establish methodological approaches to preserving the biodiversity. The said initiative will be implemented together with leading academic institutions. *[OS]* For more information, see the Environmental protection
5. Employees and trade unions	
Key interests: professional and career development, safe working conditions, remuneration	
– further professional training; – social support of employees; – communication through internal channels; – interaction with trade unions	In 2019, RusHydro Group conducted more than 56,300 training courses while also holding regular professional skills competitions and providing career guidance. RusHydro Group provides voluntary health insurance and non-government pension insurance plans. Employees receive support as part of existing collective bargaining agreements and internal documents. For more information, see the Ensuring good working conditions Employees have access to a dedicated intranet platform (portal.rushydro.ru), which publishes Group-wide news, covers developments at RusHydro's branches and subsidiaries, announces essential corporate events and actions, and posts vacancies and information on new appointments. In 2019, 12 issues of a corporate newsletter were published with a circulation of 11,000 copies, distributed across branches and subsidiaries of RusHydro Group. Most of RusHydro Group's companies have trade unions in place, with a total of 34,239 members in 2019 (49% of the total headcount). Interaction with trade unions in branches and subsidiaries runs as follows: – establishment of commissions for drafting collective bargaining agreements and monitoring their implementation, social policy commissions with the participation of the employer and trade union representatives; – taking into account the union's opinion when adopting internal regulations on social and labor relations; – holding joint meetings of heads of local trade unions with RusHydro's management on relevant aspects of social and labor relations. – holding joint cultural, sports and festive events; – timely informing trade unions about decisions made on reorganization, layoffs and other cases stipulated by labor legislation and collective bargaining agreements

Key mechanisms	Responses to requests and results of stakeholder relations in 2019
6. Professional industry associations and expert community	
Key interests: energy science development, development of innovative technologies, partnership prospects, transparent operations	
● forums, conferences, exhibitions; ● joint programs; ● public reporting; ● implementation/association programs.	RusHydro Group participates in committees and working groups of a number of non-profit partnerships and international organizations, including: ● Russian Union of Industrialists and Entrepreneurs (RSPP), where Nikolay Shulginov, Chairman of the Management Board – General Director of RusHydro, holds a Board member position; ● Hydropower of Russia Association; ● Council of Energy Industry Veterans Non-Profit Partnership; ● Market Council Non-Profit Partnership; ● International Hydropower Association; ● Global Sustainable Energy Partnership (GSEP). For more information on forms of participation in non-profit organizations, see Appendix No. 3
7. Federal and local executive authorities	
Key interests: ensuring reliable and uninterrupted power supply and heat supply, tax revenues, development of regions of operation, improvement of the regulatory framework for energy, control over investment program implementation and financial and business operations	
● agreements on social and economic cooperation with government authorities; ● involvement in developing investment programs; ● arranging and holding public hearings on facilities construction projects; ● engagement in joint committees, commissions, and expert groups on energy sector development; ● development of proposals on improvement of laws and regulations that cover activities of RusHydro Group's companies; ● interaction with external regulators during their audits of RusHydro Group.	In 2019, the Company had effective agreements with the Russia's Ministry of Civil Defence, Emergencies and Disaster Relief, and the Federal Fishery Agency. RusHydro worked with committees of the Federal Assembly of the Russian Federation on matters related to the Company's interests. Representatives of the Company participated in all significant events (parliamentary hearings, roundtables, emergency response sessions, meetings) organized by the executive and legislative authorities. In 2019, RusHydro had effective agreements and memoranda signed with the authorities of the following regions and municipal entities: Republic of Dagestan, Karachay-Cherkess Republic, Republic of Sakha (Yakutia), Republic of Tatarstan, Republic of Khakassia, Kamchatka Territory, Primorsky Krai, Amur Region, Volgograd Region, Magadan Region, Moscow Region, Chukotka Autonomous Area, Artem Urban District, Vladivostok Urban District, and Yakutsk Urban District. RusHydro developed the program to develop the energy system in the Far Eastern Federal District with a view to accelerating local economic growth. For more information, see the Program to develop the energy system in the Far Eastern Federal District with a view to accelerating local economic growth Together with the Government of the Sakhalin Region, the Company established the Program of Stable Power Grid Operation in the Sakhalin Region, approved by the Ministry of Energy. For more information, see the Accident rate at RusHydro Group's facilities Also in 2019, the management of RusHydro participated in commissions and working groups under the Government of the Russian Federation established for the development of the energy sector and social and economic development of Russian regions. Upon review by the Government Commission on the Development of the Electric Power Industry on May 29, 2019, the list of thermal power plants to be modernized (rehabilitated) or constructed in the WECM non-price zones was approved by Order of the Russian Government No. 1544-r dated July 15, 2019. A number of key issues related to the development of the energy sector in the Republic of Dagestan were discussed by the working group on the development of hydropower generating facilities, ensuring safety and effective operation of hydraulic facilities, which includes representatives of the Government of the Republic of Dagestan and RusHydro. *[OS]*

Key mechanisms	Responses to requests and results of stakeholder relations in 2019
8. Regulators and infrastructure organizations	
Key interests: compliance with Russian and international laws	
– reporting; – development of proposals to improve legislation.	The Company regularly discloses information in accordance with the requirements of the Bank of Russia and other regulators. RusHydro Group is actively involved in policy-making in the industry. The main achievement of RusHydro Group's engagement in legislative improvement efforts in 2019 was the adoption of several regulations which set forth: – legal grounds for introducing long-term tariff regulation in the Far Eastern Federal District[1]; – possibility of implementing a mechanism for upgrading thermal power plants[2]; – size of fees charged for the use of water bodies[3]; – requirements to reliability and safety in the electric power industry (orders of the Ministry of Energy of Russia). *[OS]* In 2019, PJSC RusHydro continued developing the national standardization system by ensuring operation of the specialized subcommittee – Hydropower Plants (hereinafter, SC-4) of the Technical Committee 016 "Power Sector". The National Standardization Program, approved by Rosstandart based on the propositions of SC-4 (NSP 2015–2019), includes nine national standards initiated by SC-4. In late 2019, by Order of Rosstandart No. 1339-st dated December 4, 2019, the national standard (GOST R) "Instrumentation systems and equipment. Manufacturing conditions. Norms and requirements" (executed by the Branch JSC Institute Hydroproject – NIIES). In 2016–2019, the total number of GOST R national standards initiated by SC-4 and approved by Rosstandart amounted to 4. *[OS]*
9. Educational institutions	
Key interests: targeted training programs, energy science development, development of innovative technologies, including those which reduce the environmental impact	
– cooperation in R&D; – training, retraining, and skills improvement for employees; – orders for R&D projects.	Implementation of From School to Workplace, a program of advanced human resource development: – launch of the tenth energy class in total and the first energy class in the North Caucasus in 2019 with the support of RusHydro and the Ministry of Education of the Karachay-Cherkess Republic; – participation in the organization of various events, including Energy for Education Industry contest, ProeKTOriYa, a national career guidance forum, and project sessions in the Russian Children's Education Centers (Sirius, Ocean, Smena, Orlyonok); – Energy for Development contest for university undergraduates; – spring energy school for students; – cooperation with partner universities in organizing internships at RusHydro Group enterprises; – providing charitable assistance to partner universities. Two engineering centers dedicated to thermal power generation and wind power competencies have been established at the Far Eastern Federal University. For more information, see the Ensuring good working conditions

[1] The Russian Government's Resolution No. 64 dated January 30, 201 On Amendments to Certain Acts of the Government of the Russian Federation Concerning Regulation of Prices (Tariffs) for Electricity (Capacity) Supplied to Technologically Isolated Local Electric Power Systems and in Areas not Technologically Linked with the Unified Energy System of Russia and Technologically Isolated Local Electric Power Systems, and Declaration of Some Acts of the Government of the Russian Federation as Invalid, as well as the Russian Government's Resolution No. 837 dated June 29, 2019 On Amendments to Pricing Basis in the Field of Regulated Prices (Tariffs) for Electric Power.

[2] The Russian Government's Resolution No. 43 On Selecting Projects to Upgrade Generating Facilities of Thermal Power Plants dated January 25, 2019.

[3] The Russian Government's Resolution No. 1211 dated September 18, 2019 On Amending Clause 1 of Russian Government's Resolution No. 1509 dated December 26, 2014.

Key mechanisms	Responses to requests and results of stakeholder relations in 2019
10. Local communities and regions of presence	
Key interests: local development	
– job creation; – conducting public hearings on energy construction projects; – implementation of charity projects aimed at social and economic development of the regions where RusHydro Group operates; – participation in educational and environmental projects of high social importance.	RusHydro Group builds and commissions energy facilities that help create new jobs. In 2019, 1,569 new jobs were provided, mainly in the Far Eastern Federal District. In 2019, under the Charity and Sponsorship Program more than 300 charitable projects were implemented in the regions of RusHydro Group operation, providing support in the following key areas: education, environment, health care, sports, culture, support of social institutions, charitable foundations, non-profit organizations, low-income and vulnerable citizens. The Company also supported a number of state-run projects of public importance. In addition, RusHydro subsidiaries implemented more than 320 charity projects in 2019. For more information, see the Social initiatives and contribution to the growth of local communities
11. Media	
Key interests: receiving full reliable information on the Company's operations, quick informed responses to media inquiries	
– preparing and providing the media with press releases, statements, and comments of the Company; – publishing information on the corporate website and social media; – preparing and providing background, analytical information and presentations to the media; – organizing and holding briefings, press conferences, interviews, media scrums, press tours and other media events; – providing information in a timely manner in response to media inquiries	As a result of interaction with the mass media, publications mentioning RusHydro Group totaled over 76,000 in 2019, with PJSC RusHydro mentioned 36,600 times. More than 15,000 items were published in federal outlets, while 258 pieces were broadcast on TV and radio. RusHydro has official accounts in three social networks: VKontakte, Facebook and Instagram with over 26,000 followers in total. The Company's corporate website (www.rushydro.ru), which is open to all Internet users and contains information on all lines of business of RusHydro Group, attracted 533,000 unique visitors in 2019.
12. Public social and charitable organizations	
Key interests: support for social activities and securing financial assistance, volunteers' assistance	
– social and charitable programs; – corporate volunteering; – public reporting on corporate social responsibility; – systematic communication with charitable foundations and non-governmental organizations.	Regular meetings were held with charitable foundations and non-governmental organizations. At the request of charitable foundations and organizations, the Company conducted a screening, upon which it decided on feasibility of the charitable assistance to be provided within the budget of the RusHydro's Charity and Sponsorship Program and in accordance with the Regulations on the Organization of Management of Charitable and Sponsorship Activities of RusHydro Group and the Charity and Sponsorship Policy. The Company rendered targeted aid to those in need through charitable organizations upon receiving formal requests and supporting documents. For more information, see the Charity and social projects In cooperation with charitable foundations, volunteering campaigns were arranged to help the disadvantaged. For more information, see the Corporate culture and volunteering