

ENVIRONMENTAL PROTECTION

Zarubezhneft's policy in health, labor, environment, safety, and social responsibility defines ecological well-being as the basis for a production facility's economic stability, which contributes to achieving of the UN SDGs.



In 2020, the Company successfully underwent a **recertification audit** to confirm the its certification for compliance with the international standard **ISO 14001:2015**.

- ▶ Zarubezhneft
- ▶ JC RUSVIETPETRO
- ▶ ZARUBEZHNEFT-Dobycha Kharyaga
- ▶ RMNTK Nefteotdacha
- ▶ Modriča Motor Oil Plant
- ▶ Zarubezhneftstroyontazh
- ▶ ZARUBEZHNEFT-Dobycha Samara
- ▶ Ulyanovskneftegaz
- ▶ Orenburgnefteotdacha
- ▶ Giprovostokneft

included in 2020

- ▶ VNIIneft

1st among 20
companies
in the environmental
openness ranking

Biodiversity conservation programs

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In 2020, ZARUBEZHNEFT GROUP's subsidiaries operating in Russia's Arctic zone (ZARUBEZHNEFT-Dobycha Kharyaga and JC RUSVIETPETRO) continued working on biodiversity conservation in accordance with the approved programs. ZARUBEZHNEFT-Dobycha Kharyaga completed work on adjusting the Biodiversity Conservation Program (BCP) of the Kharyaga license area based on a biota inventory and the identification of species that are indicators of the sustainable state of the Kharyaga field's ecosystems. The implementation of the BCP of ZARUBEZHNEFT-Dobycha Kharyaga was

postponed until 2021 due to the spread of COVID-19 and the ban on travel across Russia. Since 2019, the Company's employees have been taking part in the Clean Shores movement in the Nenets Autonomous Area. Its main task is to jointly improve and clear the banks of local reservoirs from garbage.

BCPs have been developed by ZARUBEZHNEFT-Dobycha Samara (Ulyanovskneftegaz and Orenburgnefteotdacha).

Biodiversity conservation issues have come to the forefront in political and environmental programs and currently represent one of the most pressing problems of the 21st century. Numerous international agreements on biodiversity conservation are being concluded, and government bodies around the world are developing and adopting national legislation to address biodiversity loss and the degradation of ecosystems.

As part of the federal project 'Conservation of Biological Diversity and Development of Eco-Tourism', as regards the implementation of measures for the conservation and reintroduction of the Siberian Crane (white crane), Zarubezhneft and the Russian Ministry of Natural Resources and the Environment concluded an agreement on cooperation on December 30, 2019 with total funding of RUB 42.785 million. The agreement envisages the Priority Action Plan for the Conservation and Restoration of the Siberian Crane on the Territory of the Russian Federation in 2020–2024. The following federal state budget-funded institutions have been appointed as the entities responsible for the work of the Ministry of Natural Resources: Oka State Reserve and OSRI Ecology.

3.8 RUB mln

*spent on the conservation
and reintroduction of
the Siberian crane*

In 2020, despite the restrictions caused by the spread of COVID-19, Oka State Reserve began implementing the action plan, for which Zarubezhneft donated RUB 3.829 million. The allocated funds created conditions for the breeding of Siberian Cranes with the purchase of the necessary drugs, feed, and vitamins. This work will continue in 2021 to fund activities to breed Siberian Cranes for release into the wild. The Company plans to allocate RUB 17.625 million.

Independent assessment

The Company pays great attention to an independent assessment of stakeholders. Since 2014, Zarubezhneft has been participating in the Environmental Openness rating based on the methodology of the World Wildlife Fund

(WWF). Zarubezhneft finished first among the 20 largest oil and gas companies in Russia in 2020, improving its position from the previous year.

Environmental policy

In accordance with its 'Search for and Assessment of New Projects' standard, the Company pays special attention to environmental issues and the assessment of green risks. All projects undergo an environmental audit in which the main criterion is the absence of specially protected natural areas within the contract area. During the implementation of a project, an environmental impact assessment is conducted, and measures are developed to reduce the fragmentation of landscapes and the area of disturbed territories.

Zarubezhneft has uniform HSE requirements for contractors. The regulations for interaction with the Company's contractors have the same requirements for compliance with the environmental standards as for Zarubezhneft's subsidiaries. There is a ban on picking mushrooms and berries as well as hunting and fishing in the area of the Company's projects.

ZARUBEZHNEFT GROUP's subsidiaries monitor the integrity of inter-field oil pipelines on a monthly basis, which is one of the priorities of the Company's Environmental Policy.

All pipelines function without exceeding the standard operating period established by a project or expert organizations. In order to determine the technical condition of infield pipelines and confirm the standard operating period of the pipeline system, the Company annually conducts a technical examination and an industrial safety examination in accordance with the schedules.

Environmental measures

In 2020, ongoing funding for environmental activities at subsidiaries in the Russian Federation amounted to approximately RUB 266.576 million, which is significantly higher than the level of 2019 (+22%).

One of the Company's priority environmental tasks is to minimize the impact of drilling waste through its neutralization and use, followed by the elimination of sludge pits. There are no oil-contaminated lands on ZARUBEZHNEFT GROUP's balance sheet.

Regular measurements of the air, soil, snow, surface water, and bottom sediments were carried out on the territory of all licensed areas of the Group's enterprises as part of local environmental monitoring and industrial environmental control.

Observational data is compared with the background values of natural indicators. During the reporting period, the maximum permissible concentration (MPC) standards on the territory of the Russian Federation were not exceeded.

GROSS AIR EMISSIONS BY ZARUBEZHNEFT GROUP, *thousand tons*

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Air emissions	2018	2019	2020
Solids	0.437	0.280	0.215
Sulfur dioxide	6.909	6.841	4.928
Carbon monoxide	7.914	6.375	4.204
Nitrogen oxide	1.213	1.225	0.888
Hydrocarbons (no volatile organic compounds)	8.804	7.015	6.199
Volatile organic compounds	3.900	3.251	0.958
Other gaseous and liquid substances	–	–	–
GROSS AIR EMISSION OF HAZARDOUS SUBSTANCES	29.18	24.99	17.39

Reducing greenhouse gas emissions

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In order to confirm its commitment to the overall low-carbon trend and climate agenda, the Company has continued implementing measures to reduce greenhouse gas emissions at existing operations in pursuit of carbon neutrality as an inescapable reality and right to further operate. Zarubezhneft is aware of the need to make radical changes in business models, asset portfolios, and accepted practices in order to deeply transform structurally. In this regard, 2021 should be a turning point.

In 2020, in an effort to reduce its own emissions, the Company carried out operational improvements, increased staff awareness, and continued the implementation of low-carbon technologies (energy efficient equipment, timely equipment maintenance, and the implementation of the gas program). The Company also invests in innovative green technologies and renewable energy sources.

In early November 2020, Russian President Vladimir Putin signed a decree to reduce greenhouse gas emissions in order for the Russian Federation to fulfill its obligations under the Paris Agreement. In this regard, ZARUBEZHNEFT GROUP pays close attention to the implementation of the Gas Program for the Sustainable Use of Associated Petroleum Gas in 2020–2024.

The use of APG for internal heat generation and electricity needs has increased thanks to the measures taken in the Gas Program of 2020. The volume of APG production and use is based on the readings of gas metering units. The APG beneficial utilization rate for 2020 in the Group's Russian segment (JC RUSVIETPETRO and ZARUBEZHNEFT-Dobycha Samara as part of UNG and ONO) amounted to 95.2%, which is in line with the targets set in the Gas Program for 2020 (actual 2019 — 92.5%, plan for 2020 — 95.2%).

PRODUCTION AND USE OF ASSOCIATED PETROLEUM GAS BY ZARUBEZHNEFT GROUP IN 2020 (RUSSIAN SEGMENT), million m³

Enterprise	APG production	APG usage for internal needs	% APG usage
JC RUSVIETPETRO	110.25	104.90	95.1
Orenburgnefteotdacha	2.24	2.24	99.8
Ulyanovskneftegaz	0.52	0.48	92.9
TOTAL	113.01	107.62	95.2

The associated petroleum gas produced at the Kharyaga field is high-sulfur, which complicates its beneficial use. According to the Kharyaga field development project, ZARUBEZHNEFT-Dobycha Kharyaga plans to continue working on the launch of equipment for gas purification from hydrogen sulfide, a gas turbine unit and the necessary infrastructure for compressing purified gas. At the end of 2020, the level of APG utilization at ZARUBEZHNEFT-Dobycha Kharyaga amounted to 61.8%, while the target was 47.8%. The utilization level increased due to the supply of APG to the gas transmission network of LUKOIL-Komi. By 2027, the Company plans to achieve an APG useful utilization level of 95%.

In order to meet its commitment to the overall low-carbon trend and climate agenda, the Company continued to implement measures to reduce greenhouse gas emissions

from existing processes, while striving for carbon neutrality as an inevitable reality and the right to continue operating. Zarubezhneft is aware of the need to make radical changes to its business models, asset portfolios, and accepted practices in order to achieve a deep transformation structure, and in this regard, 2021 should be a turning point.

In 2020, in order to reduce its own emissions, the Company made improvements to production, increased staff awareness, and continued the introduction of low-carbon technologies and energy-efficient equipment, timely equipment maintenance, and the implementation of the Gas Program. The Company also invests in innovative green technologies and renewable energy sources.

Integrated environmental permits

In 2020, Zarubezhneft continued its involvement in the initiative of the Russian Federal Service for Supervision of Natural Resources is the Federal Environmental, Industrial, and Nuclear Supervision Service (Rosprirodnadzor) to issue integrated environmental permits as part of the implementation of the federal project 'Introduction of the Best Available Technologies' of the national Ecology project. As a result of participating in this project, Zarubezhneft subsidiary ZARUBEZHNEFT-Dobycha

Kharyaga, which became the first company in Russia to receive an integrated environmental permit (IEP), was granted a positive conclusion from the environmental impact assessment in 2019. In 2020, ZARUBEZHNEFT-Dobycha Samara sent an application for an IEP to the territorial bodies of Rosprirodnadzor, and JC RUSVIETPETRO signed an agreement to support the receipt of an IEP in the territorial body of Rosprirodnadzor in 2021.

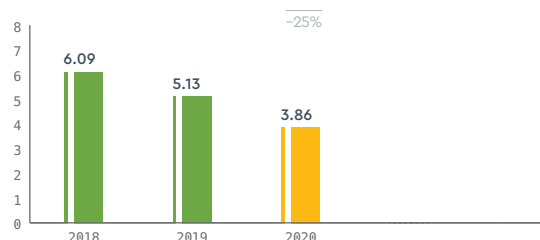
Environmental indicators in Russia

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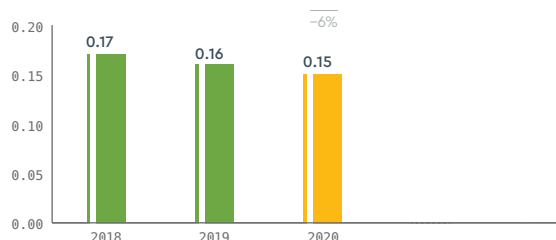
The implementation of the Gas Program in 2020 reduced specific pollutant emissions, which decreased from 5.13 to 3.86 tons per thousand tons of oil produced, as well as specific greenhouse gas emissions — from 160 tons of

CO₂ equivalent per thousand tons of oil produced to 150 tons of CO₂ equivalent per ton of oil produced compared with 2019.

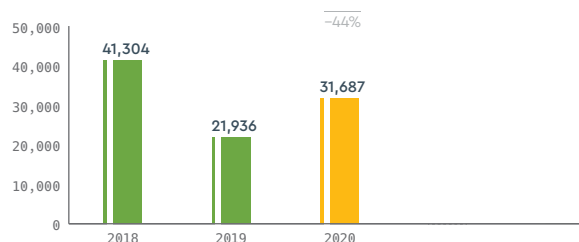
AIR EMISSIONS, tons/thousand tons of oil



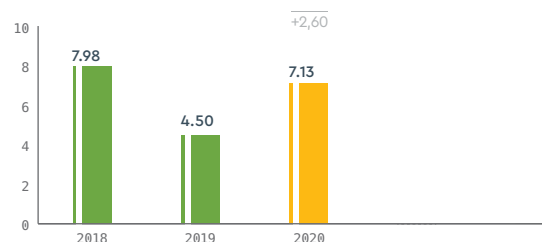
GREENHOUSE GAS EMISSIONS IN RUSSIA, thousand tons/thousand tons of oil



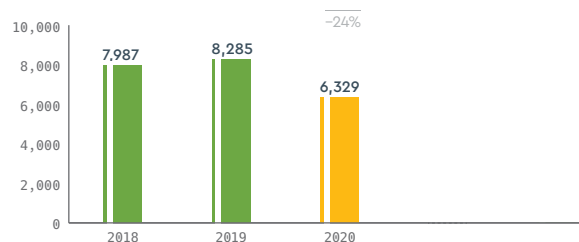
WASTE GENERATION PER YEAR, tons



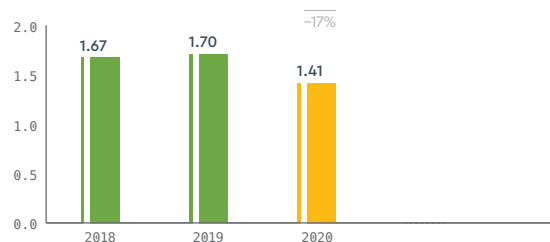
WASTE GENERATION, tons/thousand tons



WATER INTAKE, thousand m³



WATER INTAKE, thousand tons/thousand tons of oil



In 2020, the amount of mandatory payments for negative environmental impacts amounted to RUB 40,399,165 and as well as RUB 800,000 in of fines for violations of environmental legislation.

In August 2020, the Rosprirodnadzor regional offices issued a compliance notice for the lack of a geo-monitoring program for three fields of ZARUBEZHNEFT-Dobycha Samara.

The Company strictly follows the legislative requirements of the Russian Federation and the countries where it operates. Zarubezhneft did not discharge water or wastewater, including oil, or contaminate land in 2020.

There were no accidents involving environmental damage during the reporting year.

In 2020, drilling rates did not decrease. Specific waste generation indicators increased from 4.53 tons per 1,000 tons of oil produced in 2019 to 7.13 tons in 2020. Most of the waste generated is 4th hazard class waste, or construction waste.

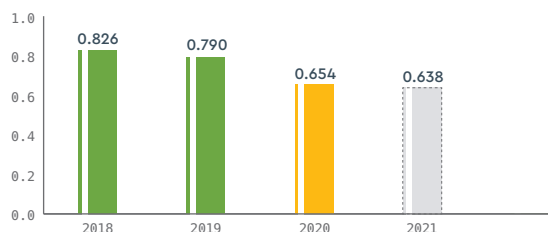
Reducing greenhouse gas emissions

Zarubezhneft believes the Russian Federation's accession to the Paris Climate Agreement is an important step towards expanding the effective use of associated gas. We have also worked on solutions to leverage the benefits of natural gas to meet the goals of the Paris Climate Agreement, which the Russian Federation adopted in September 2019.

In accordance with the 'Methodological Indicators and Guidelines for Quantifying the Volume of Greenhouse Gas Emissions by Organizations Engaged in Economic and Other Activities in the Russian Federation' (approved by Order No. 300 of the Russian Ministry of Natural Resources and the Environment dated June 30, 2015 and registered with the Russian Ministry of Justice on December 15, 2015, as Registration No. 40098), Zarubezhneft calculated the volume of greenhouse gas emissions into the atmosphere for 2020 as a result of the activities of production enterprises.

Fixed investment in environmental protection in 2020 is associated with the planned measures for the construction and equipment of a waste disposal site at JC RUSVIETPETRO. Pursuant to design solutions for the site 'Landfill for the Neutralization and Disposal of

CHANGES IN GREENHOUSE GAS EMISSIONS, MLN TONS CO₂ EQUIVALENT



Due to the implementation of the gas program, emissions in 2020 amounted to around 654,000 tons of CO₂ equivalent, which is 17.2% less than the previous year.

Waste from the Slivka Severo-Khosedayuskoye Field', the Company purchased a second UPNSH-05 unit for the disposal of oily waste. The costs of other environmental protection measures (required scheduled maintenance of water treatment systems and expenses on environmental monitoring in terms of implementing biodiversity conservation programs) are given in the table:

EXPENSES FOR ENVIRONMENTAL PROTECTION, RUB mln

Investments	2018	2019	2020	2021	+/-
Fixed investments for environmental protection	228.21	60.30	15.91	23.53	-44.39
Fee for negative environmental impact	20.38	17.30	40.40	37.53	23.10
Fines for environmental pollution	0.51	0.94	0.80	0.00	-0.14
Operating costs for environmental protection, including:	163.80	218.04	176.39	238.46	-41.65
• For the protection of water bodies	23.89	10.31	5.05	13.15	-5.26
• For the protection of atmospheric air	3.70	7.72	5.55		11.33
• For the protection of land resources from production and consumption waste	119.00	181.69	145.27	183.60	-36.42
• For land reclamation	17.37	18.31	9.02	11.35	
• Other areas in nature protection	0.00	0.00	11.50	19.03	11.50
TOTAL	412.90	296.58	233.50	299.51	-63.08

Interaction with stakeholders

102-40 102-42 102-43

Zarubezhneft is committed to interacting with all stakeholders in order to maintain and establish constructive relations when implementing projects. Corporate requirements for staff and contractors include rules for the respectful and considerate treatment of minority interests.

Since 2009, JC RUSVIETPETRO and the Administration of the Nenets Autonomous Area have been observing a cooperation agreement on engagement with the indigenous peoples of the North. Since 2017, ZARUBEZHNEFT-Dobycha Kharyaga has been implementing Methodological Recommendations for Conduct in Territories Where Indigenous Minorities of the North Traditionally Use Natural Resources.

In 2020, the Company held 17 tabletop exercises to respond to emergencies at fields with monitoring conducted via video conferencing by the Emergency Situations Commission. The increase in tabletop exercises was due to the high-profile environmental disasters that attracted close public attention in 2020 and the novel coronavirus infection. The Company assessed the risks in a timely manner and took a proactive approach. In addition, the Company's subsidiaries conducted their own training sessions together with contractors to work out training tasks for the most important work processes.

In an effort to ensure the Company's readiness to respond to emergency oil and petroleum product spills as well as other possible accidents, subsidiaries have concluded the following agreements:

- ▶ To clean up accidental oil and petroleum product spills at production facilities with specialized organizations. The agreement provides for constant (round-the-clock) readiness of skilled personnel and equipment for mobilization to clean up accidental spills.
- ▶ To prevent and eliminate oil, gas, and water inflows and open fountains (OGWI and OF). This Agreement provides for the constant operational readiness of forces and equipment to respond to emergencies caused by OGWI and OF at the Company's facilities. Preventive work is carried out on a quarterly basis together with the Company's employees to prevent OGWI and OF from occurring at the facilities.
- ▶ To provide fire safety (fire extinguishing) services.

Since the start of the year, ZARUBEZHNEFT GROUP has conducted 12 tabletop exercises associated with the following risks:

- ▶ Ingress of oil products into water bodies
- ▶ The spread of COVID-19
- ▶ Industrial incidents with subsequent fire

The tabletop exercises took place in real time, with the maximum number of staff involved, and practiced various scenarios, using video materials. Some of the videos filmed during the exercise in 2019-2020 were taken into account by the WWF when recapping the results of the Environmental Responsibility Rating of Russian oil and gas companies in 2019.

In 2020, changes were made to the corporate concept of tabletop exercises to involve internal contractors and public fire departments in joint training as external stakeholders to cope with real risks in a training environment.

Taking into account the lessons learned from environmental disasters in 2020, the Company conducted an audit to assess the adequacy of equipment and the volume of reserves of material resources and personal protective equipment for the elimination and localization of incidents, accidents, and emergencies.

Development plans

In 2021, the Company embarked on a course to expand the scope of work to improve indicators on ESG principles and the UN Sustainable Development Goals. Much of the efforts will be tied to the creation of a corporate program to minimize the Company's carbon footprint. Zarubezhneft will also continue biodiversity conservation work.

RES – the path to a low-carbon life support model