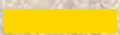




**ROSNEFT**



Sustainability  
Report



**2018**

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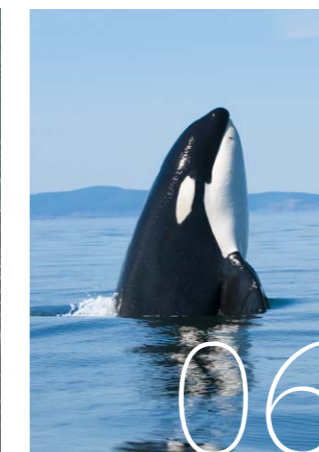
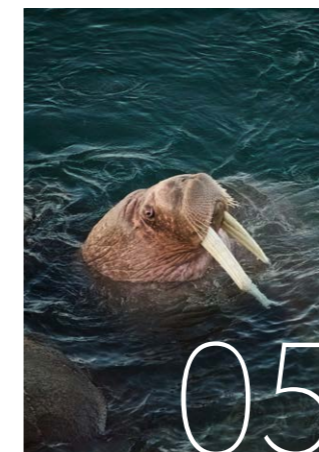
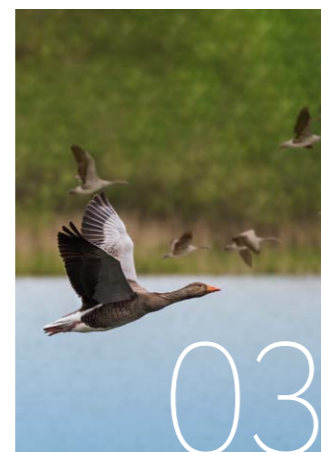
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## Message from the Chairman of Rosneft's Board of Directors



**Gerhard Schroeder**

Chairman of Rosneft's Board of Directors

Rosneft's shareholder structure changed in 2018, with the ownership now being divided between three major shareholders: the state holding a stake slightly over 50%, British company BP (19.75%), and the Qatar Investment Authority (QIA), which increased its direct shareholding to 18.93%. The switch to the direct holding system is a sign that **investors have confidence in the growth path chosen by the Company and consider it an attractive investment.**

In 2018, not only did Rosneft confirm its status as the world's leading producer of oil and liquid hydrocarbons among publicly owned oil companies, but it also set new benchmarks for the industry. The Company posted record hydrocarbon production – 28.5 mmtoe, up 1.3% year-on-year.

Rosneft tops the list of major public international oil and gas companies in terms of proved hydrocarbon reserves under SEC standards. Their volume in 2018 grew by 4% to total 41.4 bboe and the proven reserves replacement ratio reached 173%.

At the year-end, the Company's refining throughput reached 115 mmt. Rosneft continued to invest heavily in the modernization of its own refineries – investments were around RUB 1.4 trln, over 60% of which has already been financed.

The Company operates in 25 countries across four continents. **Rosneft is fully aware of the role it plays in advancing**

**the sustainability agenda and is involved in efforts to address global issues.** In a public statement released last year regarding its contribution to the 17 UN Sustainable Development Goals, the Company highlighted five priority goals on its agenda: Good Health and Well-Being, Affordable and Clean Energy, Decent Work and Economic Growth, Climate Action, and Partnerships for the Goals.

To reach the Affordable and clean energy goal, **the Company continues to improve energy efficiency in all its activities, ensures accessibility of high-quality and inexpensive energy,** in particular, in remote districts, and takes measures to increase Associated petroleum gas utilization rates. In the last five years, Rosneft has invested over RUB 125 bln in APG utilization technologies, which is comparable to the efforts of the world's top companies in respect of green energy.

Turning to combating climate change, **the Company is also augmenting its natural gas production, aiming to reduce greenhouse gas emissions significantly** and to implement its Gas Investment Program and Energy Saving Program to improve the ecology in its regions of operation. Rosneft cares about the environment, as demonstrated by the launch of its program for the conservation of marine ecosystems' biological diversity in one of the most valuable natural areas of Russia – the Arctic region. In 2018, the Group Subsidiaries planted about a million young trees as part of

forest conservation activities. Total green investments by the Company over the last five years have exceeded RUB 240 bln.

**Rosneft is focused on the development of ecologically pure technologies along the entire production chain. With that in mind, the establishment of natural gas fueling infrastructure is among key priorities for its retail business.** Using natural gas as engine fuel makes vehicles far more energy efficient and helps to reduce the negative environmental impact. 10 stations were built in 2018 under this initiative, with up to 170 more to be constructed in Russia in collaboration with China's Beijing Gas.

With its systemically important position in the energy sector and the scale of its operations, Rosneft plays an essential part in improving public well-being and makes investments in healthcare, education, social and economic development and environmental protection.

## Message from Rosneft's Chief Executive Officer



### Igor Sechin

Chairman of the Management Board,  
Chief Executive Officer of Rosneft

The past year was one of the Company's most successful financial years. Rosneft's revenues rose by 37% to a record RUB 8.2 trln and EBITDA increased by 49% to RUB 2.1 trln. Net profit attributable to the Company's shareholders reached almost RUB 550 bln, up 2.5 times year-on-year.

**In 2018, Rosneft retained its status as Russia's largest taxpayer and as a core contributor to the Russian Federation's state budget.** Tax payments hit a record for the Company and amounted to RUB 4 trln – up 1.5 times year-on-year. At the end of the year, **shareholders were also paid record dividends, RUB 225 bln**, with over RUB 112 bln paid to the government.

Rosneft's successful results in 2018 supported growth of the Company's market capitalization, which rose by more than 40%. As of the end of the reporting year, **Rosneft had the highest market capitalization of all Russian companies among the world's top oil and gas companies.**

Despite external pressures, Rosneft remains an effective channel for integrating Russia into the global economy through energetic efforts in foreign markets and cooperation with the world's largest oil companies. Rosneft operates in 25 countries and has partnerships with seven of the ten global majors.

Consistent implementation of the Rosneft-2022 Strategy, focused on improving the business's performance

and maximizing returns on existing assets, contributed to the successful outcomes throughout the year.

The Strategy helps to respond to the challenges the Russian Federation is facing today – tasks specified in state projects and in the Presidential Decree on the National Goals and Strategic Objectives of the Development of the Russian Federation till 2024.

**In the next four years, the Company plans to join the first quartile of world oil and gas companies in terms of HSE.** In its operations, Rosneft prioritizes public health, recognizing its responsibility to ensure accident-free operations and safe working conditions for both employees and contractors. The HSE funding has reached RUB 56.3 bln.

Rosneft is one of the largest employers in Russia. Over 325 thousand employees work for the Company, and each of them is provided with a favorable working environment and social guarantees. **Rosneft contributes to the sustainable development of the country's economy, technology development, creates new production sites and jobs.**

In 2018, in accordance with the additional initiatives included in the Rosneft-2022 Strategy, efforts to provide additional motivation and social security to Company's employees were significantly enhanced. Investments in the key areas of Rosneft's social policy were raised by 17%.

The Company is an important driver behind the development of the regions of Rosneft's operation. Rosneft traditionally donates considerable sums to develop social infrastructure and create comfortable environment in dozens of local communities.

The Company's focus is increasingly turning to sustainable use of natural resources. It is implementing large-scale oil and gas production projects and upgrading production and refining capacity in order to reduce environmental impact and produce modern, environmentally friendly fuels.

**To strengthen the Company's position in the areas of environmental and social responsibility, Rosneft's public position on its commitment to the 17 UN Sustainable Development Goals was approved in 2018.**

Rosneft remains committed to the UN Global Compact and its core principles. It takes into account the sustainable development challenges that the global community is facing, including human rights, climate change, prevention of corruption, environmental impact mitigation, etc. These priorities will enhance the Company's investment potential.

## Key Sustainability Performance Indicators

Period	2016	2017	2018
<b>KEY SUSTAINABILITY PERFORMANCE INDICATORS</b>			
SEC proven reserves of oil, condensate and liquefied petroleum gas, mmt	3,701	3,792	3,899
SEC proven marketable gas reserves, bcm	1,714	1,949	2,065
Hydrocarbon liquids production, mmt	210.0	225.5	230.2
Gas production, bcm	671	684	673
Hydrocarbon production, mboe	1,965	2,087	2,115
Oil refining, mmt	100.3	112.8	115.0
Output of petroleum products and petrochemicals, mmt	98.2	109.1	111.7
Assets at the end of the year <sup>1</sup> , RUB billion	11,117	12,228	13,163
Total revenues and equity share in profits of joint ventures and associates <sup>1</sup> , RUB billion	4,988	6,011	8,238
Total equity, RUB billion	3,782	4,183	4,677
Dividends, RUB billion	125	104	225
<b>DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED, RUB BILLION</b>			
<b>Generated direct economic value</b>			
Revenues <sup>1</sup>	5,134	6,091	8,050
<b>Economic value distributed</b>			
Operating costs	1,743	1,967	2,270
Payments to providers of capital	177	199	235
Employee wages and benefits	228	269	296
Insurance contributions	49	61	67
Taxes and duties payable	2,021	2,614	3,879
Community investments	11	19	23
Economic value retained <sup>1</sup>	905	962	1,280
<b>HEALTH, SAFETY AND ENVIRONMENT PERFORMANCE INDICATORS<sup>2</sup></b>			
Incidence rate of non-fatal injuries among Company employees, per million hours worked (LTIF)	0.21	0.36	0.34 <sup>3</sup>
Incidence rate of fatal injuries among Company employees, per 100 hours worked (FAR)	2.28	1.87	2.47 <sup>3</sup>
Gross emissions of pollutants, thousand tonnes	1,627	1,846	1,835
Air pollutant emissions from extraction activities per thousand tce, tonnes	3.95	4.05	3.96
Air pollutant emissions from refining and petrochemical activities per thousand tce, tonnes	146	1.90	1.77

<sup>1</sup> Some indicators for the 12 months ending on 31 December 2017 have been updated.

<sup>2</sup> To ensure comparability, HSE indicators for 2016-2017, except LTIF and FAR, were adjusted in accordance with the IFRS perimeter.

<sup>3</sup> Injury rates were recalculated to align with the IFRS perimeter and the new calculation method, whereby those injured in sports activities, due to wrongdoing of other parties and in a road accident caused by another driver, are excluded from the calculation.

<sup>4</sup> Changes in the fatal accident rate (FAR) in 2018 were attributed to an aircraft accident at the Vankor field. The aviation services that involved the use of aircraft and flight staff were provided by a contractor.

Period	2016	2017	2018
Associated petroleum gas utilization rate, % <sup>5</sup>	90.0	89.2	84.4 <sup>6</sup>
Gross wastewater discharges to surface waters, million cubic meters	129.1	133.2	127.9
Wastewater discharges from extraction activities per tce, cubic meters	0.0004	0.0006	0.0005
Wastewater discharges from refining and petrochemical activities per tce, cubic meters	1.11	0.99	0.90
Polluted wastewater discharges from extraction activities per tce, cubic meters	0.0002	0.0004	0.0001
Polluted wastewater discharges from refining and petrochemical activities per tce, cubic meters	0.74	0.62	0.55
Water consumption (water intake from surface and underground sources) for extraction activities per tce, cubic meters	0.44	0.43	0.46
Water consumption (water intake from surface and underground sources) for refining and petrochemical activities per tce, cubic meters	148	147	143
Rate of pipeline failures per kilometer per year	0.127	0.101	0.095
Crude oil and petroleum product spills due to pipeline failures, tonnes	694.5	684.3	647.2
HSE training, thousand man-courses	306.1	413.0	414.3
Expenditures on personnel and process safety, including fire safety and blowout prevention, RUB mln	44,257	56,208	56,285
Environmental capital expenditures, RUB mln	46,615	67,240	45,605 <sup>7</sup>
Operating environmental expenditures, RUB mln <sup>8</sup>	26,242	28,642	31,697
Environmental fines payable, RUB mln	260	258	290
Payments to budgets at all levels for environmental protection and the sustainable use of natural resources, RUB mln	4,457	4,199	4,741
<b>EMERGENCY PREVENTION AND RESPONSE PERFORMANCE INDICATORS</b>			
Financial and non-financial reserves for emergency prevention and management, RUB mln	1,728.9	1,891.0	1,998.7
<b>INNOVATION PERFORMANCE INDICATORS</b>			
R&D expenditures, RUB billion	20.2	29.9	32.1

<sup>5</sup> The data on the sustainable use of associated petroleum gas, both current and future, is hereinafter provided for Russian assets only.

<sup>6</sup> Changes in the Associated petroleum gas utilization rate were driven by higher oil and APG production at new fields (greenfields) and lower production at current fields due to oil production cuts under the OPEC+ Agreement.

<sup>7</sup> In 2017, pursuant to the Cooperation Agreement signed with the Russian Ministry of Natural Resources and the Environment and the Federal Service for the Supervision of Natural Resources (Rosprirrodnadzor), Rosneft invested heavily in the implementation of two environmental projects - renovation of a unified complex of biological treatment plants at Bashneft-Ufaneftekhim and the construction of a comprehensive gas treatment unit at the East Urengoy sky license area. Consequently, the Company's contribution to environmental performance improvement remained high in 2018. See more in the Water Consumption and Wastewater Discharge section herein.

<sup>8</sup> Data for 2016-2017 was adjusted to reflect updated information, including that relating to Novokuybyshevsk Petrochemical Company.

Period	2016	2017	2018
<b>HR PERFORMANCE INDICATORS</b>			
Headcount at the year-end, thousand	287.7	318.0	325.6
Average headcount, thousand	253.2	302.1	308.0
Workforce by category at the year-end, %			
▪ Workers	57.7	57.8	56.2
▪ White-collar employees	29.8	30.0	31.5
▪ Managers	12.5	12.2	12.2
Workforce by gender at the year-end, %			
▪ Female	33.5	32.2	32.3
▪ Male	66.5	67.8	67.7
Employee turnover, %	10.9	10.3	10.8
Company average monthly salary per person, RUB	75,467	79,221	84,030
Gross payroll (incl. benefits, one-time bonuses, and annual compensation), RUB mln	229,318	287,159	310,605
Social payments to employees, RUB mln	6,524	7,735	8,560
<b>SOCIAL PERFORMANCE INDICATORS</b>			
Tax payments and customs duties <sup>9</sup> , RUB mln, including:	1,953,666	2,574,559	3,971,418
▪ tax payments to the federal budget and customs duties	1,615,429	2,179,751	3,502,757
▪ tax payments to regional budgets	281,793	325,205	393,139
▪ payments to extra-budgetary funds	56,444	69,603	75,522
Expenditures on social programs, social investments and charity in the regions, RUB mln, including:	28,961	37,435	45,749
▪ optimizing working conditions, RUB mln	8,197	8,510	8,179
▪ social investments under cooperation agreements with regional authorities, RUB mln	2,403	6,668	9,543
▪ charity, including support for educational institutions in line with the government's policy in education and science <sup>10</sup>	1,879	2,671	3,185
▪ other social expenditures	16,482	19,586	24,841

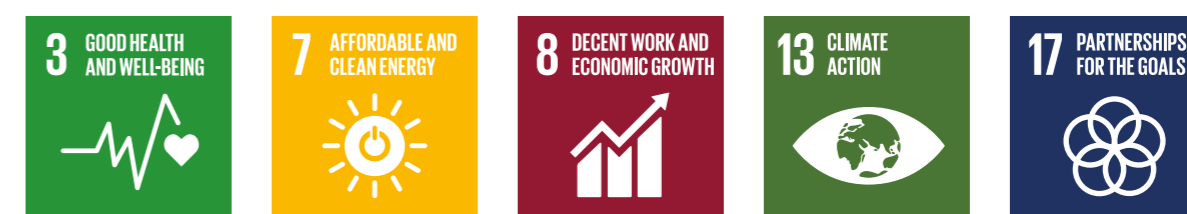
<sup>9</sup> Taxes, customs duties and insurance contributions transferred to the budget of the Russian Federation.

<sup>10</sup> Data on several charity projects taken from Company's annual reports for 2016-2018 do not include charitable support for educational institutions or the Veterans Council.

# Sustainable Development Priority

Rosneft has approved the strategic principles and public position related to a contribution to the implementation of 17 UN Sustainable Development Goals.

Among them, the Company has selected five strategic priorities for its own operations.



Preserving the environment for future generations is an integral part of Rosneft's corporate culture and business principles. The Company is aimed at the delivery of superior performance in minimizing the environmental impact and bolstering the eco-friendliness of production.

Applying advanced drilling waste disposal methods

Reducing gas dissipation during gas lift production

Creating a microbial compound for disposing of hydrocarbon pollution in the Arctic region seas

Having a special-purpose ecological institute in place

Implementing programs that facilitate:

- reduction of pollutant emissions
- biological diversity conservation
- energy saving
- increase of reclaimed and reusable water volume

## ACHIEVEMENTS

**>240**  
RUB bln

Green investments over 5 years

**~1 mln**  
young plants

were planted by Group Subsidiaries under the forest conservation activities

**10**  
filling stations

selling compressed natural gas were constructed in 2018

## GOALS

**4.4**  
mmtoe

energy consumption reduction by 2022

**8 mmt**  
of CO<sub>2</sub>-equivalent

prevention of greenhouse gas emissions until 2022

**170**  
filling stations

selling compressed natural gas will be constructed by the end of the project

## About this Report

This 2018 Rosneft Sustainability Report (the "Report") is the thirteenth in a series of nonfinancial corporate reports that are published annually by the Company.



All reports are available on the Company's website at [www.rosneft.com](http://www.rosneft.com).

**Non-financial reports have been traditionally targeted at a wide range of stakeholders, including Company employees, shareholders, investors, local communities, public organizations, clients, and partners.**

The Company uses various channels to collect feedback on its sustainability performance. Comments and suggestions are accepted by telephone or email, with relevant details provided in the Contacts section of each publication. All comments are carefully analyzed and may be incorporated in the next Report.

To ensure the relevance of disclosures made in the Report, the Company has performed a materiality assessment across individual sustainability performance indicators and topics provided in the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards), drawing on the analysis of its internal and external environments

that was conducted with the involvement of stakeholders. The findings of the materiality assessments performed in 2014-2017 were also taken into account. To identify material topics, the Company performed a benchmarking analysis on non-financial reports by leading industry players, both within and outside Russia, followed by an analysis of industry events and trends which are significant for sustainability reporting purposes. Consideration was also given to topics raised at stakeholder meetings, sustainability inputs received during 2017, and feedback on the previous year's Sustainability Report.

Based on the findings from the analysis and taking into account GRI's principles for defining sustainability context, materiality, completeness, and stakeholder inclusiveness, the Company compiled a list of material topics that are subject to mandatory disclosure.

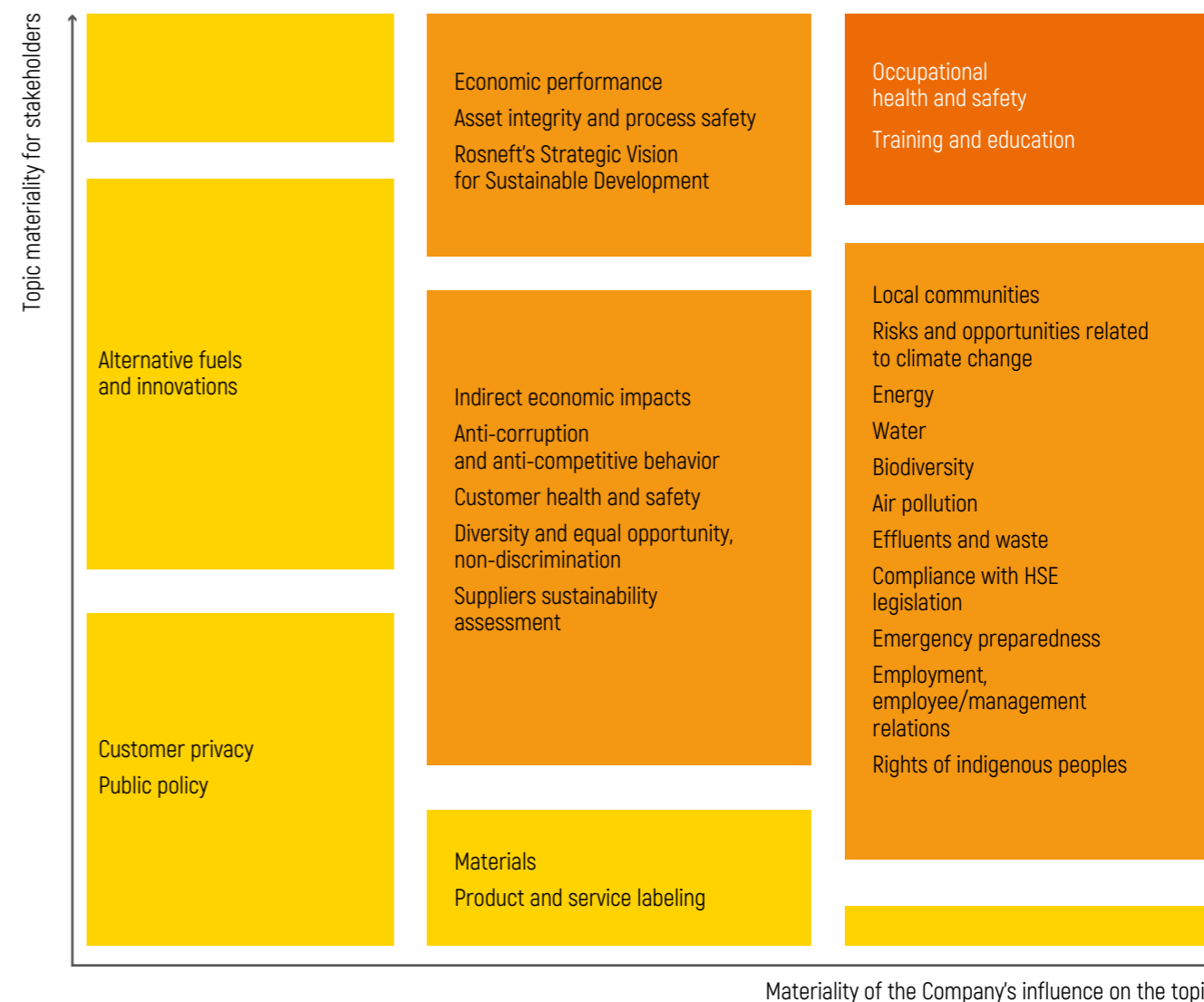
In 2018, for the third year in a row, Rosneft earned one of the top rankings in the "Responsibility and Openness" and "Course for Sustainability" indices compiled by the Russian Union of Industrialists and Entrepreneurs (RUIE) to assess the extent of sustainability disclosure and performance on

This Report provides detailed disclosures of certain matters pertaining to the priorities of the Company's 2018 sustainability agenda. In particular, **Rosneft focused on five UN sustainable development goals, the achievement of which will be aided by the Company in the course of its core activities**, including Good Health and Well-Being, Affordable and Clean Energy, Decent Work and Economic Growth, Climate Action, and Partnerships for the Goals. Information on the Company's contribution to the achievement of these goals is marked in this Report's text with the relevant icons.

In some cases, references to the 2018 Rosneft Annual Report or other publicly available documents are made to avoid duplication of the sustainable development information in this Report.

social, economic and environmental fronts. The assessment is based on the analysis of publicly available corporate disclosures, including annual and non-financial reports. RUIE indices promote a systemic perspective of corporate social responsibility as a core element of effective business strategies.

## Materiality Matrix



## Reporting Principles

This Report is prepared in accordance with the GRI Standards, including where relevant the oil and gas sector disclosures. In reporting its financial and operating performance, the Company is guided by International Financial Reporting Standards (IFRS).

This Report reflects the Company's contribution to achievement of the UN's sustainable development goals

and progress toward implementing the principles of the UN Global Compact. It also includes information on basic performance indicators for non-financial reporting developed by the RUIE. Further, this Report is compiled taking into account the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). The Company subscribes to and applies the principles

of Oil and Gas Industry Guidance on Voluntary Sustainability Reporting by IPIECA/API (2016).

**The 2018 Sustainability Report has been externally assured by EY and has been prepared in accordance with the Core option of the GRI Standards.** The Independent Assurance Report is included as a separate Annex to this Report (page 134-135).

## Reporting Perimeter

Rosneft prepares sustainability reports at the consolidated corporate level, covering all Group Subsidiaries. The Group's key sustainability performance indicators for 2016-2018 are given on pages 6-8 herein.

In 2018, the Company resolved to follow the IFRS consolidation rules more strictly during data preparation and presentation in the Sustainability Report, to improve the transparency and comparability of the disclosed

indicators related to Health, Safety and Environment (HSE), HR management and social performance. Starting in 2018, joint ventures that are consolidated under the equity method were therefore excluded from the reporting perimeter. To ensure comparability, information on HSE indicators for 2016-2017, except LTIF and FAR, was adjusted in accordance with the IFRS perimeter. For comparability purposes, LTIF and FAR data for 2018 is presented in accordance with the IFRS perimeter

and in line with the previously applied reporting perimeter and calculation methodology.

The adjusted consolidation portfolio includes the entities that are consolidated under IFRS standards fully or proportionally to the share owned. In this case, HSE and HR indicators of those Group Subsidiaries, which are consolidated proportionally to the share owned as per IFRS standards, are considered herein in full (100%).

# 01

## Rosneft's Sustainable Development Management



**Gerhard Schroeder**

Chairman of Rosneft's Board of Directors



During 2018, not only did the Company continue to enhance its position on the global market but it also identified sustainable development as one of its key strategic priorities. The commitment to UN goals and contribution to their implementation will significantly enhance the Company's advantage as a responsible world energy leader.



**Igor Sechin**

Rosneft's Chief Executive Officer, Chairman of the Management Board



The Company aims for sustainable use of natural resources, the production of up-to-date and eco-friendly fuels, and a reduction in the environmental impact. As part of the Rosneft-2022 Strategy, the Company implements initiatives that will help it to join the first quartile of international oil and gas companies in terms of health, safety and environment. Further, its projects are intended to develop human resources and contribute to integrated social and economic development of the regions, while respecting human rights in all regions of activity and fully meeting the UN's Sustainable Development Goals.

### Amur Tiger Studies and Conservation

Rosneft supports programs involving studies and the conservation of Amur tiger populations carried out by Autonomous Non-Profit Organization Amur Tiger Center to maintain specially protected areas in the Amur tiger's habitat.

See page 67

## Rosneft's Strategic Vision of Sustainable Development



### Rosneft-2022 Strategy

The Rosneft-2022 Strategy focuses on increasing profitability and return on existing assets. Currently, the Company's asset portfolio includes highly efficient projects aimed mainly at on time and on budget delivery, achieving synergy, as well as fast roll-out of state-of-the-art technologies. It will propel the Company to a whole new level of efficiency.

We believe that the Rosneft-2022 Strategy perfectly complies with the sustainable development objectives in the midst of the transformation of the energy resource markets, as well as with public interests both globally and regionally. Key

Strategy areas are in line with the tasks assigned by the President of the Russian Federation under the national projects, as well as with those established by Order of the President of the Russian Federation on National Goals and Strategic Objectives of Development of the Russian Federation through to 2024 No. 204 dated 7 May 2018.

Rosneft builds different predictive development scenarios for the global power industry. During strategic planning and the drafting of industry documents, we analyze the risks and opportunities for the Company and Russia's energy industry related to climate change and the transition to low-carbon energy.

Rosneft sees its own sustainable development as a contribution to social development, one that meets the present day requirements and which does not threaten future generations' ability to satisfy their needs.

Under the Rosneft-2022 Strategy, Rosneft strives to join the first HSE quartile among international oil and gas companies by 2022. In 2018, the Company launched additional strategic initiatives, which include new educational, HR and social projects, regional development programs, and Rosneft's accelerated technology breakthrough.

### ADDITIONAL FOCUS AREAS TAKING INTO ACCOUNT THE PRIORITIES OF THE RUSSIAN FEDERATION



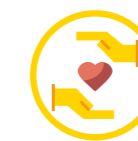
#### RN - CITY OF THE FUTURE

New services at filling stations (a significant increase in non-fuel goods and services offered; digital and "green" services)  
Wide use of energy efficient solutions and renewable power sources at the Company's facilities



#### HUMAN RESOURCES

Leader of the Future program for the development of the management talent pool  
Collaboration in education (from school to university) and development of a mentoring program  
Long-term incentive system aimed at increasing productivity



#### SOCIAL DEVELOPMENT

The Modern Medicine program comprising medical stations at the enterprises, telemedicine, and leading edge periodic health examinations  
The Active Longevity Program supporting the Company's retirees and providing them with medical care in addition to the standard services from compulsory health insurance



#### DIGITAL ROSNEFT

Increase in speed and transparency of interaction between the Company and external contractors  
Creation of the Company's digital cluster

As a responsible producer and a member of the global energy market, the Company's focus is turned towards the sustainable use of natural resources. The Company implements

large-scale oil and gas production projects, and upgrades its producing and refining capacity so as to reduce the environmental impact and produce modern, environmentally friendly fuels.

The Rosneft-2022 Strategy is uniform for all business units and based on stringent ecological performance requirements, social responsibility, and labor safety.



### Commitment to the UN Sustainable Development Goals<sup>1</sup>

The Company's Strategy includes a commitment to the 17 UN sustainable development goals. Following the business practice of global majors, Rosneft has identified five priority goals, the achievement of which is contributed by the Company in the course of its core activities, including Good Health and Well-Being, Affordable and Clean Energy, Decent Work and Economic Growth, Climate Action, and Partnerships for the Goals. The Company's current activities also integrate the objectives that facilitate the achievement of other UN sustainable development goals.

Rosneft's sustainable development goals and objectives are aligned with the selected priority UN sustainable development goals. The Company continues to integrate sustainable development principles into its strategic and program documents.

Rosneft explicitly promotes the implementation of the UN-established goals both in own core activities and by supporting and participating in various projects and initiatives aimed at improving living standards in the regions of its operation, development of health care services, science and education, culture, and environmental protection.

### Strategic principles and public position of the Company

In December 2018, the Company's Board of Directors approved Rosneft's strategic principles and public position on contributing to the implementation of the UN's sustainable development goals. The document is available on the Company's website.



This public position meets the requirements of openness, transparency, and sharing information with shareholders, investors, and other stakeholders. It constitutes a supplement to the Sustainable Development Policy and annual reports published by the Company.

Information on Rosneft's contribution to the achievement of all 17 UN sustainable development goals, including those that are top priority for the Company, is marked in the present Report with the relevant icons.

#### Strategic Priority Goals



#### Goals Integrated into Current Operations



## Goal 3. Good Health and Well-Being

### 3.1. Health Care and Occupational Safety. Promoting the occupational safety of suppliers and contractors

Rosneft intends to become a top performer in accident-free operations and safe working conditions for employees and contractors. By the end of 2022, the Company plans to join the first quartile on comparable HSE indicators.

### 3.2. Environmental Policy and Obligations

Preserving the environment for future generations is an integral part of Rosneft's corporate culture and business principles. The Company aims to deliver a superior performance to minimize environmental impact and bolster the eco-friendliness of production. Over RUB 300 bln in green investments have been planned for 2018-2022. In 2018, green investments of the Company amounted to RUB 45.6 bln in total.

Rosneft's environmental objectives for the period through to 2022 are as follows:

- reducing greenhouse gas emissions (GHG) to prevent climate change;
- mitigating environmental impact, using the best available technologies for production, waste disposal, efficient wastewater treatment, as well as regular environmental investment projects and nature protection measures;
- taking measures to preserve the ecosystem and biodiversity, as well as to support natural resources recovery, including land reclamation.

### 3.3. Risk and Incidents Management

The Company tries to create an accident-free operating environment and ensure the safety of its employees and contractors.

The HSE Risk Management System specifies a single structured procedure to identify hazards and evaluate the risk of an employee's or contractor's injury, as

well as measures to eliminate or mitigate these risks. The Company draws lessons from each accident or injury. The corporate incident investigation procedures are aimed at revealing systematic causes and the prevention of similar accidents in future.

### 3.4. Road Safety

Rosneft regularly holds and participates in road safety activities and implements initiatives preventing road accidents.

### 3.5. Fostering a Positive Social Environment

Rosneft is committed to high social responsibility principles and focuses on health care and comfortable working conditions, supporting and promoting a healthy lifestyle, housing and living improvements for employees and their families, as well as financial assistance for veterans and retirees. The Company also contributes to the improvement of the social environment in the regions of its operation.

<sup>1</sup> The UN's Development Goals, adopted on 25 September 2015 by a Resolution of the UN General Assembly, are aimed at achieving significant progress in addressing global economic and social challenges and in protecting the environment.



7 AFFORDABLE AND CLEAN ENERGY



## Goal 7. Affordable and Clean Energy

### 7.1. Higher energy efficiency across all the Company's business areas

Rosneft is a major consumer of fuel and energy resources, accounting for more than 4% of the country's energy mix. In 2009, Rosneft launched an Energy Saving Program meant to reduce energy resources consumption, as well as to enhance economic, environmental, and production performance.

### 7.2. Creating conditions for enhancing energy efficiency through the use of the Company's products

Greenhouse gases from oil and gas industry products are mainly generated during their utilization by consumers. To mitigate the environmental impact and climate change, the Company consistently does the following:

- commissions new and renovated refinery units, expands the list of output products with enhanced fuel efficiency and a low emission level;
- informs customers about the advanced environmental and operational performance of the fuels produced, as well as about the output of new product types;
- changes the production structure in favor of more ecologically-friendly products, increases gas production and expands its share.

### 7.3. Enabling access to energy and reliable energy product supplies to consumers, including in developing markets

Rosneft is a significant player in the global oil and gas market and recognizes its role and responsibility for timely, reliable supplies of energy products to consumers, available on equal terms and at competitive prices.

### 7.4. Innovative activities

Leadership in innovation and R&D is a key driver of the Company's development. Rosneft's innovation activities are aimed at the design and implementation of new technologies, product types, and approaches to business process management.

8 DECENT WORK AND ECONOMIC GROWTH



## Goal 8. Decent Work and Economic Growth

### 8.1. Contribution to the sustainable development and diversification of the national economy

The Company facilitates the economy's sustainable development, its technological upgrading, the establishment of new production facilities and high-productivity jobs, the output of products with high added value through the transition to long-term contracts with consumers, suppliers and contractors, and the growth of the anchor order system.

### 8.2. Health Care and Occupational Safety. Promoting the occupational safety of suppliers and contractors (see Goal 3.1)

### 8.3. Positive social environment (see Goal 3.5)

### 8.4. Support for the family and children

Rosneft ensures the social protection of its employees and their families, the protection of jobs and the guaranteed integration of female employees into the staff after maternity leave.

### 8.5. Freedom of association and collective bargaining

The principle of freedom of association is a core value for Rosneft, which also recognizes the inviolability of the workers' right to collective bargaining and the right of each employee to collective representation of interests, including by trade unions. These provisions are formalized in Rosneft's Code of Business and Corporate Ethics.

### 8.6. Productivity and efficiency growth

The Company's goal is to increase operating efficiency and productivity, generating even more added value.

### 8.7. Education is a tool facilitating the integration of youth into the energy industry

Rosneft as a responsible employer and key industry member pursues a policy aimed at ensuring a constant influx of professionally trained young specialists from among the best university graduates.

### 8.8. Generation of a sustainable procurement system along the entire value chain

The Company aims to cooperate with counterparties interested in the creation and sustainable development of their supply chains, the provision of new technological solutions and the implementation of innovations.

### 8.9. Higher energy efficiency across all the Company's business areas (see Goal 7.1)

### 8.10. Decent living and working conditions in remote regions

Rosneft provides decent working and recreation conditions for those who work in remote regions and under adverse climatic conditions.





## Goal 13. Climate Action

### 13.1. Risks related to climate change

Rosneft identifies and assesses the risks associated with its operation area, as well as from suppliers' and contractors' activities. The Company's approach to management and the flexibility of its business model ensure high adaptability to potential changes in the energy landscape. Considering the increasing community demands and climatic components, the medium-term aims for the Company's development are as follows:

- increasing the production of natural gas, which allows a significant reduction in GHG emissions compared to other fuel types;
- the implementation of oil refinery development projects, building up the output of high-demand products and feedstock for the petrochemical industry;
- lower emissions and improved efficiency of production facilities;
- development and output of new product types, allowing consumers to reduce emissions and increase fuel efficiency.

### 13.2. Higher energy efficiency across all the Company's business areas (see Goal 7.1)

### 13.3. Creating conditions to enhance energy efficiency through the use of the Company's products (see Goal 7.2)

### 13.4. Environmental Policy and Obligations

As a party to the United Nations Global Compact, the Company aims to reduce the impact of its activities on climate change. The Rosneft-2022 Strategy makes provisions for a reduction of greenhouse gas emissions. The Company pursues the Investment Gas Program and the Energy Saving Program designed to prevent GHG emissions of over 8 mmt of CO<sub>2</sub>-equivalent by 2022.

The Investment Gas Program is mainly focused on the reduction of associated petroleum gas flaring to a level below 5%, in accordance with the target stated

by the Government of the Russian Federation. This can be achieved through a comprehensive approach to oil field construction: developing infrastructure for gas extraction, use and supplies to consumers, or for gas re-injection into the reservoir.

### 13.5. Innovative activities

The Company implements innovation projects aimed at developing technical solutions to utilize renewable energy sources for supplying power to oil and gas production enterprises, as well as developing technologies and equipment for natural and associated petroleum gas treatment and use, including for power generation. Several patents have been obtained.



## Goal 17. Partnerships for the Goals

### 17.1. Participation in global initiatives

As a party to the United Nations Global Compact, the Company follows the principles of the Social Charter of Russian Business and supports the Anti-Corruption Charter of Russian Business. Rosneft shares the general principles and values of the Universal Declaration of Human Rights and of the International Labour Organization (ILO) Declaration of Fundamental Principles and Rights at Work, and supports initiatives promoting sustainable development, increased transparency, combatting corruption, ensuring fundamental human rights, reducing inequality and protecting the environment.

### 17.2. Participation in the energy industry's sustainable development

The Company recognizes the importance of sustainable development for the global energy industry and responsible behavior of key producers, including investments in the recovery of the resource base, timely and efficient reserves development, and the provision of reliable supplies to consumers in both developed and developing countries. Considering the contemporary challenges, hindering producers from participating in the global oil market and hindering the financing of efficient energy-related projects must not be allowed.

### 17.3. Efficient partnership with government entities, business, and society

Rosneft focuses on open, meaningful dialogue and responsible cooperation with government entities, business, and society in line with applicable laws and high standards of corporate and business ethics. It expands the Company's opportunities and facilitates the generation of favorable conditions for business development. Major cooperation areas comprise the drafting and improvement of federal and regional legislation and industrial regulations, and promotion of key initiatives for sustainable development of the industry and regions.



# Support for International Sustainable Development Initiatives



Since 2010, Rosneft has been a party to the United Nations Global Compact – the most extensive international sustainable development initiative uniting over 12 thousand companies from more than 160 countries.

WE SUPPORT



The Global Compact declares 10 principles in the areas of human rights, labor relations, environmental protection, and countering corruption that shall be followed by the parties of their own free will. The Global Compact calls on parties to support the UN's sustainable development goals aimed at enhancing the well-being of the present and future generations. As a party to the UN Global Compact, Rosneft makes all efforts to meet the growing energy resource demands of the world economy, which is necessary for balanced social and economic development and improving living standards.

The UN Global Compact principles are taken into account both at the strategic and operational management levels. These principles are integrated into the Rosneft-2022 Strategy and incorporated into the system of local regulations that directly set the functioning of the Company's major business processes.

Rosneft also shares and observes the following principles:

- UN Universal Declaration of Human Rights;
- UN Declaration on the Environment and Development;
- OECD Guidelines for Multinational Enterprises;

- The ILO Declaration on Fundamental Principles and Rights at Work;
- The ILO Freedom of Association and Protection of the Right to Organize Convention (No. 87);
- The ILO Right to Organize and Collective Bargaining Convention (No. 98);
- The ILO Discrimination (Employment and Occupation) Convention (No. 111).

The principles of these international documents are formalized in the Company's local regulations and integrated into corporate business processes.



<p><b>Human Rights</b></p>	<p><b>Principle 1:</b> Businesses should support and respect the protection of internationally proclaimed human rights.</p>	<p><b>Principle 2:</b> Businesses should make sure that they are not complicit in human rights abuses.</p>
<p><b>Labor Standards</b></p>	<p><b>Principle 3:</b> Businesses should uphold freedom of association and the effective recognition of the right to collective bargaining.</p>	<p><b>Principle 5:</b> Businesses should uphold the effective abolition of child labor.</p>
<p><b>Environment</b></p>	<p><b>Principle 7:</b> Businesses should support a precautionary approach to environmental challenges.</p>	<p><b>Principle 9:</b> Businesses should encourage the development and diffusion of environmentally friendly technologies.</p>
<p><b>Anti-corruption</b></p>	<p><b>Principle 8:</b> Businesses should undertake initiatives to promote environmental responsibility.</p>	<p><b>Principle 10:</b> Businesses should work against corruption in all its forms, including extortion and bribery.</p>

# Sustainability Management



## Sustainable Development Policy

The Sustainable Development Policy is a high-level document which stipulates Rosneft's stance on all basic issues of sustainable development. According to the Policy, the Company aims at supporting the implementation of Rosneft's Strategy for the delivery of superior performance in the industry, and ensuring efficient resource utilization and Russia's energy security, while contributing positively to social and economic development, compliance with high environmental and industrial safety, corporate governance and social responsibility standards, and meeting the requirements for protection against both natural and man-made threats.



The Sustainable Development Policy is a public document available on the Company's website.

## Strategic Sustainable Development Principles

While defining five primary UN sustainable development goals that Rosneft will support in its core activities, the Company formalized its own strategic sustainable development principles in 2018.

### MAXIMUM BUSINESS MODEL ADAPTABILITY IN THE COURSE OF TRANSITION TO THE LOW-CARBON ECONOMY



Flexible business model  
Balanced investment portfolio  
High performance and value creation irrespective of the oil business cycle  
Energy security

### CARE FOR PEOPLE, THE ENVIRONMENT AND MORAL VALUES



Safety culture and safe conduct of business  
Working space and benefits for employees  
Human, business, and asset security

### CONSISTENT AND RESPONSIBLE BUSINESS OPERATIONS



Business and production coherence  
Information transparency and disclosure  
Respect for human rights  
Ethics, following procedures, and combatting corruption  
Risk management

### ASSISTANCE IN FURTHER ECONOMIC AND SOCIAL DEVELOPMENT



Direct and indirect support for economic development  
Development of suppliers, contractors, and related industries - employment and advanced personnel training  
Industrial and social infrastructure  
Availability of energy resources, and new products and solutions

### RESPONSE TO THE RISK OF CLIMATE CHANGE



Corporate governance focused on climate change issues  
Emission reduction  
Energy consumption during production  
Company's product utilization

### EFFICIENT ENVIRONMENTAL IMPACT MANAGEMENT



Leadership in environmental protection  
Water resource management  
Ecosystems and biodiversity

### PARTNERSHIP WITH STAKEHOLDERS



Efficient partnerships  
Respect for human rights  
Right to work, comfortable working conditions, and social protection for employees  
Company's corporate values for suppliers and contractors

## Corporate Governance

The Rosneft corporate governance system<sup>1</sup> is based on advanced Russian and international experience and best practices. It is constantly reviewed to meet external environment changes, as well as the requirements of the Company's shareholders and other stakeholders. It involves all system components in the ongoing management of the Company's sustainable development.

### General Shareholders Meeting

The General Shareholders Meeting is the Company's supreme governing body. It is competent to decide on matters that are fundamental to Rosneft's business, including the approval and introduction of changes to the Charter and internal documents regulating the activities of the Company's governing and control bodies, approval of annual reports and financial statements, net profit distribution and dividend payments, election

of the Audit Commission, and approval of the Auditor and major transactions.

The General Shareholders Meeting appoints an effective board of directors. The Company provides all shareholders with equal and fair opportunities to exercise their legal rights<sup>2</sup>, as well as ensuring sustainable growth in dividends.

In 2018, resolutions of the General Shareholders Meetings on the dividend payouts were adopted in accordance with the Dividend Policy, which is aimed at both striking a balance between Rosneft's and its shareholders' interests and ensuring the necessary increase in the Company's investment appeal and shareholder value:

- the dividend payout target is at least 50% of net profit under International Financial Reporting Standards;
- dividends shall be paid out at least every six months.

**In 2018, Rosneft paid out a total of RUB 225 billion in dividends.**

### STRATEGIC PLANNING COMMITTEE (contains one Independent Director)

- shapes Rosneft's overall strategy and strategies for individual business lines, and monitors their progress;
- reviews the draft internal policy documents on sustainable development, innovative activities, information policy, and external communications.

### HR AND REMUNERATION COMMITTEE (2/3 of the Committee are Independent Directors)

- assesses Rosneft's current and anticipated demand for professional skills of governing body members and top managers taking into account the Company's interests and Development Strategy;
- reviews the drafts of the Code of Business and Corporate Ethics, and internal policy documents on HR and social areas, including human rights;
- reviews Rosneft's Sustainable Development Reports.

## Participation of the Board of Directors, its Committees, and the Management Board in Managing Sustainable Development Issues

The Board of Directors provides strategic management of the Company's activities; it is accountable to the General Shareholders Meeting and acts on behalf of, and for the benefit of, all shareholders within the limits of its competency. The elected Board of Directors includes 11 members, among them four Independent Directors.

Setting the Sustainable Development Policy and monitoring its implementation by the Company's management are key functions of the Board of Directors and serve as the basis for Rosneft's strategic development.

The committees of the Board of Directors regularly discuss major sustainable development issues to prepare recommendations for the Board of Directors.

### AUDIT COMMITTEE (includes Independent Directors only)

- reviews management's suggestions on improving the risk management and internal control system, and on the acceptable risk appetite;
- reviews the Corporate Governance Code, internal policy documents on the risk management and internal control system, and on corporate governance;
- monitors the completeness and accuracy of financial statements and other reports, the reliability and effectiveness of risk management and the internal control system, the compliance framework, internal audit, and the corporate governance system.

<sup>1</sup> Details on the Rosneft corporate governance system are given in the 2018 Annual Report and available on the website at: <https://www.rosneft.com/governance/>.

<sup>2</sup> For shareholder relations refer to Rosneft's 2018 Annual Report.

The Management Board defines key strategy areas, prepares suggestions to the Board of Directors on which business lines to focus on, and reports on their implementation.

The Chief Executive Officer is the Chairman of the Management Board and supervises the compliance with, and control over, the Company's collective governing bodies' resolutions, including those on sustainable development.

**Sustainable Development Issues Discussed by the Board of Directors, its Committees, and the Management Board in 2018**

During a meeting in December 2018, the Board of Directors adopted a major sustainable development resolution to approve measures for improving the Company's performance in environmental and social responsibility issues. Rosneft approved the public position on its commitment to 17 UN Sustainable Development Goals – Rosneft: Contributing to Implementation of the UN's Sustainable Development Goals, and it defined five priority goals: Good Health and Well-Being, Affordable and Clean Energy, Decent Work and Economic Growth, Climate Action, and Partnerships for the Goals. The review of this issue by the Board of Directors confirms that social and ecological responsibility is one of the fundamental values of the Company.

The Board of Directors and its committees contribute to the Company's sustainable development through the Company's comprehensive KPI System.

The Board of Directors exercised risks management functions in respect of sustainability management as follows:

- Reviewed the progress report on the Company's Risk Management and Internal Control Plan;
- Reviewed the report on HSE activities;
- Approved reports on the identification of current financial and business corporate risks for 2019;
- Approved the Company's Policy on Risk Management and Internal Control and changes to the Company's Regu-

<b>PROGRESS ON THE COMPANY'S STRATEGY</b>	▶▶▶ The Rosneft-2022 Strategy was updated, in particular, information on social development, the talent pool, environment, and regional development.
<b>HEALTH, SAFETY, AND THE ENVIRONMENT</b>	▶▶▶ Health, safety, and environment reports are reviewed on a quarterly basis; the Company's Policy was approved.
<b>ENERGY EFFICIENCY AND ENERGY SAVING IMPROVEMENTS</b>	▶▶▶ The progress report on the 2017-2021 Energy Saving Program was reviewed.
<b>MANAGEMENT OF SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT</b>	▶▶▶ The progress report on the 2017 Innovative Development Program was reviewed, as well as the issues on innovative development and the introduction of recommendations on managing intellectual property rights.
<b>MANAGING SOCIAL AND BUSINESS RELATIONS</b>	▶▶▶ The Company's Policy on Anti-Corruption and Prevention of Corporate Fraud and the Company's Regulations on Procurement of Goods, Works, and Services were all approved; the progress report on the Company's Information Policy for 2018 was reviewed.
<b>MANAGING HR ACTIVITIES AND THE RIGHT APPROACH</b>	▶▶▶ The progress report on the Action Plan to Introduce Professional Standards in the Company's Operations was reviewed.

lations on the Procedure for Managing Conflicts of Interest at Rosneft and Group Subsidiaries.

Key sustainable development decisions of the Management Board:

- Establishing the Technology Council, the Science and Technology Committee, the Information Technology Expert Council, and the Import Substitution Committee;
- Approving two business projects on production development and improvement of petroleum products quality;
- Approving three monetary grants for developing social projects;
- Approving the Company's internal Standards:
  - Leadership in HSE;
  - Integrated Health, Safety and Environment Management System;
  - Corporate Risk Management System, Internal Control System;

- General requirements for the competence of testing laboratories, where the quality of jet petroleum, oil, lubricants, and special aircraft-filled fluids is checked;

as well as changes in the Regulations on labor remuneration and social security of Rosneft's employees.

In 2018, the Management Board focused on the following sustainable development issues:

- Improving management efficiency and introducing HSE leadership principles;
- Enhancing the Risk Management and Internal Control System;
- Improving the quality of innovative, scientific and technological activities and the Company's performance through technological development;
- Enhancing the Company's IT development effectiveness;

- Improving labor remuneration and social security of employees;
- Motivating employees and developing a talent pool;
- Developing social services in the Company's regions of operation.

- the Board Committees – 83 issues, 14 of which were related to sustainable development,
- the Management Board – 195 issues, 38 of which were related to sustainable development.

**Sustainable Development Competence of the Board of Directors**

In June 2018, Hans-Joerg Rudloff, having wide competencies and experience in Strategy, Corporate Governance and M&A, Finance & Audit, and Risk Management, joined the Board of Directors.

Rosneft's 2018 Annual Report and Rosneft's Sustainable Development Reports for previous periods contain information on the experience and competencies of members of the Board of Directors.

In 2018, every fifth issue reviewed by the Board of Directors or the Management Board concerned the Company's sustainable development, and the share of the Board Committees' recommendations pertaining to sustainable development was 17%.

In 2018, the Board of Directors, the Board Committees and the Management Board reviewed a total of 405 issues, including:

- the Board of Directors – 127 issues, 25 of which were related to sustainable development,

**The Management Board's KPIs for Sustainable Development**

The Board of Directors annually approves the key performance indicators (KPIs) with a view to achieving the Rosneft-2022 Strategy targets, including those of sustainable development:

- Implementing strategic tasks and activities;
- Monitoring environmental performance indicators;
- Reducing the injury rate;
- Increasing labor productivity;
- Enhancing innovative performance;
- Delivering on the staff training plan and introducing professional standards into the Company's operations;
- Raising stakeholders' awareness of the Company's sustainable development;
- Adopting up-to-date feedstock, products, and inventory accounting systems;
- Savings fuel and energy resources;
- Reducing the Company's document workflow by updating, developing; and integrating electronic data systems.



### Sustainability Risks Management<sup>1</sup>

The goals and objectives of the Risk Management and Internal Control System (RM&ICS) are set out in the Company's Policy on the Risk Management and Internal Control System<sup>2</sup> developed based on recommendations of international agencies specializing in risk management, internal control, and audit services. They are aimed at reasonable assurance that the Company will achieve the goals, which can be grouped into four main categories:

- Strategic goals contributing to the accomplishment of the Company's mission;
- Operational goals related to the Company's financial and business performance, and asset integrity;
- Goals of compliance of the Company's activities with the applicable laws and local regulations, including HSE requirements, requirements for information and personal security;
- Goals involving the timely preparation of reliable financial statements or non-financial reports, internal and/or external reports.

Owing to ongoing improvements to its RM&ICS, the Company can promptly and adequately respond to changes in the external and domestic environments, achieve a better performance, and maintain and increase its shareholder value. The Company has developed and is implementing the RM&ICS holistic development plan for the short and medium terms. This plan sets goals, objectives, and key initiatives contributing to the achievement of the Company's established goals for the RM&ICS.

In 2018, the Company set the risk appetite for the following year based on the following key principles:

- Financial and economic indicators. The Company strictly complies with covenants and pays all of its debts, both short-term and long-term, as they fall due;
- Health, safety, and the environment. Recognizing the nature and scale of the footprint of its business, products, and services, the Company realizes its responsibility for safe operation and protects the health and safety of its employees and local residents in the regions of operation. As part of its commitment to preventing any potential impact on the environment, the Company makes every effort to protect, preserve, and restore natural resources;
- Corporate governance. The Company adheres to the principle of zero tolerance for corporate fraud and corruption of any kind.

#### Key Risks Inherent in the Company's Business<sup>3</sup>

**Sustainability risks analysis is integrated into the Corporate-Wide Risk Management System and is conducted according to the agreed methodology.**

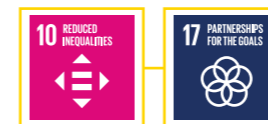
The following risks to sustainable development are considered among the strategic risks:

- More stringent environmental regulation:
  - state regulation and taxation of industries/activities related to greenhouse gas emissions into the atmosphere/adverse impact on climate change.

- the global application of requirements and measures pertaining to energy saving, energy efficiency, and decarbonization of the economy.
- Health, Safety and Environment (HSE) Risks
  - The Health, Safety and Environment risks system sets a unified structured process to identify and assess the risks to accident-free production, employees' safety and environmental protection, and to plan risk minimization and elimination measures<sup>4</sup>.
- HR and Social Risks
  - Successful Company operations are driven by its highly professional staff. Employee motivation and competencies are becoming increasingly important to the financial performance of each business unit and the Company as a whole as it expands its global footprint and operations in challenging environments, including offshore. Based on the assessment of HR and social risks, the Company identifies risks relating to social obligations and talent shortage in certain specialist areas. Rosneft manages these risks through a variety of measures, as set out in its HR and social strategy, designed to recruit and retain highly qualified personnel, and develops and improves the existing policies and procedures covering HR management, social development, and corporate culture.

Should any risks relating to human rights be identified by management, they will be assessed as part of the Company's risk management and internal control system and relevant mitigation measures will be put in place.

## Stakeholder Engagement



**The Company aims to develop partnership, sustainable, profitable, trusting and mutually beneficial relations with stakeholders – shareholders, investors, authorities, employees, the public, suppliers and contractors, clients, and the business community as a whole.**

A well-run effective communication system based on transparency, mutual respect, and principles of responsibility facilitates the further development of the Company's business lines.

The Company uses various forms of communication with stakeholders, depending on the targets set and most effective ways of interaction. The communication tools are detailed below or in stakeholder-relevant sections of the Report.

#### Shareholder and Investor Relations

**The Company's shareholders and investors include over 97 thousand individuals and legal entities, as well as over 500 Global Depository Receipt (GDR) holders.**

In 2018, Rosneft continued to work closely with institutional investors drawing on best international practices, with full transparency regarded as the number one priority.

Rosneft shares are among the most attractive investments in the domestic stock market. The Company enjoys a diversified investor base of over 500 institutional investors. Its stock performance is analyzed by 21 investment banks. Relations with the Company's investors, both existing and potential, are maintained by the Chairman of the Management

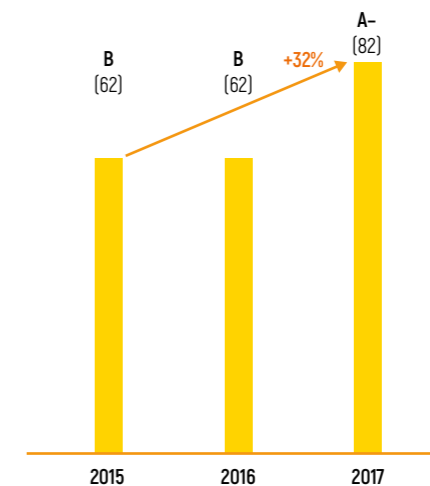
Board of Rosneft, heads of businesses, First Vice President, and the Investor Relations Department.

In 2018, the Company completed an extensive IR program, including several strategic speeches made by the CEO at major international investment forums, and over 200 one-on-one and group meetings between the Company's management and top investment funds.

Rosneft holds quarterly conference calls for investors involving heads of economics, finance, and operations, and providing detailed coverage of the Company's performance in the reporting period. Shareholder and investor materials, such as press releases, presentations, Rosneft's Annual Report and Sustainability Report, as well as material facts on resolutions of the Company's Board of Directors, are posted on the Company's official website [www.rosneft.com](http://www.rosneft.com).

Environmental, social and governance (ESG) investing is developing

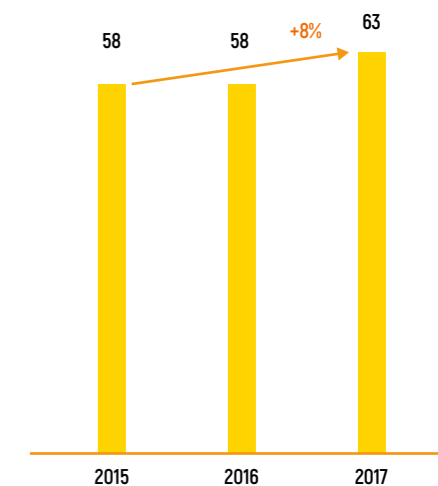
**The ESG rating by Refinitiv has increased by 32% in three years**



with the support of Rosneft's CEO, who has consistently affirmed that the Company's fundamental value lies in social and ecological responsibility. The Company is actively developing a special focus on investor relations, rating and disclosing ESG parameters in line with up-to-date ESG investing criteria (guidelines of the London Stock Exchange Group (LSEG), and recommendations of the TCFD under the Financial Stability Committee of the G-20, CDP, etc.).

In 2017-2018, Rosneft cooperated with eleven ESG rating agencies (CDP, Sustainalytics, Bloomberg, Refinitiv, RobecoSAM, CHRB, ISS, MSCI, Trucost, GES, and FTSE Russell), involving about a hundred conference calls, five conferences and feedback on the Company's ESG reports. The Company's proactive position, and open and meaningful dialogue with investors, were highly appreciated by the leading information platforms. Bloomberg ESG Disclosure assigned an ESG score of 63 to the Company. Rosneft's ESG rating by Refinitiv increased by 20 points and has reached A- (82).

**The Bloomberg ESG Disclosure Score has improved by 8% in 3 years**



<sup>1</sup> The 2018 Annual Report gives a detailed description of the key RM&ICS stakeholders, the outcome from implementing the comprehensive RM&ICS development plan, and the performance of the internal control system.

<sup>2</sup> The Company's Policy on the Risk Management and Internal Control System No. P4-01 P-01, version 2.0 (approved by Rosneft's Board of Directors, Minutes No. 6 dated 24 August 2018).

<sup>3</sup> Industry, country, financial and legal risks the Company is exposed to are detailed in Rosneft's Annual Report for 2018 (Annex 2).

<sup>4</sup> These risks are detailed in the HSE Risk Management Section herein, and in Rosneft's Annual Report for 2018 (Annex 2).

**Government Relations**

Rosneft is a Russian strategic enterprise. ROSNEFTEGAZ, a wholly-owned state company, is Rosneft's largest shareholder with 50.00000001% of the equity. Thus, Rosneft pursues its activities in the interests of Russia and ensures equitable treatment for all shareholders as they exercise their rights.

The Company is the largest taxpayer in Russia. In 2018, Rosneft's contribution to the budget's fiscal revenues and extra-budgetary funds of the Russian Federation amounted to almost RUB 4 trln.

The Company has a presence in 78 of Russia's 85 regions and not only implements production and investment programs in the key regions of operation but also cooperates with the regional authorities in projects relating to health, education, physical education and sports, science, and technology.

The Company is an important supplier of fuel to strategic government services. By decrees of the Government of the Russian Federation, the Rosneft Group Subsidiaries are the sole suppliers of petroleum, oil, and lubricants to the Ministry of Defense of the Russian Federation, the Investigative Committee of Russia, the EMERCOM of Russia, the Ministry of Internal Affairs of the Russian Federation, the National Guard Services of Russia and other federal clients.

Rosneft maintains an open, meaningful dialogue with the Government and regulatory bodies. Major cooperation areas comprise the development and improvement of federal and regional legislation, industrial regulations, and the promotion of key initiatives for sustainable development of the industry and regions.

**COMPANY'S CONTRIBUTION TO DEVELOPING THE OIL AND GAS SKILLS SYSTEM**

Since 2015, Rosneft, along with other major companies and public and educational organizations, has been taking part in the activities of the Council for Professional Qualifications in the Oil and Gas Sector and contributing to the development and support of the Oil and Gas Skills System. The Council was established by the resolution of the Russian Presidential Council for professional competence.

In 2018, The Company completed the drafts of eight occupational standards. It prepared recommendations for twelve occupational standard drafts (including four standards on the oil and gas sector and eight standards on other sectors) and took part in the review of four drafts of Federal Educational Standards. The Company's experts participated in accrediting the professional education programs of six universities and the selection of organizations to empower oil and gas skills assessment centers.

**COOPERATION WITH ROSSTANDART ON FUEL QUALITY**

In 2018, with the participation of Rosneft, the Interdepartmental Working Group on Oil Products Trafficking under the Federal Agency on Technical Regulating and Metrology (Rosstandart of Russia):

- Drafted and approved recommendations on public monitoring of the oil market;

- Prepared revisions of Technical Regulations TR TS 013/2011 to strengthen product liability;
- Drafted recommendations to establish a federal fuel traceability system aimed at eradicating fake oil products.

The Company has a presence in

**78**  
of Russia's regions



**Interaction with Government Bodies on Import Substitution and Localization**

The Company continues to work closely with the main federal executive bodies dealing with import substitution in Russia: the Russian Government, the Ministry of Industry and Trade, the Ministry of Energy, and the Ministry of Economic Development. It is represented in various intergovernmental task forces and research groups established by federal executive bodies to consider current issues, such as reducing the domestic energy sector's dependence

on imported equipment, components, and spare parts, as well as on foreign services and software.

Rosneft is also involved in public discussions of draft laws and regulations aimed at facilitating import substitution.

Being aware of the immediacy of the problem, the Company cooperates with the Russian Federation constituent entities in searching for Russian producers to develop technological partnerships, attract participants to Rosneft's Import Substitution Program, develop comprehensive technological solutions and enhance new hi-tech equipment and technologies.

**At the end of 2018, 37 Russian Federation constituent entities cooperated with the Company under active agreements, including 18 agreements containing sections on import substitution, localization, and innovations.**

**Employee Relations**

Rosneft's core asset is its employees, the high professionalism of whom is key to the Company's success. The Company creates all the required conditions for comfortable work and realizing the potential of each employee. The Human Resources section herein contains detailed information on this matter.



**Regional Partnerships**

Rosneft's performance contributes significantly to the development of the regions of operation. Projects of the Group Subsidiaries give a new impetus to the development of local enterprises, social services, human resources, and infrastructure, and contribute to increasing the regions' investment appeal. Detailed information on regional partnerships and the implementation of socially significant projects in the regions can be found in the Contribution to the Development of the Regions of Operation section herein.

**Public Consultations**

In accordance with Russian legislation, the Company arranges and holds public hearings to discuss the findings of environmental impact assessments for its planned operations. Thus, **Rosneft engages all stakeholders in discussing the Company's performance at the planning stage.**

In 2018, it held over 220 public discussions with representatives of the local population in many regions with the cooperation of both state and municipal bodies. Rosneft reviewed various issues

at the initiative of both the Company and the stakeholders, including:

- the construction and reconstruction of sludge pits, solid and liquid waste disposal sites, and waste disposal technology projects;
- waste management, the conservation of forests during field preparation;
- the recultivation of lands polluted due to pipeline ruptures;
- the assessment of the environmental impact of capital construction and reconstruction, including impact on local water in regions of operation;
- environmental impact prevention and response measures, including environmental impact on water resources in regions of operation.

Rosneft devotes special attention to public discussions under offshore projects. In particular, in 2018 the Company held 16 public consultations under offshore projects, including 14 hearings, in five Russian Federation constituent entities:

- Krasnoyarsk Territory, Dudinka, Dikson;
- Arkhangelsk Region, Arkhangelsk, Belushya Guba;
- Yamalo-Nenets Autonomous District, Salekhard, Yar-Sale, Seyakha;
- Republic of Sakha (Yakutia), Saskylakh and Yuryung-Khaya, Tiski;

**> 220  
public  
discussions**

of planned projects carried out in 2018 with the local population

- Chukotka Autonomous District, Anadyr, Lavrentiya, Egvenkinot.

The Company provided comprehensive answers and explanations to stakeholders at the hearings. Comments and recommendation of local residents and municipal bodies were taken into consideration in the planning documentation.

**ECOARCTIC FORUM**

In 2018, Rosneft participated for the second time in the ECOARCTIC ecological forum aimed at discussing key issues in the exploitation of resources in the Arctic with the involvement of scientists, the authorities, subsurface users' specialists and local residents. Rosneft traditionally chooses settlements located close to hydrocarbon exploration and production fields as locations for the event.

In 2018, it held roundtables in the Khatanga and Saskylakh settlements

with over 140 participants on Current Issues in Safe Development in the Arctic and a Reduction of Adverse Impact on the Environment from Operations. Scientific data in the reports show that thanks to up-to-date exploration technologies the impact on marine life is insignificant.

About 210 high-school students took part in career guidance sessions at the forum. The Company's specialists shared stories from their professional activities and talked about fauna species of the Arctic

listed in the Red Books of the Russian Federation and its constituent entities, methods of researching environmental conditions and monitoring of mammals and birds.

The celebration of Reindeer Herder's Day in Khatanga and of International Day of the World's Indigenous People (Hunting and Fishing Spirit's Day) in Saskylakh and Yuryung-Khaya completed the ecological forum.

**Roundtables**

Since 2007, Rosneft has held annual roundtable discussions in each key region where it has a presence. The Company meets with all stakeholder groups, including partners, clients, public organizations, educational institutions, mass media, federal and regional governments and supervisory authorities. Managers of respective Group Subsidiaries and core service units with competencies in the discussed topics participate in the roundtables.

These initiatives allow Rosneft not only to report on its activities for the previous year but also to hold a candid and open discussion of specific cooperation opportunities with stakeholders, as well as to develop solutions on joint projects that are most relevant to these regions.

2018 was the twelfth year that the Company has hosted these events, with 16 roundtable meetings. The Company hosted stakeholder meetings in Irkutsk (the Irkutsk Region), Igarka (Krasnoyarsk Territory), Gubkinskiy (the Yamalo-Nenets Autonomous District), Izhevsk (the Udmurt Republic), Komsomolsk-on-Amur (Khabarovsk Territory), Krasnodar and Tuapse

(Krasnodar Territory), Khanty-Mansiysk (the Khanty-Mansiysk Autonomous District), Orenburg (the Orenburg Region), Ryazan (the Ryazan Region), Samara (the Samara Region), Saratov (the Saratov Region), Stavropol (Stavropol Territory), Usinsk (the Republic of Komil), Yuzhno-Sakhalinsk (the Sakhalin Region), and Ufa (the Republic of Bashkortostan).

**Key Topics of Roundtable Discussions**

The roundtables deal with problems raised by the stakeholders. The Company focuses on adding essential topics for stakeholders to the roundtable agenda. The topics discussed in 2018 may be split into several groups below.

**Group Subsidiaries' Development Strategy**

As major employers and taxpayers in the regions of operation, the Rosneft's Group Subsidiaries understand that the social and economic development of the regions depends largely on the implementation of the Company's projects. For this reason, the development strategy of the Group Subsidiaries has traditionally been a dominant theme at roundtable meetings.

**in 16  
roundtables**

on sustainable development were held in the regions of the Company's operation in 2018

Stakeholders in Irkutsk asked questions about the Company's plans concerning oil refining depth, and the Company's need for polymer bitumen and other additives to improve road quality. Proposals were made to develop gasoline fuel production and sales, as well as petrochemicals production with high added value.

At the roundtable in Krasnodar, the participants discussed plans and parameters of associated petroleum gas (APG) utilization.



The Round table in Khanty-Mansiysk



The Round table in Ufa



The Round table in Samara

**Health, Safety, and the Environment**

Among matters that top the agenda of roundtable discussions are steps to minimize the adverse impact on the environment, including the prevention of pipeline failures, adverse impact control, APG utilization, waste recycling, land reclamation, tree planting, etc.

The stakeholders in Khanty-Mansiysk were pleased to note the reduced adverse impact on the environment from the Company's operations. In Saratov, participants welcomed the positive experience from electronic Safety Boards at plants' entrance checkpoints, which display time without accidents, as well as safety monitors with occupational safety information.

In Krasnodar, RN-Krasnodarneftegaz reported on implementing the out-of-operation wells abandonment and natural environment restoration program. Participants of the meeting in Gubkinskiy proposed the use of independent renewable power sources in the construction of well pads to reduce the number of transmission lines.

The roundtable meeting in Ryazan raised issues of the possible integration of ecological laboratories of Ryazan Oil Refining Company into the unified state ecological monitoring system of the Ryazan region and issues of progress in waste treatment facilities renovation. In Tuapse, the Company reported on waste treatment facilities renovation.

**Contribution to the Development of the Regional Economy and Infrastructure**

Rosneft is strongly committed to supporting its host regions, as is evident from discussions with stakeholders. The Company uses social and economic partnership schemes to provide funds required for the development of local territories. Recent roundtable discussions covered a broad range of topics, including wide-ranging plans for sustainable development, the use of local contractors, the condition of infrastructure assets, etc.

Participants of the discussion in Igarka noted the responsible approach of the Company and its contractors

to returning land after utilization to the municipalities for further use. Stakeholders expressed a wish to see the Company's involvement in the local airport extension. During the discussion, mention was made of financing the construction of a fish processing plant in Dudinka as a way for Rosneft to meet its obligations on fish restoration in the region.

In Samara, there were proposals to expand Rosneft's cooperation with regional enterprises, including machine-building enterprises, and on simplifying the small business interaction system. The discussion in Usinsk raised the issue of encouraging Rosneft's contractors to register within the jurisdiction of the municipal entity. In Ufa, participants proposed that priority for working with the Company be given to local service providers on conditions acceptable to Rosneft.

**Social Responsibility and Charity**

Roundtable participants acknowledged Rosneft's role as an active contributor to building a more sustainable local

community by helping indigenous peoples, organizing sports and fun events, and undertaking a wide range of charity projects and socially responsible activities.

In Irkutsk, stakeholders highly appreciated the Company's contribution to the preservation, development, and promotion of indigenous minorities' traditional values. The panelists focused on reducing the turnaround time from the submission of a social funding request to the availability of funds in districts with limited winter-time deliveries. The roundtable participants in Gubkinskiy expressed their wish to take into account the indigenous peoples' traditional settlement areas when designing pipeline routes.

Roundtable participants in Yuzhno-Sakhalinsk thanked the Company for being an organizer of the oil and gas complex sector in the open air section of the Sakhalin Museum of Local Lore with a focus on awareness of the history of oil production development in Sakhalin. The roundtable discussion in Saratov included a renovation project

for the regional tuberculosis sanatorium for children from several regions.

**Education**

Engagement with universities to enable seamless transition from university to the workplace remains a key topic for discussion at roundtable meetings. This covers a broad range of matters, from determining current needs for university graduates through to collaborative efforts in organizing the educational process, providing vocational guidance and expanding university capabilities. Stakeholders highlight the Company's greater involvement with secondary education institutions and the growing role of Rosneft Classes.

Panelists of the roundtable discussions in Ufa and Gubkinskiy were pleased to note Rosneft's successful cooperation with education institutions, including participation in infrastructure projects, and educational and research activities. In Khanty-Mansiysk and Komсомolsk-on-Amur, participants suggested increasing the number of Rosneft Classes.

Stakeholders in Khanty-Mansiysk and Samara praised Rosneft for supporting university teachers by providing them with practical training at the Company's enterprises, including practical studies of production equipment currently out-of-service while under overhaul.

Participants of the roundtable discussion in Usinsk thanked the Company for the construction of an oil field training base to practise skills required by an oil and gas production operator. The roundtable in Samara greeted the new opportunities for universities to apply their scientific research output in the real economy.

Stakeholders made suggestions about various promising potential areas of cooperation. In Gubkinskiy, Rosneft was asked to participate in organizing an Engineering Championship for students. At the roundtable meeting in Khanty-Mansiysk, participants made a suggestion to the Company to open an oil and gas science park. In Komсомolsk-on-Amur, there was a request to establish a student design center providing real production goals.

**Partnership with Public Organizations**

Rosneft cooperates with a wide range of public organizations on the principle of partnerships, transparency and effective achievement of objectives.

The Company is a member of numerous professional associations, such as the Russian-German Foreign Trade Chamber, Chamber of Commerce and Industry of the Russian Federation, Russian Pacific Economic Cooperation Council, National Petrochemical & Refiners Association, Russian Gas Association Group, National Association for Subsoil Examination, National Association for Technologies Transfer, and Non-Profit Russian Corporate Counsel Association.

Being a member of non-commercial organizations, Rosneft has been actively involved in the development of the social sphere, science, sports, and education. Rosneft's CEO is the Chairman of the Board of Trustees at the St. Petersburg Academic University of the Russian Academy of Sciences, Deputy Chairman of the Supervisory Board of the Russian Volleyball Federation, a member of the Board of Trustees of the Lomonosov Moscow State University, the National Intellectual Development Foundation, St. Petersburg State University, the Graduate School of Management of St. Petersburg State University, the State Federal-Funded Educational Institution of Higher Professional Training St. Petersburg Mining University, the Federal State Budgetary Institution Russian Academy of Education, MGIMO University of the Ministry of Foreign Affairs of the Russian Federation, Non-Government Organization Russian Geographical Society, the University grammar school (boarding school) of the Lomonosov Moscow State University, and the Supreme Supervisory Board of the Russian Boxing Federation.

**PARTNERSHIP WITH THE WORLD WILDLIFE FUND (WWF)**

The Company focuses on stakeholders' expectations and views on environment protection.

It has been cooperating with the WWF for over five years under the Letter of Intent on cooperation in the field of environmental protection signed in 2013.

Efforts by the Company to extend the environmental disclosure zone helped Rosneft to seventh place in the environmental responsibility ranking (WWF, Creon) in 2018, versus tenth place in 2017. Further, in the Information Disclosure category, the Company rose by eight places in the environmental responsibility ranking from tenth to second in the period.

**PARTNERSHIP WITH THE TALENT AND SUCCESS FUND**



In 2018, Rosneft partnered with the Talent and Success Educational Fund as part of efforts to implement strategic initiatives, develop an approach to working with talented young people, and build a young external talent pool.

In the Sirius Educational Center in Sochi, the Company developed and implemented a pilot partnership program for gifted students of Rosneft Classes aimed at giving students basic programming knowledge, shaping their project-focused thinking, enabling them to gain experience in the develop-

ment and implementation of projects addressing the Company's current challenges in field production, refining, feedstock and petroleum products logistics, and at providing career advice.

60 students from 18 regions of the Company's operation were chosen to participate in the Program.

At the end of the Program, participants may develop applications and virtual or augmented reality devices for current oil and gas specializations and professions.

**Contractor Relations**

The Company sees the implementation of a suppliers and contractors relations model consistent with international standards at the organizational level, together with supply effectiveness, as a strategic priority for sustainable development.

Rosneft is one of the largest consumers of goods, works, and services among both private and state-owned Russian companies. In 2018, annual procurement of goods, works, and services by Rosneft and Group Subsidiaries from external counterparties totaled RUB 2,114.4 bln. The Company's most significant regions include the Siberian Federal District (Krasnoyarsk Territory, the Tomsk Region), the Ural Federal District (the Tyumen Region, the Khanty-Mansiysk Autonomous District-Yugra, the Yamalo-Nenets Autonomous District), the Volga Federal District (Bashkiria, the Orenburg Region, the Samara Region), and the Far Eastern Federal District.

The Company's long-term cooperation with suppliers and contractors is a key success factor. Long-term contracts contribute to building such relations. Placing long-term orders ensures stable development of the oil and gas industry and machine engineering, the services market, the availability of jobs for workers across industries, and the potential for the development of new technologies.

When choosing suppliers and contractors Rosneft applies the following principles:

- **Publicity:** procurement information transparency;
- **Competitiveness:** ensuring equality, fairness, and a lack of discrimination and unjustified competition restrictions against procurement parties;
- **Reasonableness:** compliance with effective Russian laws and avoiding admission barriers built by establishing unmeasurable requirements for procurement parties;
- **Effectiveness:** targeted and sparing use of funds for product procurement and implementation of the Company's cost saving measures.

The stable and high volume of the Company's demand for goods, works, and services in the context of constant business development is a powerful tool for the economic development of the Russian Federation in general, and for each region in particular.

These principles are established by the current legislation of the Russian Federation and implemented under the Regulations on Procurement of Goods, Works, and Services, which are common for the Company and the Group Subsidiaries. Rosneft implements competitive procedures on the TEK-Torg electronic trading platform with over 40,000 registered contractors.

The Company and the Group Subsidiaries select reliable suppliers and contractors using a unified end-to-end system for checking compliance with corporate requirements. The system is comprised of the following components:

- **Accreditation.** Before entering into contracts with Rosneft or Group Subsidiaries, all suppliers and contractors should pass the procedure for checking for compliance with minimum requirements concerning legal status, business solvency, loyalty and business standing, as part of activities to counter corporate fraud and corruption. In 2018, a total of 7,566 suppliers of goods, works, and services had valid accreditation to participate in procurement procedures, with small- and medium-sized enterprises accounting for over 76% of the total number of accredited suppliers.

- **Qualification** by Product Types. Rosneft checks suppliers and contractors for compliance with particular requirements for the timely delivery of certain high-quality products (goods, works, services), including requirements for particular experience, capacity, resource base, appropriate permissions, and other requirements.
- **Technical Audits.** Technical audits are aimed at familiarizing the Company with suppliers' production activities, technical capacity, and produced goods/equipment list, and at evaluating their ability to produce and supply goods/equipment as needed according to the Company's technical requirements. an audit can be carried out as part of the current procurement procedure or as per the Company's pre-approved schedule. All specified requirements are available to potential suppliers and contractors for preliminary study on the Company's website and on the TEK-Torg electronic platform.
- **Technical Inspections.** Rosneft has developed and applies unified requirements for the inspections of production and shipping of goods from the suppliers' production sites to evaluate their capabilities to provide high-quality and timely supplies. The technical inspections involve a check and assessment of compliance with production and shipping processes, as well as compliance of goods with the Company's contractual requirements.

**RUB 2,114.4 BLN**

total annual procurement of goods, works, and services by Rosneft and Group Subsidiaries from external counterparties in 2018

**Contractors' Compliance with HSE Requirements**

Rosneft pays particular attention to compliance with health and safety requirements. **The Company extends the qualification HSE requirements to almost all parties involved in the production procurements.** Compliance with the requirements shows clearly whether the procurement parties have an HSE system and whether their HSE-related employees are sufficiently qualified, including those involved in high-risk operations.

Collegial bodies which make decisions in procurement procedures include officials from the HSE department, who inspect competitors' compliance with the HSE requirements.

The works and services agreements as a rule include the standard Appendix "Health, Safety and Environmental Requirements for Organizations Involved in the Works and Services Provided at the Company's Facilities" and liability in case of failure to comply with the requirements. The Appendix states the responsibilities for compliance with HSE requirements, as well as containing requirements for personnel training, compulsory briefings and medical examinations, a prohibition on employees intoxicated with alcohol, narcotics, or any toxic substance from working, requirements for personal protective equipment, transport vehicles in operation, and environment protection, including a prohibition on unlicensed hunting and fishing.

This standard Appendix imposes an obligation on contractors to have their own HSE systems and which do not contradict the Company's HSE Policy principles.

Rosneft applies the same HSE requirements to contractors at corporate facilities that it applies to its own employees.

The Company improves the contractors' HSE indicators by involving contractors' staff in all aspects of corporate HSE standards, such as studying, monitoring production, and activities aimed at minimizing accidents. It also imposes requirements involving absolute respect for labor law, including human rights.

The Company continuously monitors HSE at contractors, thus improving the safety culture on the oil and gas services market.

**Contribution to SME Development in the Regions**

Within the context of enhanced cooperation with the Russian regions of the Company's operation, Rosneft engages suppliers and contractors from these regions in its procurements.

In addition to discussing the list of items at roundtables with suppliers and contractors, the Company provides information on the procedure and rules for participating in procurements, minimum requirements for procurement participation, and preferences for small and medium-sized enterprises (SMEs).

Rosneft focuses on the maximum involvement of SMEs in procurements. In 2018, Rosneft and the Group Subsidiaries entered into contracts with SMEs valued at over RUB 167 bln. With the purpose of developing this focus area, the Company signed an agreement with JSC Corporation MSP, under which:

- Rosneft held 26 workshops for SMEs in Russia's regions with the participation of over 2,000 representatives of SMEs;
- Rosneft participated in developing and updating the Russian legislative framework covering the monitoring of SME procurement.

**> 167 RUB BLN**

the amount of contracts concluded in 2018 between the Company and the Group Subsidiaries with SMEs

**26 workshops**

held in 2018 for SMEs

**> 2,000 representatives**

participated in seminars for SMEs



**Client Relations**

Rosneft sells its products on domestic and external markets both through retail and large/small wholesale networks. The key client categories are divided into two segments: customer-related (B2C) and industrial (B2B).

In the customer-related segment, the Company's clients are predominantly individuals. Retail brands of the Company, such as Rosneft, VR, and Bashneft, have successfully established themselves on the market. A loyalty program with about 12 mln members operates in 64 entities of the Russian Federation.

Major clients in the industrial segment are legal entities and independent entrepreneurs, as well as state and local

**THE LARGEST RETAIL NETWORK IN RUSSIA**

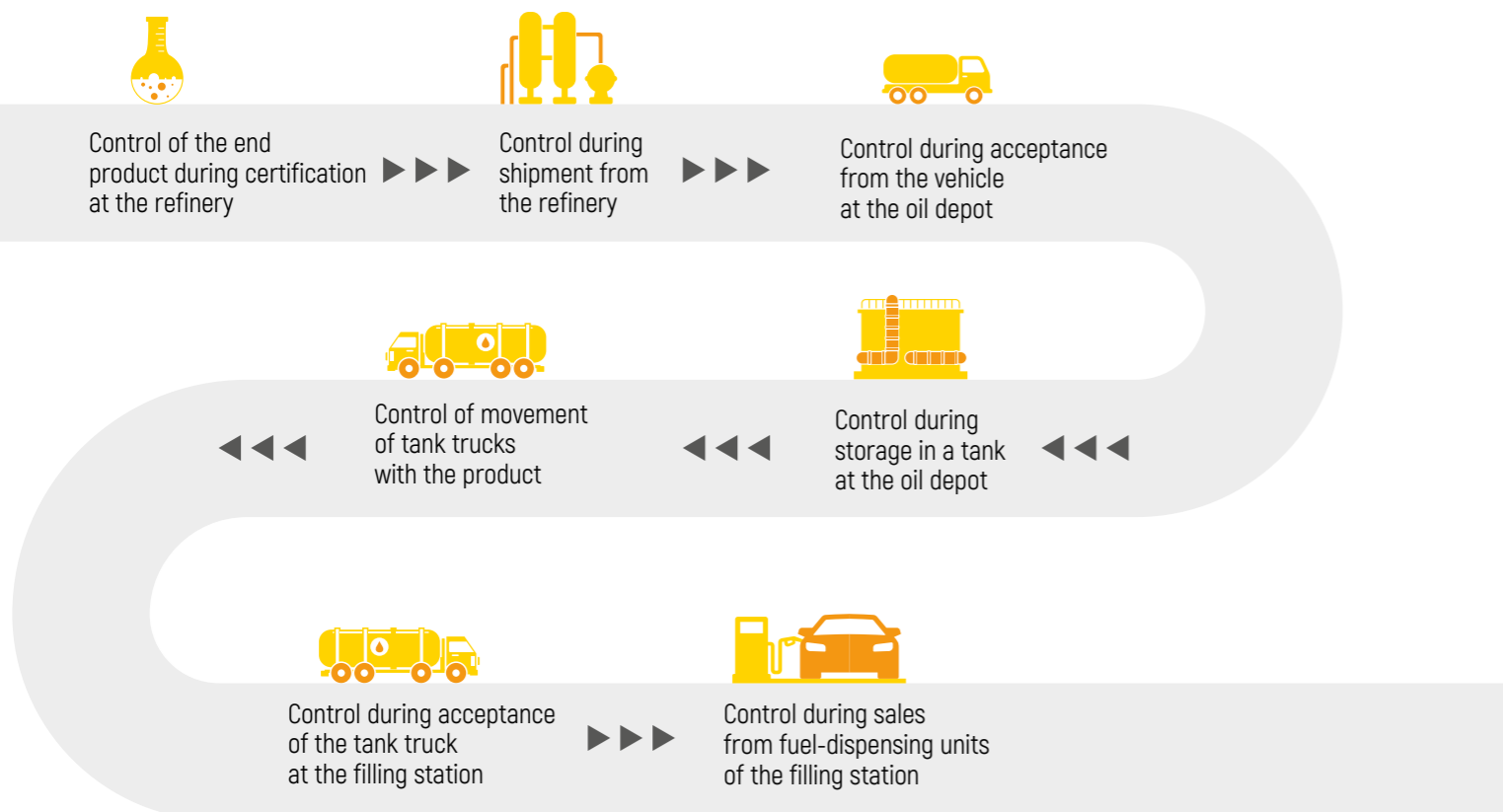
<b>66</b> regions of Russia	<b>138</b> oil depots	<b>2,963</b> filling stations	<b>1,933</b> shops
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government customers working under contracts concluded under competitive procedures. Legal entities benefit from the payment system, which allows the buying of any fuel in Russia, Belarus, Poland, Kazakhstan, or Abkhazia with a fuel card or a virtual fuel card. The RN-Card mobile application supports the virtual fuel card, allowing clients to manage their balance and reports in an online account, optimize fuel costs, etc.

At the end of the reporting period, the Company's retail business network amounted to 2,963 filling stations<sup>1</sup> and 138 oil depots operating in 66 regions of the Russian Federation and in Belarus, Kyrgyzstan, and Abkhazia. Currently, it is the largest retail filling station network in Russia by number of stations and geographical coverage, accounting for 30% of the retail motor fuels market. The total amount of wholesale and retail petroleum

<sup>1</sup> Of large and small formats.

**Fuel quality assurance is conducted in 7 stages**



products sold exceeds 20 mln tonnes per year. Rosneft's own and rented filling stations incorporate 1,933 shops and 1,138 cafés.

Rosneft is the largest producer of high-quality lubricants in Russia thanks to the scientific capacity of 29 design, research and development institutes and its own resource base of mineral and synthetic oils. The assortment of petrol, oil, and lubricants addresses the needs of large industrial enterprises and private consumers and includes over a thousand items:

- base and industrial oils;
- motor and transmission oils for cars and trucks, buses, agricultural and special-purpose machinery, and railway and ship transport;
- special aviation oils;
- hydraulic, gearbox, turbine, compressor and transformer oil, etc;
- special products (lubricants, softeners, wax products, etc);
- fuel and oil additives.

Rosneft pays particular importance in its retail business to providing

customers with high-quality petroleum products and lubricants, maintaining high client service standards, and ensuring the required level of industrial and environmental safety.

**Ensuring High Quality of Products**

Being a leader on the motor fuel market, Rosneft has over the years successfully ensured the compliance of its products with all required standards and clients' expectations. The Rosneft trademark is one of the most recognizable on the petroleum products market across the regions of the Company's operation, and it is associated with high-quality fuel sold at filling stations.

**The Company has implemented a fuel quality management system across all stages of its production and transportation ensuring the stability of fuel parameters during the whole cycle – from refinery tank to car tank. Fuel quality is similar and corresponds to the requirements of the 5th ecological class of the Technical Regulations of the Customs Union (CU TR 013/2011)**

15 mobile Rosneft laboratories inspect the products continuously and cover 52 regions of the Russian Federation. Every year each mobile laboratory inspects more than 700 filling stations.

**to ensure the protection of public health.**

Fuel quality parameters are determined with the use of up-to-date equipment at 11 stationary refinery laboratories and 74 laboratories of the oil depots. The last part of this system consists of mobile laboratories provided with high-tech analyzers for testing products directly at the filling station. The mobile laboratories are used for fuel quality control, including control based on indicators of the products' influence on consumers' health and safety specified in the technical regulations: the content of sulfur and benzene in gasoline, the diesel-fuel flash point, etc.

**INSPECTION OF FUEL QUALITY BY PUBLIC ORGANIZATIONS**

In April 2018, the Federation of Car Owners of Russia supported by the Petroleum Club of St. Petersburg and participants of the fuel market publicly monitored fuel quality at filling stations in the Northwestern Federal District and also held a practical test of the Guidelines on Organizing and Carrying out Public Monitoring, Partnership and Mutual Cooperation in the Area of the Fuel Market, approved by Rosstandart.

The monitoring covered 20 filling stations belonging to vertically integrated companies including Rosneft,

regional network companies, and independent owners.

Sampling of diesel fuel and AI-92 gasoline was carried out at the filling stations. a total of 40 petroleum product samples were taken, coded, and sent to laboratories for analysis. Representatives of the Rosstandart territorial administration and the St. Petersburg Committee on Law and Order were observers. Following the public monitoring, the sold fuel was confirmed to be of high quality at all inspected filling stations of LLC RN-Severo-Zapad (a Rosneft subsidiary).

In addition, fuel quality is controlled by Rosstandart. In 2018, 28 inspections of petroleum product enterprises were carried out. During the inspections, including unscheduled ones (which were carried out due to consumers' requests), the quality of fuel stored at 13 oil depots and provided to clients at 100 filling stations across the country was inspected. The inspections confirmed the high quality of the Company's motor fuel, and no deviations from regulatory requirements were detected.

The quality of fuel sold via retail at the Company's foreign assets (on the territory of Abkhazia, Belarus, and Kyrgyzstan) corresponds to the requirements of the Technical Regulations of the Customs Union and is monitored using third-party independent laboratories.

**Products with Enhanced Ecological Indicators**

As a result of several refinery development projects and the re-equipment of existing facilities within the terms specified by the Technical Regulations of the Customs Union, the Company has managed to transit fully to ecological class 5 fuel on the Russian market.

In 2018, the Company brought the following types of new fuels with improved ecological and operational indicators to the Russian market:

- **EURO 6** gasoline. Rosneft's EURO 6 gasoline contains less sulfur (leading to decreased corrosiveness), and less benzene and aromatic hydrocarbons (leading to decreased toxicity of exhaust gases). When using EURO 6 AI-95 with improved ecological and operational indicators, the quantity of sediment on intake valves is decreased by 12.5%, and the quantity of sediment in car engine combustion chambers is decreased by 12.7%. EURO 6 motor gasoline of Bashneft's refineries and the Saratov Refinery is sold at Rosneft filling stations in Krasnodar Territory and at Bashneft filling stations in Bashkortostan. During the project, positive results were obtained. These results demonstrate that the new fuel is trusted and in-demand.
- **Pulsar 100**. High-octane fuel with decreased tendency to sediment formation. While Pulsar 100 fuel was developed, the fuel blend composition was changed significantly in relation to AI-98-K5 fuel: the content of aromatic hydrocarbons decreased, while the content of high-quality components with

a low tendency of sediment formation was increased. Pulsar 100 produced by Rosneft corresponds to the requirements of Technical Regulations CU TR 013/2011 for gasolines of K5 ecological class and standards according to qualification methods. Pulsar fuel is sold at filling stations of the Company in the Moscow region. In 2018 Pulsar fuel won the Russian Product of the Year 2018 award in the Most Popular New Product of the Year competition, Fuel category, confirming the fuel's high quality and the trust of consumers.

- **BP ACTIVE** fuel. This fuel, based on a special technology, provides a high level of protection against sediment formation and removes existing sediments. ACTIVE technology is a unique set of components specially developed for a new line of BP fuels that to the highest extent possible prevents sediment formation on key engine parts and helps to increase fuel savings and restore engine power.

**Improvement of Client Service Standards**

Apart from high-quality fuel, client service quality is the key driver in retail. The Company runs a Mystery Buyer program to assess retailer service on a regular basis. All retail filling stations, of large and small formats, participate in this program. The overall level of consumer service quality in Rosneft's retail network in 2018 was assessed at 94.49%, an improvement on 2017.

The Company has initiated a hotline for issues regarding petroleum product sales which receives calls from clients of filling stations of three brands – Rosneft, BP and Bashneft. The Company appreciates clients' opinions and aims to improve the quality of services constantly. Each recorded complaint is followed up by a check from the Group Subsidiaries' specialists. The clients obtain feedback in a form that they select: by email, telephone or via an official letter. In 2018, the hotline received and processed more than 6 thousand complaints.

**SALES OF GASOLINE FUEL**



Rosneft has been implementing a program to grow its NGV filling stations network in Russia since 2014, which is in line with the Instructions of the President and the Government of the Russian Federation on Measures to Increase Energy Efficiency by Using Gas as Motor Fuel.

Compressed natural gas (CNG) is gas used as a motor fuel instead of gasoline, diesel fuel, and propane-butane. CNG's use in transport

reduces engine wear and significantly decreases the content of harmful substances in exhaust gases. In addition, CNG is essentially cheaper than usual fuel (gasoline or diesel fuel) and the more widespread gas fuel – propane-butane.

In 2018, ten CNG pumps were installed at current filling stations in four regions of Russia, at which more than 1.5 thousand cars are filled every year.

Both special stations and CNG pumps at existing filling stations are part of gas filling station infrastructure, and this is extremely convenient for consumers, allowing the Company to ensure a high level of client service. The upcoming plans of the Company include increasing the number of compressed gas pumps in the network.

**Company's Approach to Pricing**

Rosneft follows high standards in social responsibility, pursues a balanced pricing policy and makes all efforts to provide fair prices for consumers. The Company realizes its role and influence on the fuel market in general. Company retail prices are at the market's average level. The Company never initiates price rises by itself, but tries to smooth any price increase caused by external reasons and prevent speculative fluctuations.

**Availability of Fuel in Remote and Hard-to Access Regions**

One of Rosneft's focuses is petroleum products marketing and distribution to end consumers throughout the territory of the Russian Federation, including remote and hard-to-access regions: Kamchatka Territory, the Magadan Region, the Nenets Autonomous District, the Republic of Sakha (Yakutia), the Sakhalin Region, the Chukotka Autonomous District, and the Yamalo-Nenets Autonomous District.

Petroleum products are supplied to the Republic of Sakha (Yakutia) and northern areas of the Irkutsk Region by maritime transport via shipments from the oil depot of JSC Irkutsknefteprodukt in Ust Kut. The oil depot in Ust Kut is an important part of the supply chain to deliver petroleum products by river under the Northern Supply Haul program.

LLC RN-Vostoknefteprodukt supplies motor fuels to the Magadan Region, Kamchatka Territory, and Sakhalin Island using a tanker fleet.

**Fuel Supplies to the Public Sector**

Continuous provision of motor fuel is a key priority for sales ventures of the Company. These ventures are engaged in small-scale wholesale of motor fuels from the oil depots and retail sales from the Company filling stations.

The Company sales ventures regularly participate in procurement procedures of government customers organized under federal laws. The Company is a single supplier of motor fuels to the majority of the largest federal government customers.

**ELECTRIC CAR CHARGING COLUMNS AT ROSNEFT'S FILLING STATIONS**

The first charging columns for electric cars were installed in 2014 at eight Olympic format filling stations in the Krasnodar Territory. In the reporting year, two charging columns were installed at Rosneft filling stations: the 22 kW charging column in the Tver Region and the first fast 50 kW charging column in the Leningrad Region.

In 2019, the Company plans to open one more fast 50 kW charging column at a Company filling station located along the Federal Highway M-10. These columns allow the charging of electric cars in less than one hour, which makes the use of this new kind of transport much easier.



In 2018, the total amount of petroleum products wholesale and retail exceeded 20 mln tonnes

# Observance of Human Rights



Rosneft strictly follows Russian law, the Social Charter of Russian Business and the Universal Declaration of Human Rights. It recognizes the importance and value of fundamental human rights and freedom declared by the UN, including freedom of association, recognition of the right to collective bargaining, employment rights, rights to a favorable environment, health protection, and rights of indigenous peoples.

In respect of the observance of human rights, the Company follows the requirements of the ILO and UN Global Compact.

Principles of the Company relating to observing human rights are described in Rosneft's Code of Business and Corporate Ethics and the Sustainable Development Policy of the Company. All employees of Rosneft and the Group Subsidiaries are aware of the content of the Code of Business and Corporate Ethics, including information on human rights.

In addition, during interaction with its suppliers and contractors in Russia, Rosneft requires the observance of Russian labor laws, including meeting health and safety requirements. For foreign assets, standard approaches of the Company are taken as a basis, while local procedures are developed in order to comply with local laws.

The Company has required processes in force aimed at prompt responses to human rights complaints. The Security Hotline and Ethics Hotline are the key tools in this area. These hotlines are available both for the Company's employees and for any other stakeholders' representatives (written messages are accepted in all local languages used in the countries and regions where the Company operates). The Company guarantees confidentiality and security in relation to messages transmission. The employees can also contact experts on ethics working in almost all Group Subsidiaries on any ethical matter, including human rights aspects.

Check procedures are followed in respect of all facts, information on which is collected using specified feedback tools.

## Personnel Training on Human Rights

Training on issues relating to human rights is integrated into Company training courses. 3,092 persons completed training in diversity and equal opportunities and discrimination prevention in 2018 at Rosneft (35,373 hours).

The main topics concerning human rights included in the training programs are as follows:

- Human rights: approaches and terms;
- Civil society and rule of law;
- Human rights protection;
- Labor rights in different countries;
- Business ethics;
- Management of cultural changes;
- Design of efficient social communications.

# Compliance Framework



The Company is highly committed to preventing and fighting corruption. In 2018, it continued to build a robust framework designed to ensure compliance with applicable domestic and international anti-corruption laws.

The Company has a Council for Business Ethics, a permanent body composed of ethics leaders and other executives. The Council is a collective body responsible for considering ethics, human rights, conflict of interest issues, monitoring the enforcement procedures for the Code, and ensuring compliance with corporate regulations.

The Council for Business Ethics held two meetings in 2018. The Council for Business Ethics confirmed amendments of the Comprehensive Anti-Fraud and Anti-Corruption Program for 2017-2018 under the National Anti-Corruption Plan for 2018-2020 approved by Presidential Decree No. 378 dated 29 June 2018. In pursu-

ance of the specified Comprehensive Program, activities were organized to prepare guidelines concerning the following aspects: prevention and/or management of conflicts of interest; quantifying demand for training/professional development for officials involved in anti-fraud and anti-corruption activities; conferences and other events on anti-fraud and anti-corruption issues, etc. In order to address provisions of the National Plan, the Comprehensive Anti-Fraud and Anti-Corruption Program has been introduced in Rosneft for 2019-2020.

## Prevention of Fraud and Corruption

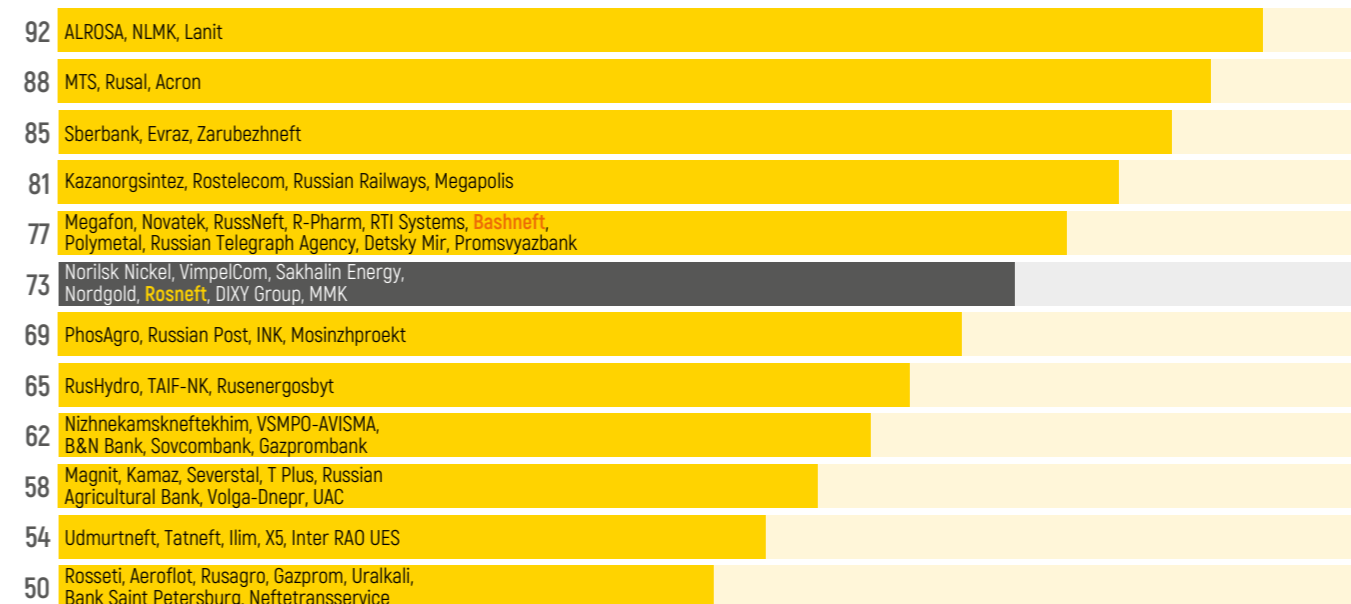
The Company remained focused in the reporting period on enhancing the effectiveness of measures designed to counter corruption and corporate fraud and ensure that both top management and other staff comply with

international and Russian anti-corruption laws, as well as with its internal regulations in this area.

Achievements of the Company in this area were noted by external independent parties. Transparency International analyzed the reports of Russia's 197 largest companies by revenue in 2018. Rosneft was highly praised by it due to the disclosure of data on anti-corruption programs introduced – 73% (with the average result of Russian companies at 27%).

Owing to its robust controls over contracting, pricing and discount practices, the Company was in the position to detect effectively all indications and evidence of affiliation, vested interests and potential corruption schemes. The 2018 review process covered 122,048 prospective contractors, of which 2,593 applicants were barred from participating in procurement procedures.

## Anti-Corruption Documents - Assessing Russia's Largest Companies. Report "Transparency International - Russia"



<sup>1</sup> Source: Transparency in Corporate Reporting. Assessing Russia's Largest Companies. Report "Transparency International - Russia", <https://transparency.org.ru/special/trac2018russia/docs/report-ru.pdf>



The Company continued systematic efforts to identify commercial schemes involving malpractice or abuse of power on the part of management or third parties. 751 criminal cases were initiated in 2018 based on evidence gathered by security officers of various Group Subsidiaries and provided to law enforcement agencies.

Rosneft continued to take action to prevent instances of theft, fraud or damage during the handling of crude hydrocarbons or petroleum products.

**> 15 thousand employees**

passed internal training programs in compliance and countering fraud and corruption

In 2018, a great number of activities were carried out for prevention and management of conflicts of interests. The Company's Regulations managing conflicts of interest and the Procedure for Corporate Gifts and Hospitality Exchange were introduced, the regulations for Ethical Declarations by the Company's Employees and Selective Checks of Corresponding Data were approved, and a multimedia training course was initiated on Managing Conflicts of Interest and Business Ethics Compliance. Commissions on Managing Conflicts of Interest have been set up at the Group Subsidiaries.

The Company vets job applicants on an ongoing basis to identify potential conflicts of interest, including affiliation.

Training in anti-corruption and anti-fraud practices forms an integral part of a wider compliance training program.

In 2018, both in-class and distance internal training programs in compliance and countering fraud and corruption were organized. More than 15 thousand

employees of Rosneft and the Group Subsidiaries took part. These included:

- Countering Corruption and Fraud distance training course for 2,132 employees;
- Managing Conflicts of Interest and Business Ethics Compliance distance training course for 12,183 employees;
- A Consistent Approach to Developing the Compliance Function in-class course implemented by in-house coaches of the Company for 1,218 employees;
- In-class internal training on the subjects a Consistent Approach to Developing the Compliance Function: Anti-Corruption Compliance as well as Managing Conflicts of Interest were completed by more than 470 employees of Rosneft's Head Office and the Group Subsidiaries as part of corporate conferences and activities for General Directors of the Group Subsidiaries, deputy HR directors of the Subsidiaries, and heads of units for social programs and corporate culture of the Subsidiaries.

Employees of Rosneft and the Group Subsidiaries take part on a regular basis in corporate and open training programs and conferences on compliance, and countering corruption and fraud. In 2018, 37 Company specialists participated in 17 such activities. Further, the Company held conferences on anti-corruption compliance for employees of joint ventures involving foreign partners.

**Security Hotline**

The Company operates a 24/7 Security Hotline to report on cases of corporate fraud and corruption.

27,081 complaints were received during 2018 via the Security Hotline, including those regarding the following violation categories:

- corruption, fraud, and theft – 370;
- violation of procurement process regulations – 77;
- violation of ethics and labor laws, and conflicts of interest – 214;
- violation during sales of petroleum products – 288.

The amount of detected/prevented damage was RUB 34.52 mln.

Information on the Security Hotline operation is submitted to the Chairman of the Board of Directors of Rosneft every three months.

An analysis of the Security Hotline has revealed that this operation has an influence on employees, restraining them from unlawful acts and violations of local internal regulations.

**27,081 complaints**

were received during 2018 via the Security Hotline

**CODE OF ETHICS DAY**



Code of Ethics Day was held in more than 60 Group Subsidiaries in September 2018, aimed at popularizing the Code of Business and Corporate Ethics as well as corporate values, sharing best practices, and increasing employees' engagement level and loyalty.

Activities during Code of Ethics Day were organized as a large-scale

information campaign: a special issue of the Ethics of Business Relations information bulletin was prepared; art contests, business games, and master classes for employees of the Company's enterprises were held; and additional consultations were organized with ethics experts – on Experts Open Day. Winners of the contests were awarded corporate prizes.

**Ethics Management Framework**

In 2015, the Company adopted a new version of the Code of Business and Corporate Ethics, which is aligned with best domestic and global practices. The Code includes a set of unified standards of business behavior expected from employees in terms of relationships with each other, business partners and stakeholders. **The Company's entire staff (100% of employees) have been familiarized with the Code.**

the Company continued to build awareness of the Code and promote a compliance culture in 2018 by holding business ethics workshops, training sessions

and contests. The Company publishes regular articles on business ethics in the Our News information bulletin and Oil Courier newspaper.

The Company continued to run the ethics hotline, which is designed to obtain feedback on ethics issues. A total of 88 queries were received in 2018, relating mostly to compliance with labor laws (26%), ethics breaches including human rights matters (17%), requests for additional information about business ethics, and other questions. All queries were duly handled by the relevant departments. There is an ongoing exchange of information with the Security Service that supervises the Company's Security Hotline.



# 02

## Health, Safety and Environment



**Christoph Nehring**

Rosneft Vice President for HSE



The company aspires to accident-free operations ensuring the safety of its employees and contractors and minimizing the impact on the environment. The company implements programs using best national and international practices which are moving us forward and continuing the progress towards achievement of the UN sustainability goals. With clear objectives in mind all our employees do their best to deliver continuous improvement of performance indicators, working in an inclusive and systemic manner with all stakeholders.

### The Black Sea Dolphins Study

Rosneft has initiated a comprehensive three-year project involving research and monitoring of marine mammals, given that they are indicators of the extent to which the Black Sea ecosystems are in a stable state. Since the 1980s, no studies of the Black Sea dolphins had been conducted due to a lack of funding. Rosneft's ecological initiatives also involve an interdisciplinary approach, including integrated research by experts in various science disciplines (oceanography, geology and marine biology).

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## HSE Management System



The HSE strategic goal is to become a global leader in safe operations, protecting health and ensuring safety of employees and local communities in the Company's regions of operation, reducing its environmental footprint.

### HSE Policies and Strategies

As Russia's top oil and gas producer and a global industry leader, Rosneft understands the scale and nature of the impact that may be caused by its operations and takes a responsible approach in order to stay accident-free, improve workplace safety and minimize its environmental footprint.

The Company's commitment is to ensure safe environment for its staff, partners, and communities in regions of its operation. To deliver on its commitment, Rosneft is focused on improving production processes, increasing the reliability of equipment to ensure its safe and accident-free operation, and implementing new technologies.

The Rosneft-2022 Strategy outlines the Company's objective, target indicators, and priorities for the HSE agenda. The HSE strategic objective is to become a global leader in safe operations, protecting health and ensuring safety of its employees and local residents in the Company's regions of operation, and minimizing its environmental footprint.



By 2022, Rosneft is determined to join the first quartile of global oil and gas companies in HSE performance as measured by indicators such as LTIF, LWIF and PSER Tier 1.

In 2018, the Board of Directors approved a new HSE Policy of the Company. This Policy is a framework document intended to represent Rosneft's position

on HSE, including road traffic, fire, radiation, gas safety and blowout prevention, facility integrity, and prevention of and response to fires and emergencies. The Policy formalizes unified principles and approaches in this sphere to ensure constant improvement of the Company's Integrated HSE Management System performance.



Under its the Policy, Rosneft has committed to the following:

- Prioritize health and safety of people over productivity;
- Prioritize emergency prevention over accident localization and response;
- Improve the sustainability of the Company's operations by protecting and restoring natural resources, including through land reclamation programs;
- Mitigate the negative impact on the environment from the Company's operations;
- Reduce the impact of the Company's business activities on climate change;

- Protect ecosystems and biodiversity, especially it its offshore projects.

The Integrated HSE Management System has been developed in the following six focus areas: leadership and safety culture, capability, safety management system, control, integrity and risk management, reporting and performance management.

Rosneft continues to develop the fundamental components of the Safety Management System to ensure progress towards its strategic HSE objectives by updating and adopting the following internal standards and regulations:

- HSE Leadership standard;
- HSE IMS standard;
- HSE Risk Management Regulation.

In 2018, the Company set up a system for recording process safety events (PSE) and launched a pilot project

to systemize recordable PSE in line with best international practices. The Company's employees were provided with comprehensive training to be able to fully apply the criteria for recordable PSE and conduct a follow-up analysis of such events.

### HSE Committee

A permanent collective body – the Rosneft Health, Safety and Environment Committee – is a part of the Company and prepares recommendations/resolutions/decisions aimed at developing a safety culture, preventing on-the-job injuries, occupational diseases, and emergencies, including those with environmental consequences. The Committee, made up of functional and business unit top managers, regularly reviews the matters that provide Rosneft's governing bodies with confi-

dence in proper HSE risk management by the Company, as well as reviewing the implementation and efficient use of plans for constant HSE performance improvement.

**Representatives of the Rosneft Interregional Trade Union Organization participate in the Committee meetings on an ongoing basis.** In the reporting period, the Committee recognized the employees in charge of labor safety in the trade union organizations, whose work has improved labor safety in the Group Subsidiaries. The Committee decided to expand trade union HSE control.

In 2018, the HSE Committee held 5 meetings and took over 60 decisions in key HSE development areas for the Company, including:

- Action plans in key HSE development areas under the Rosneft-2022 Strategy and their implementation status;
- Improvement of contractors' labor safety;
- Review of the results of major accident investigations;
- Development of the Medical Emergency Response System at the Company's production and process facilities;
- Development of the Company's risk and integrity management approaches;
- Safe air transportation in the Company.

**The HSE Committee also reviews the results of Rosneft HSE activities, including monitoring of the achievement of the strategic objectives, and reviews projects and programs for HSE risks mitigation, all on a quarterly basis.**

Based on the analysis of HSE performance indicators, Rosneft top managers (HSE Committee members) develop a collective position on the implementation of relevant HSE objectives, and on the establishment and monitoring of the Company's values relevant to employees' safe work. The results of the Company's HSE activities are consolidated into a quarterly report which is submitted for approval to the Board's Strategic Planning Committee and the Board of Directors. The Board members actively participate in discussions of HSE matters and, thus, get involved in HSE risk management activities.

### Certification of the Integrated HSE Management System

In 2018, the Company successfully underwent a certification audit of compliance with the following standards: ISO 14001:2015 Environmental management systems. Requirements with guidance for use; and OHSAS 18001:2007 Occupational health and safety management systems. Requirements. The results of the certification audit confirmed the management system's compliance, certificates were issued, and the number of certified Group Subsidiaries increased from 51 to 57.

### HSE Risk Management

HSE risk management is governed by the Regulations on HSE Risk Management. Being a part of a common risk management system of the Company, it specifies a single structured procedure

to identify hazards, assess risks and plan actions to manage those.

Risks are managed at several levels: from the heads of business units in the Group Subsidiaries' to Rosneft's top managers. The results obtained at a lower level serve as the input data to make decisions at higher levels.

The Company's health, safety and environmental risks are related to the following:

- Accidents, incidents, fires, or other situations involving damage to the Company's operating facilities and equipment or deviation from process specifications;
- Harm to health of employees, contractors, visitors or the local communities;
- Impact on the environment from operations;
- Penalties, suspension of operations, damage to business reputation or loss of trust on the part of stakeholders due to failure to comply with applicable HSE regulations.

The Company evaluates and analyzes its impact on water resources. For detailed data on the Company's actions in relation to water resources see the Water Consumption and Wastewater Discharge section of this report.

Based on the evaluation results and risks prioritizing, measures to prevent different emergencies are introduced and a prompt and effective response is provided. The HSE risk management process is aligned with Company's business planning to ensure funding for specified risk mitigation priorities.

**60**  
resolutions

taken by HSE Committee in key HSE development areas in 2018

**57**  
Group Subsidiaries

certified under ISO 14001:2015

## Maintaining Safe Operations



### Industrial Safety

#### Equipment Functioning

Proper use and timely decommissioning are key drivers to mitigate risks of emergencies and negative environmental impact. To this end, the Company develops equipment renovation and upgrade plans specifying economically feasible methods and considering potential risks and expenditures.

The overall Company program to ensure operability of its equipment includes target programs for the business units developed on the back of risk analysis, experience from emergencies and incidents, and technical diagnostics. The program's structure and funding are constantly updated to take account of current financial and operation conditions.

The **Upstream segment** continued to implement the Pipeline Reliability Improvement Program, covering a number of actions on renovation, overhaul, repair, inhibition, diagnostics (including internal pipe diagnostics), inhibition protec-

tion of pipeline systems and detection of pipeline leaks from drones.

Due to the Program's implementation in 2018 the field pipelines' failure rate decreased by 5.9% year-on-year.

Two target innovative digitalization projects to improve the reliability of pipelines are in progress under the Rosneft-2022 Strategy.

The project of Process Design for Monitoring and Support of Decisions while Developing Pipeline Reliability Improvement Programs involves the development of a software system with a program containing automated drafting of strategies and activities to improve the reliability of pipelines, taking into account different scenarios for each Company production subsidiary. This hi-tech solution will ensure deeper and more precise analysis with a wide range of methods to mitigate environmental and technological risks from the pipeline operations. The concept for an information system was developed in the reporting period for monitoring and decision making

when field pipeline reliability improvement programs are created. Testing of the pilot software solution is planned for 2021, with further commissioning in all production subsidiaries starting from 2022.

As part of the project Development of a System for Selection of Design and Methods for Pipeline Chemical and Industrial Protection, work is in progress to develop special software with a regularly updated database containing physical and chemical properties of the medium and a built-in forecasting tool. This program will enable the optimal selection of materials and methods for anticorrosion protection for a particular time period and for each production subsidiary separately. The project is aimed at extending the failure-free operation of field pipelines. The pilot project is planned to be completed in the end of 2021. In the reporting year, an instruction was drafted as part of the project to optimize the selection of design and methods of pipeline anticorrosion protection based on physical and chemical properties of the medium used.

#### Pipeline Failures and Oil Spills, Upstream

Period	2016	2017	2018
Total pipeline failures per million tonnes of oil and gas condensate produced	35.3	37.4	33.9
Crude oil and petroleum product spills due to pipeline failures, tonnes	694.5	684.3	647.2
Crude oil and petroleum product spills due to pipeline failures per million tonnes of oil and gas condensate produced	3.10	3.00	2.81
Rate of pipeline failures per kilometer per year	0.127	0.101	0.095

#### Pipelines: Basic Characteristics and Safety Improvements, km<sup>1</sup>

Period	2016	2017	2018
Total length of in-field pipelines	88,463	116,358	119,077
Total length of in-field pipelines in operation at period end	62,630	82,513	83,155
Reconstruction and repair of in-field pipelines	1,276	1,426	1,584
Diagnostics and examination of in-field pipeline safety	18,138	23,998	24,825

<sup>1</sup> Data excluding intercluster pipelines.



Within the **Oil Refining and Petrochemicals business**, a set of programs is being implemented to ensure the equipment's functioning and to prevent emergencies resulting in an adverse environmental impact. The programs specify the replacement of pipeline sections with an expired time limit or that are worn due to corrosion; the upgrading of pipeline equipment to mitigate the risks of leakage and wear-corrosion, as well as the improvement of operational performance.

The programs are planned to be implemented by 2023. Over 4,900 process pipelines and 14,600 pipeline sections are planned for replacement, and about 300 upgrading activities are scheduled. Total expenditures on the programs' implementation will exceed RUB 30 bln. In 2018, investments in pipeline replacement amounted to over RUB 400 mln. Under the above-mentioned programs, 177 pieces of the most critical pipelines were replaced, 319 dead legs

of process pipelines were eliminated, and over 2 thousand elements of pipelines were replaced in order to ensure that the material used was appropriate for the operating conditions.

In the **Refining segment**, a program for the development of tank farms has started to enhance the effective operation of products and feedstock tanks with the future development plans and safety improvements. Under the programs, action will be taken to replace, remove, construct, and renovate the tanks. In addition to previously approved programs for Ryazan Refinery and Saratov Refinery, programs for Novokuybyshevsk Refinery and Kuibyshev Refinery were developed in 2018. Programs for other Company refineries are also in development.

In the **Commerce and logistics segment**, a target HSE Program for Equipping Petroleum Product Tanks at the Tank Farm Facilities with Process Equipment, Monitoring Systems for Hydro-

carbons Vapor Concentration in the Atmosphere, and Ventilation Systems was approved in 2018.

The system of hydrocarbons vapor concentration monitoring will ensure safety at work and more efficient control over operating processes. Installation of siphon drains / stripping nozzles will minimize the risks of unfavorable events during tank and vessel cleaning operations.

Phase 1 – up to 2021 – involves the implementation of the target program in the largest assets (tank farms) of fifteen Group Subsidiaries. The preliminary budget for the phase shall be RUB 227 mln and it will be updated in 2019 depending on the FEED results and cost estimates for the construction works. Phase 2 will involve another nineteen Group Subsidiaries till 2022. The reporting year saw the estimation of the works' cost, as well as the drafting and approval of the Phase 1 investment memorandum.

**Blowout Prevention**

In 2018, the total number of well control events was reduced by 20%. were no well control events recorded event during well construction. The results were achieved to the blowout prevention activities of the Company:

- developing the supervising service;
- the provision of fluid parameter monitoring systems for crews involved in well workovers and servicing;
- installation of 24/7 CCTV at well construction and workover sites;
- training classes equipped with computer simulators;
- replacement of blowout preventers for crews involved in well workovers and servicing with new hydraulic preventers and heated preventers.

**Fire Safety**

The Company has a program in place covering fire safety at production assets, – Major Areas of Fire Safety activity in 2018-2021.

The program is targeted to increase both the Company's firefighting department's readiness and the Company's facilities' resistance to potential fires, as well as to comply with federal and corporate requirements.

As at the end of 2018, 116 departments dealing with all aspects of fire safety issues and employing trained and certified staff of 8,600 people were engaged in fire safety activities at Rosneft's production facilities. The fire safety material

**400 trainings**

arranged on oil spillage cleanup, fire extinguishing, and potential emergencies isolation in 2018

resources include 117 fire stations equipped with 686 fire vehicles and over 17 K pieces of fire-fighting equipment being in compliance with the regulatory requirements.

**Accidents at the Company's Sites**

In 2018, due to the Company's comprehensive and intense activities aimed at ensuring industrial safety and accident-free working conditions, the number of accidents significantly decreased.

Despite the fact that the accidents were caused by local factors and did not lead to production site shutdowns, the Company considers these events as significant and requiring special attention to the operability of equipment.

The Company takes all necessary actions to reduce the accident rate. Each accident is investigated to identify both direct and systemic causes. Based on the investigation results, Lessons Learned are prepared and sent out to the employees, together with a list of corrective actions to prevent similar accidents in future. The Company works with design companies to update the project documentation and to improve the equipment operating parameters. The employees undergo additional industrial safety training and certification. Unscheduled checks of equipment serviceability take place.

**Industrial safety control system**

Rosneft develops plans and programs that ensure the Company has the required capability and resources to prevent accidents or eliminate their consequences. In case of accidents, the plans and programs are updated to take account of them. Internal or joint training arranged together with the regional emergency response authorities also contributes to the updating.

Over 400 training sessions were arranged in the reporting period on oil spill cleanup, fire extinguishing, and the localization of potential emergencies, including command and staff drills, demonstration and practice training.

Over 120 in-process control audits were conducted by the Head Office HSE departments in the Group Subsidiaries. The results of the audits are used to develop corrective actions to eliminate identified violations, and help implement such programs as Leadership, Safety Culture, HSE Training, and Elimination of HSE Violations.

For more details on emergency prevention and response see the corresponding Section of this report.

**Golden Rules of Safety**

To protect employees' health, the Company has defined the following principles:

- communication of basic safety rules to reach every workplace (corporate responsibility);
- imposing obligations on each employee of the Company and contractors to know and use the basic rules (individual responsibility);
- encouraging "stop the job" practice in case of failure to comply with basic rules and encouraging employees to report any dangerous situations (personal responsibility).

The Golden Rules of Safety give brief and clear instructions covering the ten most hazardous types of works. The Rules were introduced in the Company in 2014; they contribute to employees' safety during all production activities. The Company updated its Golden Rules of Safety in 2018 and provided a safety Golden Rules handbook to every employee. It also introduced a dedicated training course, which was successfully completed by in-house health and safety trainers who provide safety training to employees at all levels, from the shop floor to directors. Work safety issues are discussed in an open dialogue that serves as a discussion platform bringing together executives and their employees.

**Occupational Health and Safety**

Rosneft is the largest publicly traded oil company in the world and its employees and contractors deal with complex and potentially dangerous operations on a daily basis in almost all regions of the Russian Federation and abroad. Public safety in view of the Company's operations is the highest priority regardless of location and type of activity. Rosneft believes that any accident can be prevented. Based on this principle, the Company arranges preventive actions and programs involving employees at all levels in these activities.

**Leadership and Safety Culture**

Leadership and strong safety culture are main drivers to implement the strategic goals of the Company in terms of safe working conditions.

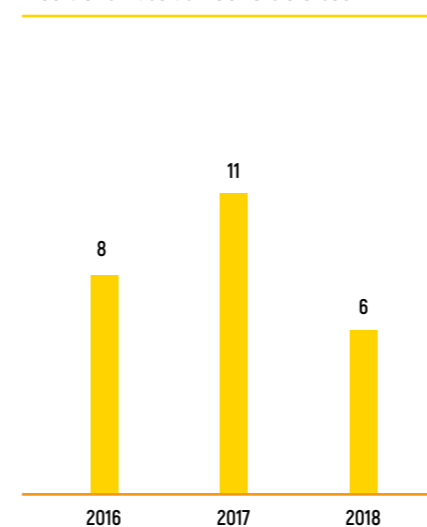
**All the Company's managers are responsible for achieving the OHS objectives. They must set an example of safe behavior and leadership in OHS.**

Main functions of OHS leaders are putting into practice and demonstrating the importance of compliance with OHS requirements; inspiring the Company's employees to follow HSE requirements and OHS principles specified in the Company's HSE Policy, and moni-



116 fire departments of all types were engaged in fire safety activities at Rosneft's production facilities.

Accident Rate at Rosneft's Sites



toring the fulfillment of requirements. The Chief Executive Officer defines the overall direction of the Company in creating and developing HSE leadership. In 2018, in compliance with the Company's order, the General Directors of 170 Group Subsidiaries approved their personal HSE commitments with their top managers who are the supervisors of these Group Subsidiaries.

Personal commitments of a leader include leadership criteria based on four principles:

- **Belief** ("safety minutes" during staff meetings, involvement in behavioral audits of a subsidiary or contractor employees' safety);
- **Credibility** (participation in commissions dealing with preparations for hazardous works, leading by example in safety rules compliance – the Golden Rules of Safety – during in-process control audits);
- **Action** (holding meetings with Company staff and the staff of contractors to discuss industrial and labor safety issues, conducting quick surveys among employees about OHS actions in progress);
- **Support** (personal interviews and incentives for employees who prevent accidents, stop unsafe work, or achieve significant results in OHS).

The Company established a safety culture benchmark after conducting an annual survey to assess the level of safety culture among 17,000 employees.

### OHS Training

Employees' knowledge of and expertise in industrial and labor safety are indispensable to ensure safe work. The Company arranges and strictly monitors that all employees undergo mandatory OHS training, and Rostekhnadzor certification on industrial safety called Occupational Health and Safety.

In 2018, mandatory training was conducted in all Group Subsidiaries, including branches and representative offices. In total, the training took 10 mln man-hours.

### LEADERSHIP WORKSHOP



In November 2018, the Company initiated a leadership workshop for top managers called a Leader's Influence on Safety Culture, involving the executives from our partner companies BP and Equinor.

The participants discussed reports and topical questions on leadership development. The program included practical sessions to generate ideas

about methods a leader can use to influence safety culture.

The workshop was conducted in the spirit of openness and dialogue. Experience sharing with BP and Equinor showed that safety and leadership culture improvement are still important and high-priority activities for any company.

The Company undertakes additional OHS training programs. The Company has implemented training based on work of in-house trainers, who develop courses on key OHS subjects. As of the end of 2018, 587 in-house trainers were trained in the Group Subsidiaries. During the reporting period, 421 training sessions were organized and 5,622 employees were trained by means of internal corporate courses, Leadership in Health and Safety, Investigation, HSE Risk Assessment and Management. In 2018, the total number of hours of additional in-house training in OHS exceeded 300,000.

A new corporate course was developed in 2018 – the Golden Rules of Safety. 388 in-house trainers conducted over

a thousand training sessions and trained over 12 K employees of the Company.

### Transport Safety

Rosneft regularly arranges and conducts activities to ensure traffic

**587**  
in-house  
trainers

trained in OHS in the Group Subsidiaries



safety and implements initiatives preventing road accidents.

The Company has in place the Regulation on transport safety management system, which specifies requirements to vehicles, equipment, and drivers, which are applied in the Company, contractors, and subcontractors. In accordance with the Regulations, as of the end of 2018, 83% of vehicles were equipped with in-vehicle monitoring systems, and 71% of vehicles were equipped with dashboard cameras.

The Company actively communicates transport safety requirements and monitors compliance:

- A number of safety campaigns were held in the Group Subsidiaries in 2018: We are For Road Safety 2018, Safe Road 2018, Car-Free Day, and Slow Down for Kids.
- Accident Prevention commissions are standing bodies to help prevent accidents in the Company's subsidiaries and contractors operating vehicles. They monitor compliance

with the Regulation on transport safety management system.

- Emergency drills are held for employees (equipment sinking during ice operations on rivers, lakes, and bogs; transportation by winter road and ice crossings; vehicles parked on the highway at night; fire extinguishing and emergency uncoupling for vehicles transporting hazardous materials; escaping from vehicles in an emergency).
- Rosneft gives planned briefings to drivers/operators of heavy vehicles, special vehicles and tractors that operate in protected licensed power line areas of Group Subsidiaries.
- The Company prohibits that employees of both the Group Subsidiaries and contractors/subcontractors sit in the front passenger seat to avoid serious injuries in road accidents during employee transfers by minivans.
- Traffic police officers participate in checks in the Group Subsidiaries.

As half of registered road accidents occur through the fault of third parties, the Company engages with regional authorities to improve transport safety. Current agreements with the administrations of the Krasnoyarsk Territory, the Primorye Territory and the Chechen Republic were expanded in 2018 to include provisions dealing with road safety.

### Company OHS Performance

The Company records all accidents both with Company employees and contractors/subcontractors' employees. Recording the contractors'/subcontractors' data makes it possible to increase control at workplaces and improve the occupational safety system. Based on the findings of each accident investigation, the Company generates Lessons Learned materials which describe both direct and systemic causes and contain accident-preventing instructions, and communicates them to all Group Subsidiaries.

Changes in the fatal accident rate (FAR) in 2018 were due to an aircraft accident at the Vankor field. The air transportation services that involved the use of aircraft and flight crew were provided by a contractor in that accident.

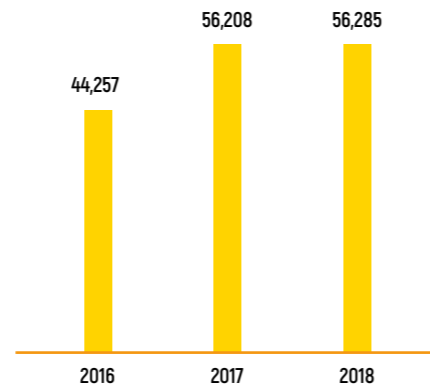
- an air navigation service was established directly at the Vankor landing PAD together with the signing of a contract on the provision of flight information.

To strengthen control over air accident prevention activities, the Company promptly developed and implemented the following:

- a multilevel Company air transportation support monitoring system was put in place including the system of aviation technical audits of air carriers;

**Personal and Industrial Safety Expenditures, Including Fire Safety and Blowout Prevention Costs**

The Company invests significant amounts in personal and industrial safety programs that also focus on prevention of fires and blowouts. In 2018, investments in such areas amounted to RUB 56,285 mln.



Personal and Industrial Safety Expenditures, Including Fire Safety and Blowout Prevention Costs, RUB mln

**Company-Related Injuries**

Period	2016	2017	2018
Incidence rate of non-fatal injuries among Company employees, per million hours worked	0.21	0.36	0.41
Incidence rate of fatal injuries among Company employees, per 100 hours worked	2.28	1.87	3.00
Incidence rate of occupational injuries (including fatalities) and First Aid injuries of the Company's employees due to occupational accidents per 1 (one) million hours worked (TRIR)			0.96
Total occupational injuries among employees	101	211	219
Including fatalities	11	11	18
Lost Time Injury Frequency Rate (days away from work due to an incident or occupational illness) per million hours worked	1743	23.51	23.08 <sup>1</sup>
Incidence of occupational illnesses per million hours worked	0.12	0.110	0.06 <sup>1</sup>

**Contractor-Related Injuries**

Period	2016	2017	2018
Total occupational injuries – contractors	121	140	135 <sup>1</sup>
Including fatalities	43	13	28 <sup>2</sup>

<sup>1</sup> The indicator is given in accordance with the IFRS perimeter and the new calculation method, employees injured in sports activities, or through the fault of third parties or in a road accident caused by a third-party driver, are excluded from the calculation.

<sup>2</sup> Changes in the fatal accident rate (FAR) in 2018 were attributed to the aircraft accident at the Vankor field. The aviation services including use of aircraft and flight crew were provided by a contractor.

**THE COMPANY'S HSE CONTRACTOR FORUMS**

Rosneft's top priorities are occupational health and safety of employees. Each employee, regardless of job category and experience, shares this corporate value. Along with the individual commitment of each Company employee, these rules are brought to partners' attention.

In 2018, the Company continued to hold annual forums with contractors to develop and enhance cooperation, ensuring a safe operating environment. The key subject of the forums was developing HSE cooperation, enhancing the engagement of executives with the employees, and optimization of the HSE system.

In April, Krasnodar hosted the VII Rosneft Regional Forum – Pursue the Goals Learning Lessons. The forum discussed HSE matters related to construction, installation, well operations, works at height and transportation. Best HSE practices were recognized as one of Forum results.

In August, Krasnoyarsk hosted the VIII Rosneft Eastern Siberia Forum named Occupational Safety as a Key to Success. The participants reviewed HSE-related issues during construction and installation works, power works, transportation, the specific nature of hazardous work risk assessments, and site access procedures for contractors. The participants made a decision to enhance the HSE capabilities of contractors, including the distribution of Rosneft's HSE Golden Rules and enhancing the quality of HSE briefings. In turn, contractors gave proposals to the Company on how to improve road safety.

In September 2018, Nizhnevartovsk hosted the IX Western Siberia Forum named In the Interest of Partnerships, for the Sake of Safety. The event was held in an active dialogue format: the participants discussed how to build mutually beneficial coop-



eration with contractors. The event included a quiz and an electronic game testing the knowledge of the Golden Rules and regulatory documents, identification of occupational risks, and a business game on how to ensure employees' safety during transportation to remote fields. The meeting resulted in the development of initiatives to enhance cooperation and in joint HSE commitments.

Participants of all forums noted the effectiveness of the actions taken – current issues were discussed in an accessible and understandable format. Team discussion ensured prompt decision-making. Lively dialogue and active experience sharing in HSE gave an impetus to plenty of promising ideas, the best of which will be implemented in subsidiaries.

## Environmental Impact in the Company's Regions of Operation



Environmental care is an integral part of Rosneft's corporate culture and social responsibility. Rosneft undertakes regular efforts to improve its environmental performance and restore natural resources.

### THE COMPANY'S ENVIRONMENTAL OBJECTIVES TILL 2022



#### REDUCING GREENHOUSE GAS EMISSIONS (GHG)

to prevent climate change



#### MITIGATING ENVIRONMENTAL IMPACT

including through the use of the best available technologies of production, waste disposal, and efficient wastewater treatment, as well as through regular environmental investment projects and nature protection measures



#### TAKING ACTION TO PRESERVE ECOSYSTEMS AND BIODIVERSITY

and to restore natural resources, including land reclamation

The Company achieves the objectives by implementing the Environmental Efficiency Improvement Program till 2025 in four basic focus areas (with a list of annual activities in each area) for all Group Subsidiaries:

- Timely meeting environmental obligations as part of the Company's day-to-day operations (land reclamation, sludge removal, and waste recycling);
- Mitigating the damage caused by third-party actions at the Company's facilities (contaminated lands, sludge pits, drill mud, and oily waste);
- Reducing the share of APG flaring, reducing per unit gross emissions into the atmosphere;

- Increasing water recycling and reuse, sustainably managing produced water and installing up-to-date water treatment systems.

Rosneft's performance is based on the principles of preserving resources and reducing environmental impact. The Company manages and supervises compliance with HSE requirements at all product life cycle and/or servicing stages, including outsourcing processes (contractors and subcontractors).

The Company plans its business activities (in line with Russian Federation laws) taking into account the En-

vironment Impact Assessment (EIA), which determines the possible impact on bioresources, including animals, birds, fish, and flora. Rosneft evaluates the impact type and level: nuisance, pollution, change in the state of the environment, etc.

During production, the Company conducts environmental monitoring, taking measurements of and analyzing pollutants and atmospheric air, monitoring surface, underground and ground water, and monitoring soils and biodiversity conservation, including changes to animal migration. Based on the monitoring, the Company develops and implements

activities to reduce environmental impact from its activities.

The effectiveness of Rosneft's Environmental Management System is assessed by recording and analyzing changes to quantitative environmental indicators. Find more information in the following sections: Reducing Air Pollutant Emissions, Water Consumption and Wastewater Discharge, and Waste Management and Land Reclamation.

### Reducing Air Pollutant Emissions

Reducing air pollutant emissions during the Company's operation is a key priority for Rosneft in mitigating environmental impact. The Company implements an Environmental Efficiency Improvement Program aimed at reducing the share of APG flaring and reducing per unit gross emissions into the atmosphere. The deadline for the Program's completion is 2025. Measures aimed at reducing gas dissipation during gas lift production and introducing sootless flaring at some fields allow a reduction in per unit emissions from production activity totalling 2%. Moreover, measures to upgrade refining and petrochemical processes contributed to reducing per unit emissions by 6.5%. Thus, the Company ramped up the production, refining and sales of hydrocarbons, while leaving gross emissions at the level of the previous year.

The Company has achieved the target to reduce gas dissipation during gas lift production aimed at lowering methane emissions. This was achieved due to the gas being flared, which changed the components of the Company's emissions – hydrocarbon emissions were reduced by 24%, while combustion product volumes (carbon monoxide, nitrogen oxide, volatile organic compounds, etc.) have increased.

### Gross Emissions into the Atmosphere by Sector<sup>1</sup>, thousand tonnes

Period	2016	2017	2018
Total emissions into the atmosphere, including:	1,627	1,846	1,835
▪ Oil and gas production	1,414	1,530	1,524
▪ Oil refining and petrochemicals	168	254	250
▪ Gas business	18	31	30
▪ Distribution and sales	19	20	22
▪ Oilfield services	7	11	9

### Air Emissions by Pollutant, thousand tonnes

Period	2016	2017	2018
Total emissions into the atmosphere, including:	1,627	1,846	1,835
▪ particulate matter	77	82	87
▪ sulfur dioxide	59	87	86
▪ carbon monoxide	716	743	822
▪ nitrogen oxide	48	57	60
▪ hydrocarbons (excl. volatile organic compounds)	429	500	379
▪ volatile organic compounds	292	355	391
▪ benz[a]pyrene	0.00002	0.00003	0.00002
other	6	22	9

### Air Pollutant Emissions per thousand tce, tonnes

Period	2016	2017	2018
<b>SO<sub>2</sub> emissions</b>			
▪ Oil and gas production	0.052	0.055	0.052
▪ Oil refining and petrochemicals	0.34	0.48	0.46
<b>NO<sub>x</sub> emissions</b>			
▪ Oil and gas production	0.09	0.10	0.10
▪ Oil refining and petrochemicals	0.127	0.134	0.139
<b>Hydrocarbon emissions (incl. volatile organic compounds)</b>			
▪ Oil and gas production	1.68	1.80	1.56
▪ Oil refining and petrochemicals	0.80	1.04	0.97

In 2018, the Company reduced per unit emissions of sulfur dioxide and hydrocarbons, including volatile organic compounds.

<sup>1</sup> Numbers in some lines may not add up to total due to rounding.

### Water Consumption and Wastewater Discharge

Access to water resources and responsible pure water ecosystem management are critical to public health, environment preservation and sustainable development. The Company aims to use water resources efficiently in its operation and undertakes resources protection and recovery measures. Limitation of the impact on water resources in all regions of operation is a Rosneft priority. The Company implements an Environmental Efficiency Improvement Program, the objectives of which are increased water recycling and reuse, sustainable management of produced water, and the installation of advanced water treatment systems. The deadline for completing the Program is 2025.

Rosneft complies with water resources utilization requirements set by law by conducting timely repairs and upgrades on existing infrastructure, leveraging the best available technologies and taking other steps. The Company continuously monitors environmental conditions, allowing it to take timely measures that mitigate the environmental impact.

The regions of the Company's operation are not recorded as regions with a water supply shortage.

The Company provides access to all water bodies directly or indirectly used for the Company's benefit in line with Russian Federation laws and regulations of the local regulatory bodies. The Company does not infringe on water rights or water access rights of stakeholders, including local communities.

> **1.2**  
**RUB BLN**

Company's investments in projects intended to improve water quality and to increase the efficiency of its use in 2018

The Environmental Efficiency Improvement Program involves the sustainable use of water resources via the development and implementation of a project for each production facility, taking local factors into account. The program's objectives are:

- increasing water recycling and reuse;
- sustainably managing produced water;
- installing advanced water treatment systems.

As part of the Program, the Company completed the following projects at its refineries in 2018:

- upgrade of the reverse water supply system and the mechanical and chemical waste treatment facility (Vemko) during the construction of a fluid catalytic cracking (FCC) unit at Syzran Refinery;
- upgrade of the mechanical and biological waste treatment facility at Ryazan Refinery;
- construction and installation work at water disposal facilities at Tuapse Refinery (waste treatment facilities, a reverse water supply unit, a biotreated wastewater treatment unit and a scour-protection drainage system).

The Company's major ecological projects contribute to the efficiency of water resources management in the production and improvement of water quality of the water supply networks in cities and settlements in Rosneft's regions of operation. The ambitious refinery maintenance program includes the construction and retrofitting of water treatment facilities.

Under a cooperation agreement with the Ministry of Natural Resources and Environment of the Russian Federation and Rosprirodnadzor, the Company implements eight top-priority environmental projects. Six of them are intended to improve water quality and to increase the efficiency of its use:

- Commissioning of a temporary underground gas storage facility and gas compressor station for gas re-injection into the reservoir;

#### Water Withdrawals from all Sources<sup>1</sup>, million cubic meters

Period	2016	2017	2018
Water withdrawals from all sources, including:	1,868.2	2,102.9	2,153.5
▪ underground water	89.5	101.5	116.3
▪ surface water	209.8	218.6	222.8
▪ third-party water supply networks	35.0	48.9	47.9
▪ stormwater	7.1	12.2	7.6
▪ wastewater	114.6	132.9	170.4
▪ produced water	1,411.4	1,587.8	1,588.1
▪ bottom water	0.8	1.0	0.5
Water withdrawals from own reservoirs	1.2	2.2	2.6

#### Total Water Consumption from all Sources, million cubic meters

Period	2016	2017	2018
Consumption of water from all sources, including:	1,633.3	1,846.8	1,813.0
▪ Oil and gas production	1,519.3	1,717.7	1,680.6
▪ Oil refining and petrochemicals	106.7	119.9	123.7
▪ Gas business	1.7	1.9	0.2
▪ Distribution and sales	2.2	2.0	3.1
▪ Oilfield services	3.4	5.4	5.4

#### Produced Water

Period	2016	2017	2018
Total produced water, million cubic meters	1,411.4	1,587.8	1,588.1
Injection without treatment, million cubic meters	15.5	26.5	13.6
Injection after treatment, million cubic meters	1,296.5	1,426.0	1,471.6
Produced water use, million cubic meters, including:	79.0	98.4	97.7
▪ injections into formations	79.0	98.4	97.7
▪ discharges into waterways	0.00	0.00	0.00
▪ discharges into soils	0.052	0.043	0.054
Total hydrocarbons in oil and gas wastewater, thousand tonnes	17.16	16.54	22.36

- Construction of a gas and condensate treatment unit in the East Urengoy sky license area;
- Construction of a wastewater treatment and disposal system for the Valanginian deposits (VostochnoUrengoy sky license block);
- Reconstruction of the Bashneft-Ufaneftekhim biotreatment facilities;
- Construction of the advanced treatment units for existing treatment facilities at Novokuybyshevsk Refinery;
- Construction of on-site wastewater treatment facilities and a water reuse system for the production of additives at Novokuybyshevsk Oil and Additive Plant;
- Construction of the stormwater treatment system on the left bank of the RN-Morskoy Terminal Tuapse;
- Reconstruction of the stormwater treatment system in Novitsky Bay.



<sup>1</sup> Numbers in some lines may not add up to total due to rounding.



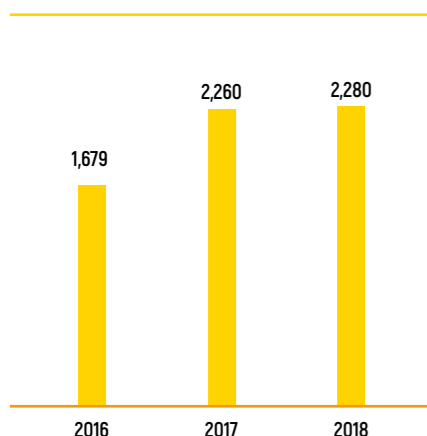


The complex of biological treatment plants at Bashneft-Ufaneftekhim

In 2018, the Company completed two major projects in this area with financing totalling over RUB 1.2 bln:

- biological treatment facilities at Bashneft-Ufaneftekhim, which is unprecedented in Russia and in Eurasia it was commissioned in 2018 to carry out the treatment of production, storm, and household wastewater from Bashneft Refinery and 66 local plants and to reduce the of river water intake by 60% through the use of treated wastewater;

Recycled and Reused Water Volume, million cubic meters



Total Wastewater Discharges, thousand cubic meters

Period	2016	2017	2018
Wastewater discharges into third-party networks for reuse	340.76	290.39	8,938.86
Domestic wastewater discharges	70,302	75,731	74,937
Industrial wastewater discharges, including:	188,245	193,161	186,883
▪ into surface waters	129,144	133,192	127,904
▪ into formations	58,879	59,870	58,881
▪ into soils	221	99	98
including:			
▪ properly treated wastewater	101,761	110,152	108,715
▪ contaminated and poorly treated wastewater	86,484	83,009	78,168

Wastewater Discharges into Surface Waters, thousand cubic meters

Period	2016	2017	2018
Wastewater discharges into surface waters, including <sup>1</sup> :	129,144	133,192	127,904
▪ Oil and gas production	18.89	191.50	173.5
▪ Oil refining and petrochemicals <sup>1</sup>	128,535	132,375	126,975
▪ Gas business	19.61	15.41	0.00
▪ Distribution and sales	407	513	341
▪ Oilfield services	164	97	415

<sup>1</sup> Data for 2016-2017 has been updated to account for wastewater discharged by JSC Novokuybyshevsk Petrochemical Company into surface waters via a third party's centralized water disposal system.

- the advanced treatment facility comprising the membrane bioreactor at Novokuybyshevsk Refinery intended to increase treatment efficiency and reduce fresh water consumption by the maximum utilization of treated wastewaters with a fully automated process.

Through measures to improve wastewater treatment quality for recycling purposes, the Company kept water resources consumption at the level of 2017, despite ramping up the production. Water consumption from surface and underground sources for refining and petrochemical activities reduced by 3%.

The minor growth in the intake water volume was driven primarily by the increase in the amount of wastewater supplied to the Company for treatment and reuse or disposal.

The highest intake volume (74%) is accounted for by produced water, which is reused in the hydrocarbon production process to maintain formation pressure.

In 2018, the share of produced water grew by 2% year-on-year and amounted to 94%. Almost all the water undergoes pretreatment to the required quality. Only 6% of the produced water is discharged into formations.

In 2018, the volume of used and reused water remained at the level of the previous reporting period (about 93% of the gross volume of water used for production needs).

In 2018, the Company increased the volume of treated wastewater reuse by retrofitting the refinery waste treatment facilities. Wastewater discharge into surface waters reduced by 4%.

Improving the quality of discharged wastewater is one of the key priorities of the Company. In 2018, the Company took another step in this direction – it reduced the discharge of contaminated and poorly treated wastewater by 6%.

The discharge of wastewater into surface waters (68% of the Company's entire discharge in 2018) has the most significant impact on the water resources. Thus, the Company pays special attention to construction and retrofitting of the wastewater discharge systems. As a result, in 2018 Rosneft reduced the discharge of contaminated and poorly treated wastewater into surface waters by 7%.

### Waste Management and Land Reclamation

The Company approved the Contaminated Land Reclamation Management and Waste Management standards in order to regulate and monitor compliance with environmental commitments. The Company implements the Environmental Efficiency Improvement Program, one of the goals of which is to meet environmental commitments as part of day-to-day operations (land reclamation, sludge removal, and waste treatment), as well as cleaning up the damage caused by third parties at the Company's facilities. The completion deadline of the Program is 2025.

The Company builds and retrofits industrial waste disposal sites, and equips enterprises with advanced oily waste refining machines and equipment. Further, it implements oil and petroleum products spill prevention actions, carries out measures to improve the reliability of facilities

and equipment, and ensures the provision of adequate resources for OSR.

The Company's efforts are aimed at the prevention, reduction and minimization of oil spills:

- The Company has established and continues to develop a system for a prompt OSR, and for their containment and cleanup, in order to minimize the environmental impact, including the impact on water resources;
- Rosneft's pipeline reliability improvement program for 2015-2019 is in progress. It is aimed at reducing the equipment failure rate and minimizing oil spills. For more details on the Program see the Equipment Functioning section of this report.

In 2018, total crude oil and petroleum product spills due to pipeline failures decreased and amounted to 2.81 tonnes per million tonnes of oil produced (down 6% year-on-year).

Rosneft cooperates with foreign partners, including BP Int. and Equinor, in the application of advanced technologies intended for oil spill prevention.

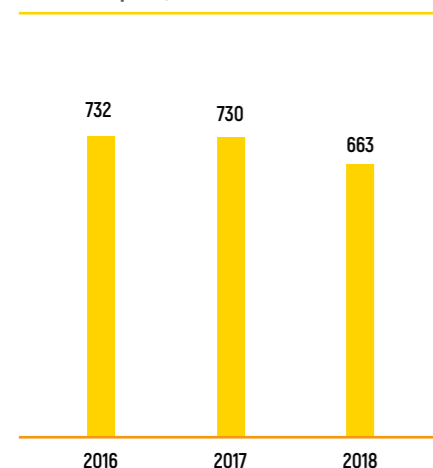
In 2018, industrial and consumer waste accumulated due to the suspension of contractual drilling waste management services at a number of Group Subsidiaries so that they could carry out a detailed examination of how these services were rendered. At the same time, the processed volume of oil-con-

### LOCAL ENVIRONMENTAL INITIATIVES FOR SEPARATE WASTE COLLECTION

Being a socially responsible organization and acting in compliance with the legislation of the Russian Federation, the Company arranges separate collection of process and household waste. For example, Samotlorneftegaz implements measures for the separate collection of plastic, glass, waste paper, rechargeable batteries, and food waste.

The Company's young specialists organize volunteer events focused on separate waste collection, also involving the students of Rosneft Classes to help them be environmentally responsible. Tyumenneftegaz, Neftegorsky Gas Processing Plant, and other Group Subsidiaries have waste paper collection programs in place.

## Total Crude Oil and Petroleum Product Spills, tonnes



taminated waste exceeded the annual volume generated, which allowed us to reduce the volume of previously accumulated waste by 1%.

Approximately 90% of the accumulated oil-contaminated waste is considered to be "legacy waste", i.e. waste generated in the past by business operations of third parties and located on territories and/or facilities where the Company currently operates.

The Company is also implementing a target innovative project to develop technology for the disposal of oil-contaminated waste containing natural radionuclides.

The implemented Pipeline Reliability Improvement Program resulted in reduction in accidents involving oil and petroleum product spills, thus allowing us to decrease the area of contaminated land. In 2018, the area of contaminated land declined by 36%.

Thanks to a large-scale remediation effort, Rosneft reduced the total area of previously oil-contaminated land by 14% in 2018.

## Waste Management, thousand tonnes

Period	2016	2017	2018
Waste at the beginning of the year, including:	14,707	13,796	14,064
▪ oily sludge	10,363	10,229	9,994
▪ drill cuttings	2,079	1,157	1,627
Adjustment for waste in the current period, including:	-34	327	310
▪ oily sludge	39	-78	26
▪ drill cuttings	-133	406	329
Waste generated during the year, including:	5,377	6,325	7,155
▪ oily sludge	584	694	678
▪ drill cuttings	3,935	4,603	5,491
New waste inventories (third-party waste and waste inherited as a result of the reorganization of another legal entity), including:	2,126	2,443	12
▪ oily sludge	75	66	9
▪ drill cuttings	2,048	2,375	0.5
Waste used during the year, including:	3,708	4,355	4,339
▪ oily sludge	193	362	393
▪ drill cuttings	3,410	3,784	3,644
Waste treated and recycled, including:	803	533	504
▪ oily sludge	299	292	243
▪ drill cuttings	322	45	85
Waste buried, including:	489	499	451
▪ oily sludge	15	8	8
▪ drill cuttings	267	219	215
Waste transferred to third parties, including:	3,390	3,439	1,312
▪ oily sludge	326	255	177
▪ drill cuttings	2,784	2,866	812
Waste at the end of the year, including:	13,785	14,064	14,934
▪ oily sludge	10,229	9,994	9,885
▪ drill cuttings	1,146	1,627	2,691

## Land Contamination and Remediation, hectares

Period	2016	2017	2018
Contaminated land at the beginning of the year	4,036	3,617	3,738 <sup>1</sup>
Contaminated land as adjusted after a pre-project survey	325	306	123
Newly contaminated land	290	321	204
Contaminated land at the end of the year	3,617	3,348	3,219
Land remediation during the year	13,491	19,866	19,001
▪ Including contaminated land	832	738	760
Natural recovery of mechanically disturbed and contaminated lands	202	157	4,605

<sup>1</sup> Data for 2018 includes the area of land contaminated as a result of a bottom water spill.

## Biological Diversity Conservation

The Company pursues the principles of preserving the environment and biological diversity in all regions of its operations. Rosneft assesses and manages its impact on biological diversity in accordance with the key international and Russian standards governing the Company's production and commercial activities.

The Company's projects are implemented after all expert reviews, approvals, and permits are obtained from the authorities, including a approval from the state ecological expert review body, and under conditions of public acceptance. All planned projects of the Company are assessed with regard to the environmental impact. Prior to initiating the projects, Rosneft evaluates the environmental footprint of the planned operations and develops action plans for mitigating the environmental impact and protecting biological diversity. Any business activities are conducted with environmental monitoring, along with the observation of marine mammals and seabirds. The obtained results are used for scientific purposes and environmental planning.

Rosneft pays special attention to on conservation of the Arctic marine ecosystems. The Company implements the Corporate Program on conservation of marine ecosystems' biological diversity in the Company's license blocks located in the Arctic region of the Russian Federation.

In its offshore operations, the Company complies with the international conventions, agreements, and national laws on environmental protection and sustainable use of natural resources. The vessels used by the Company are fully compliant with the international conventions for prevention of pollution from ships.

In 2018, Rosneft assessed the environmental impact while conducting geophysical, geochemical, and geotechnical studies in the Pechora, Kara, and Laptev Seas. The Company



Rosneft pays special attention to conservation of the Arctic marine ecosystems

conducted background environmental monitoring of the Pechora Sea ecosystem that involved field studies (observations from ships of opportunity, trawl surveys, ichthyoplankton sampling, and quantitative sampling of benthos and plankton).

Pursuant to its Environmental Protection Policy, the Company tries to avoid any activities in specially protected areas when possible or, when its activities may have an impact, takes action

to minimize it and establish strong environmental monitoring programs.

Rosneft also implements projects to conserve biological diversity in the regions of operation: the on-going Evenk Reindeer Project in Krasnoyarsk Territory; constant work on fish resources recovery in the rivers and water bodies of the Archangelsk, Vologda, Novosibirsk and Tyumen regions, Krasnoyarsk Territory and Krasnodar Territory, the Yama-

## REPOPULATION OF FISH SPECIES

In 2018, in accordance with its environmental obligations, the Company released almost 3.6 mln valuable fish juveniles, including peled, Siberian sturgeon, grayling, red salmon, Atlantic salmon, Siberian

salmon, and muksun into the waters of the Republic of Sakha (Yakutia), Krasnoyarsk Territory, Kamchatka Territory, Arkhangelsk Region, Republic of Karelia and Khanty-Mansiysk Autonomous District.

Io-Nenets Autonomous District, Republic of Karelia, and Republic of Sakha (Yakutia); and monitoring of the bird population in the territory of Upper Dvuobye swamplands in Khanty-Mansiysk Autonomous District. The Company has regularly carried out comprehensive scientific research expeditions to investigate the condition of marine Arctic ecosystems; special attention is paid to marine mammals (walrus and seals) and polar bear populations; marine environment monitoring programs are carried out in different license blocks. Rosneft funds a Black Sea dolphin study program. In September 2018, the program's first activities took place, thus allowing an improvement in the methodological approaches to minimizing the environmental impact of production on aquatic bioresources.

**DEVELOPMENT OF A MICROBIAL COMPOUND FOR DISPOSING OF HYDROCARBON POLLUTION IN THE NORTHERN SEAS**

In 2018, a microbial preparation was developed based on psychrophilic microorganisms intended for oil contamination removal in the northern seas. Use of hydrocarbon waste disposal technology supplements the oil spill cleanup procedure.

The project is implemented by the National Intellectual Development Foundation that supports the research and project activities of students, postgraduates and young scientists. The project coordinator is Arctic Scientific Center, a part of Rosneft's Corporate Research and Design Cluster.

The key outcomes of the project in 2018 are as follows:

- the selection of components of the hydrophobic granule coating and development of the compound granule coating technology;
- obtaining compounds with the assigned buoyancy and rate of coating dissolution in petroleum hydrocarbons;
- laboratory prototype tests both in simulated and natural seawater conditions;
- 20 patent applications were made for microbial disposal of hydrocarbons in the marine environment.

**Research and Monitoring of Protected Animal and Bird Species**

**Program for Polar Bear Studies and Conservation**

The Company pays special attention to polar bear studies and conservation. This is largely attributed to the fact that the polar bear is one of the main species indicating whether the Arctic ecosystems are stable. In 2013, the Company took all the polar bear species kept in Russian zoos under its protection, and in 2014 studies of those species were initiated. Since 2016, the Autonomous Non-Profit Organization Wildlife Society has been the operator of Rosneft's program for studies and conservation of the polar bear population.

In 2018, all 33 polar bears in 16 Russian zoos participating in the program were provided with a balanced ration, necessary veterinary care, and facilities to improve their habitat. In 2018, the Company finished the renovation of a large enclosure at Rostov Zoo and the construction of new enclo-



tures for polar bears at Limpopo Zoo in Nizhny Novgorod.

Apart from providing full support for polar bears in the zoos, the Wildlife Society and the A. N. Severtsov Institute of Ecology and Evolution of the Russian Academy of Sciences take action to ensure stable habitat conditions for polar bears in the wild.

The main objective of the polar bear population studies in the regions of prospective hydrocarbon fields development is to estimate the current "basic" level of anthropogenic substances in the animal organism. For that purpose, the scientists undertake a range of measures involving the non-invasive collection of biological material and information on animals' movement. The scientists analyze the selected samples to evaluate the general health of the examined species in laboratory tests. The desktop study includes analysis of the international and Russian legislative framework concerning polar bear protection, and analysis of the fund data and data accumulated by the Company.

In 2018, the Company continued its polar bear studies in the Arctic region of the Russian Federation to clarify the number and migration routes of polar bears in the Kara Sea. Radio-collars were put on two female bears.

In 2018, given the importance of safety to employees during operations in polar bear habitat areas, the Company developed guidelines for employees of the Group Subsidiaries to prevent conflict between humans and polar bears.

In 2018 the Company developed guidelines for employees of the Group Subsidiaries to prevent conflict between humans and polar bears



Photo Alexander Khitrov

**Amur Tiger Studies and Protectino**

Rosneft supports programs involving studies and protection of Amur tiger populations carried out by Autonomous Non-Profit Organization Amur Tiger Center to maintain specially protected areas in the Amur tiger's habitat. The Company finances the acquisition of vehicles, special work clothes and equipment for keepers, and incentives for state keepers who monitor the specially protected areas in the Primorye and Khabarovsk Territory, and allocates funds for the construction and development of special- and general-purpose structures.

The Company also supports the Amur tiger rehabilitation and reintroduction centers. The Company finances the feeding and veterinary care of animals in those centers, and purchases special equipment for training the tigers released into the wild to hunt on their own and peacefully coexist with humans.

The educational activities are the basis for promotion of ecological awareness, involvement of the population in practical environment work, and development of volunteer initiatives for adults

and young people. Science films about tigers are produced with the assistance of the Company. In 2016, the film "Amur Tiger. The Path to the Sacred Mountain" was released.



The film "Amur Tiger. The Path to the Sacred Mountain" is available on the official website of the Amur Tiger Center

The movie tells about traditions and customs of peoples who have always lived near the Amur tiger to show that the protection of this rare predator is impossible without human assistance. In 2017, a film "Amur Tiger In 360 Format" was made about the people whose lives are closely linked to the Amur tigers and whose shared goal is to preserve the predator for future generations. In order to tell the story, the movie-makers reconstructed situations which environmental organizations, governmental bodies, and ordinary people face day to day.



The film "Amur Tiger in 360 Format" is available on the official website of the Amur Tiger Center

In 2018, Rosneft held a Tiger Day in Vladivostok – a colorful celebration that brought together thousands of people on the city streets from across the region and other Russian cities. The event takes place in order to draw attention to the importance of protecting Amur tigers and other rare animals.

### The Black Sea Dolphins Study

Rosneft has initiated a comprehensive three-year project involving research and monitoring of marine mammals, given that they are indicators of the soundness of the Black Sea ecosystems. Since the 1980s, no studies of the Black Sea dolphins had been conducted due to a lack of funding. Currently, there is no accurate data on the number of dolphins in the Black Sea. Rosneft's ecological initiatives also involve an interdisciplinary approach, including integrated research by experts in various science disciplines (oceanography, geology and marine biology). Rosneft and P.P. Shirshov Institute of Oceanology of the Russian Academy of Sciences (RAS) have hence initiated ambitious studies on this subject. In 2018, the first sea expedition to study Black Sea dolphins was completed.

During the expedition, the scientists observed the behavior of the mammals, took photographs for further photo-fit photographic identification, and studied the dolphins' acoustic signals. Members of the P.P. Shirshov Institute of Oceanology of the RAS are planning to use the comprehensive research results to obtain more precise data on the number and frequency of occurrence of dolphins, and draw up conservation recommendations about these mammals. The next project phases will involve laboratory tests of obtained samples (genetic, toxicologic, virologic, and microbiologic) in addition to ship and aerial surveys, as well as data collection for animal identification by appearance and acoustic repertoire.



### Study of Marine Mammals of the Arctic and the Far East

Rosneft performs environmental monitoring in the Russian Arctic and the Far East, including marine mammal observations from ships of opportunity. The main objective of monitoring is to supervise those activities aimed at minimizing the environmental impact and to obtain information on the marine mammal distribution in the region of operations. The observations check the general trends and basic rules of distribution and species diversity of marine mammals known from the previous studies.

In 2018, the research conducted in the Deryuginsky license area in the Sea of Okhotsk registered 557 marine mammals of six species: orcas, minke whale, sea lion, largha seal, northern fur seal, and beluga whale. No incidents with marine mammals were recorded during the observations, and there were no cases of work suspension due to the detection of marine mammals in the safety zone.

### Evenk Reindeer Project

The Evenk Reindeer Project is one of the key social and ecological projects of the East Siberian Oil and Gas Company, which operates the Yurubcheno-Tokhomskoye field in the Evenk Autonomous District of the Krasnoyarsk Territory. Since 2014, as part of the research, scientists of Siberian Federal University have been studying reindeer migration in the Evenk and Taymyr districts of the Krasnoyarsk Territory to identify the factors affecting the migratory route changes and determining the population's quantities and health.

Such studies have not been conducted since Soviet times, therefore, the data on the animals needs to be updated. That data is primarily valuable for local residents, as the reindeer is a key element both for the northern ecosystem itself and for the well-being of the na-

The scientists created an electronic textbook for university and school students, which is the most comprehensive resource of scientific data on the Taymyr-Evenk population available in Russia

tive population engaged in traditional trades.

Scientists from Siberian Federal University have been monitoring reindeer migration using satellite collars for four years. During the preparatory phase, the scientists carried out ground and aerial surveys of the animal habitat on the Evenk and Taymyr territories, analyzed the aerial survey results, and gathered information from local residents. 17 species were identified during the first and second phases of the study. The research helped to make many scientific discoveries, changing the traditional perception of animal migration. Seasonal features of reindeer movement were detected. Their movement pattern's dependence on weather conditions and other habitat factors is analyzed.

In 2018, as part of the project, the scientists created an electronic textbook for university and school students, which is the most comprehensive resource of scientific data on the Taymyr-Evenk population available in Russia, including texts, cartographic, photo and video materials. This electronic textbook is sent to schools in the Evenk Autonomous District where reindeer studies lessons are organized.

### Evenki Geese Project

Since 2016, the East Siberian Oil and Gas Company has financed the Evenki Geese project involving the collection and analysis of data on the number, location, seasonal distribution, and spatial relations of nesting geese and their subpopulations. A red-breasted goose, a lesser white-fronted goose, and an eastern taiga bean goose are listed in the Red Book of the Russian Federation and the Krasnoyarsk Territory and require special attention from the scientists. Geese are the indigenous inhabitants of the taiga and forest-tundra landscapes of Evenkiya, therefore, it is very important to maintain their biological balance, ensure their protection and record them while the native population continues its traditional trades.

In 2018, the geese population studies continued under a grant project called the Red Book of Evenkiya. The scientists of Siberian Federal University detected new winter quarters of the Evenki group of the Siberian taiga bean goose and lesser white-fronted goose on the territory of Japan and South Korea. Using new data, the ornithologists now have clearer understanding of the situation with endangered birds listed in the Red Book.

Given the scale of migration, accurate data on the Evenki population can be obtained only in cooperation with the international scientific community. The academic symposium "Development of Effective Coordinated Monitoring of East Asian Waterfowl Populations in the 21st Century" held in the Chinese city of Hulunbuir was a platform for sharing experiences with foreign colleagues.

### Siberian Sable Project

The Central Siberia Nature Reserve conducts regular studies of the Siberian sable movement in the Evenk District of the Krasnoyarsk Territory. The project was launched in 2016 with the support of a grant from the East Siberian Oil and Gas Company.

The research was conducted using innovative technologies, including light-weight transmitters (trackers) of less than 12 grams. Based on the project data, conclusions were made on the population number and its trends, migration routes and factors affecting them, and the animals' daily activities, etc.

During the field work, the biologists put beacons on animals living in the Rybnaya, Podkamennaya Tunguska and Yenisei River areas. The work had three phases – autumn, winter, and spring. Observations confirmed that sables do not live in a particular area but constantly migrate and stay in one place with sufficient food for only 2-4 days. In recent years, the sable population in Evenkiya has been growing, as most of the species live inside a reserve with rich fodder resources.

The Siberian Sable Project involves the long-term study of the species population and migration routes on the territory of the Central Siberia Nature Reserve in Evenkiya. The obtained data is used for developing recommendations on sable population conservation and sustainable social and economic development of the region.





### Local Environmental Initiatives

The Company adheres to the principle of efficient use of natural resources and environmental conservation. To promote its commitment to this approach, Rosneft implements environmental initiatives on the territory of all offices, production facilities and territories around them, and encourages environmental awareness and involvement of the Company's employees, contractors, and the general public in nature conservation activities by enhancing environmental responsibility in Rosneft and Group Subsidiaries. The Company actively cooperates with educational institutions to promote environmental awareness, in particular, Nyaganneftegaz has created a children's ecological magazine dedicated to environmental protection. The issues of magazines were handed out to children from the daycare centers in Nyagan. Further, Kuibyshev Refinery organized environmental campaigns

among schoolchildren to collect used batteries and plant fir trees in the city.

The Company's employees participate in meetings and discussions of environmental matters on an ongoing basis. The offices and production facilities use promotional materials on environmentally-friendly practices and environmental compliance. Separate waste collection, cleaning up and tree planting at the industrial sites and surrounding territories have been organized.

The Group Subsidiaries constantly participate in greenery planting programs. In 2018, the following traditional events were held:

- as part of the international ecological campaign "To Save and Preserve" in Nyagan, Nyaganneftegaz employees and city authorities planted 141,700 young pine trees on 35.43 hectares;
- employees of Bashneft-Polyus planted a rowan alley in Naryan-Mar;

**~1  
mln young  
trees**

planted by the Company's employees in 2018

- employees of the Achinsk Refinery planted 140 birch, white poplar, fir spruce, and Hungarian lilac young trees in residential areas of Achinsk;
- in Novokuybyshevsk, employees of Kuibyshev Refinery planted over one hundred young plants of broadleaved trees and shrubs near the community center, stadium, and clinic, in schoolyards, and on the territory of daycare centers.

### Environmental Expenditures

The Company's investments in environmental protection include both long-term capital projects and projects for current needs to meet environmental commitments.

The increase in environmental expenditures in 2018 compared to 2017 was mainly due to the Company's considerable investment in environmental projects as part of the Year of Ecology. In 2017, pursuant to the cooperation agreement signed with the Russian Ministry of Natural Resources and Environment and Rosprirodnadzor, Rosneft invested in the implementation of two environmental projects - the renovation of a biological treatment facilities at Bashneft-Ufaneftekhim and the construction of a comprehensive gas treatment unit in the East Urengoy sky license block. The Company's contribution to improving environmental indicators remained significant in 2018. See more in the Water Consumption and Wastewater Discharge section of this report.

#### Environmental Expenditures, RUB mln

Period	2016	2017	2018
Environmental capital expenditures	46,615	67,240	45,605
Operating environmental expenditures <sup>1</sup>	26,242	28,642	31,697
Payments to budgets at all levels for environmental protection and sustainable use of natural resources, including:	4,457	4,199	4,741
▪ charges for adverse environmental effects <sup>1</sup>	642	913	1,159
▪ compensation for environmental damage	1,293	1,705	1,040
Pollution fines	260	258	290
Non-financial sanctions, cases	0	0	1

#### Environmental Capital Expenditures, RUB mln

Item	2016	2017	2018
Environmental capital expenditures, including	46,615	67,240	45,605
▪ Special Environmental Program	207	166	5
▪ capital construction of major environment protection systems	8,073	13,556	5,918
▪ materials and equipment	225	172	195
▪ associated investments	33,943	49,945	37,417
▪ other	4,166	3,400	2,070

<sup>1</sup> Accrued charges for adverse environmental effects.

# 03

## Combating Climate Change



**Christoph Nehring**

Rosneft Vice President for HSE



Rosneft is in action to reduce GHG emissions. Achievement of the goal is supported by implementation of our Gas investment program and Energy efficiency program. It is forecasted that prevention of GHG emissions will amount to over 8 M tons of CO<sub>2</sub> equivalent by 2022. Our company commissions new facilities and develops its refineries ensuring higher energy efficiency and expanding the range of fuel-efficient and low-emission products for consumers.

### The Evenki Geese Project

Since 2016, the East Siberian Oil and Gas Company has financed the Evenki Geese project involving the collection and analysis of data on the number, location, seasonal distribution, and spatial relations of nesting geese and their subpopulations listed in the Red book of Russia and Krasnoyarsk territory.

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As part of its efforts to manage risks arising from the transition towards a low carbon economy in the context of climate change, Rosneft regularly builds long-term development scenarios for both global economy and energy, which cover a range of probable structural changes in global energy markets.

Rosneft builds both a slow-response conservative scenario and a low-carbon development scenario. The former involves practical analysis of fundamental laws and factorial correlations and shows a picture of evolutionary development of the global economy and energy in light of the impact of technological and globalization processes. The latter is based on the assumption that the maximum shift towards low-carbon technologies and renewable power generation will not exceed the collective voluntary national contributions of the Paris Climate Agreement countries.

The Company benefits from scenario prediction in its strategic management and business planning processes, which consider the risks and opportunities for Russia's energy industry and the Company in particular coming from climate change and transition to low-carbon energy. In general, the forecasts show that Rosneft's businessmodel remains sustainable in both scenarios and meets future challenges throughout the trend building period (until 2050).

### Reduction in Greenhouse Gas Emissions

Rosneft seeks to reduce the impact of its activities on climate change in line with the thirteenth UN Sustainable Development Goal "Climate Action," which is one of five priority goals set by the Company. **The Rosneft-2022 Strategy supports reduction in greenhouse gas emissions.**

Rosneft's greenhouse gas emissions totaled 76.4 million tonnes of CO<sub>2</sub> equivalent in 2018, with direct emissions<sup>1</sup> standing at 54.2 million tonnes of CO<sub>2</sub> equivalent and indirect emissions from the consumption of purchased electricity and heat<sup>2</sup> at 22.2 million tonnes of CO<sub>2</sub> equivalent. Indirect use-phase emissions from products sold by the Company totaled 244 million tonnes of CO<sub>2</sub> equivalent<sup>3,4</sup> in 2018.

In 2018, the **Company reduced methane emission by 46% due to decreasing gas dispersal amounts, including a year-**

**on-year reduction of fugitive emissions by 63%** due to decreasing gas dispersal amounts during gas lift production at LLC RN-Krasnodarneftegaz (in 2018, the Company gas dispersal hydrocarbon collection system and booster pumping stations at Troitskaya and Khankovskaya facilities).

New facilities and production ramp-up led to increasing APG production and flaring volumes and, consequently, increased direct greenhouse gas emissions in the Oil and Gas Production segment by 6%, including increasing per-unit values by 4%. The Company has implemented energy efficiency improvement actions, including transferring the in-plant use combustion sources to more environmentally friendly fuel, and has achieved a decrease in per unit greenhouse gas emissions from oil refining, petrochemical processes, and petroleum products sales by 11%.

#### Direct Greenhouse Gas Emissions, thousand tonnes

Period	2016	2017	2018
Carbon dioxide (CO <sub>2</sub> )	44,951	46,364	50,088
Methane (CH <sub>4</sub> )	265	303	164

#### Per unit Greenhouse Gas Emissions, tonnes of CO<sub>2</sub>-eq. per tce

Period	2016	2017	2018
Oil and gas production (including oilfield services)	0.138	0.123	0.129
Refining, petrochemicals, and sales	0.131	0.131	0.117

<sup>1</sup> Scope 1 as defined in the Corporate Accounting and Reporting Standard of the Greenhouse Gas (GHG) Protocol developed by the World Business Council on Sustainable Development (WBCSD) and the World Resources Institute (WRI).

<sup>2</sup> Scope 2 as defined in the Corporate Accounting and Reporting Standard of the Greenhouse Gas (GHG) Protocol developed by the World Business Council on Sustainable Development (WBCSD) and the World Resources Institute (WRI).

<sup>3</sup> Other indirect GHG emissions (Scope 3) were calculated from sales of petroleum products.

<sup>4</sup> The Company historically discloses greenhouse gas emissions data in line with the recommendations of the TCFD, Metrics and Targets Section.

Development of gas facilities at new fields aims to improve per unit emissions rate in oil and gas production.

Since 2016, the Company has reduced per unit greenhouse gas emissions by about 8%.

Rosneft ramps up the production of natural gas, which allows a significant reduction of GHG emissions compared to other fuel types. **The Company pursues the Gas Investment Program and the Energy Saving Program designed to prevent GHG emissions of over 8 mmt of CO<sub>2</sub> equivalent up to 2022<sup>1</sup>.** Current mechanisms contributing to limiting GHG emissions include measures to protect atmospheric air and creation of conditions for enhancing energy efficiency through the use of the Company's products.

Per unit Greenhouse Gas Emissions, tonnes of CO <sub>2</sub> -eq. per thsd boe			
Period	2016	2017	2018
Company total	26.4	24.5	24.3

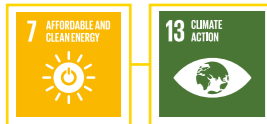
### THE CONGRESS OF ENVIRONMENTAL EXPERTS REVIEWED CLIMATE CHANGE ISSUES

In December 2018, managers and experts in environmental protection from over 120 Company Subsidiaries took part in the Fifth Corporate Congress of Environmental Experts. The Congress reviewed the results of the year, environmental protection strategic targets and initiatives to achieve them.

It paid special attention to development of internal competencies

in the Company's performance on climate protection. The Congress participants analyzed best practices of GHG management, reviewed the national calculation methods, and developed recommendations on emission inventory and emission reduction measures. The Company held a special session on climate change, where it presented the corporate automated system for calculating GHG emissions.

## Ramping up Natural Gas Production



Rosneft is changing its production structure in favour of more environmentally-friendly products, increasing natural gas production and expanding its share in total hydrocarbons production.

In 2018, Rosneft's gas production in Russia and abroad amounted to 67.26 bcm, including 32.33 bcm of natural gas and 34.93 bcm<sup>2</sup> of associated petroleum gas

The Company's strategic targets in the gas business are:

- the development of major gas production projects, including Rospan and Kharampur, thereby ramping up

- gas production to more than 100 bcm per annum;
- improving the cost efficiency of gas sales in the Russian Federation, in particular, by creating a favorable regulatory environment such as equal access to infrastructure and consumers;
- improving production efficiency and expanding the Company's technological competence to ensure:
  - development of reserves of the Turonian deposit;
  - development of liquefied petroleum gas (LPG) and natural gas liquids (NGL) production;

- increase of the utilization rate of associated petroleum gas (APG);
- monetizing the gas reserves of Eastern Siberia and the Far East as one of the future activities.

# 67.26 bcm

Company's total gas production in 2018

## Associated Petroleum Gas (APG) Utilization



In 2018, Rosneft continued to implement its Gas Investment Program. The Gas Investment Program is mainly focused on reduction of associated petroleum gas flaring to a level below 5%, in accordance with the target set by the Government of the Russian Federation<sup>1</sup>. The Company is seeking to achieve the target by the end of 2021. This can be achieved through an integrated approach to oil field development: creating infrastructure for gas gathering, use, and delivery to consumers, or gas re-injection into the reservoir.

Nineteen projects were completed in the reporting period to build APG utilization infrastructure, including:

- Facilities for gas reinjection of the Verkhnechonskoye field in OJSC Verkhnechonskneftegaz with a capacity of 1 bcm per annum;
- A 36 MW gas turbine electric power plant of the Kondinskoye field in JSC Kondaneft;
- Gas preparation, utilization and transportation facilities in LLC Bashneft-Dobycha, LLC RN-Krasnodarneftegaz, LLC RN-Yuganskneftegaz, JSC RN-Nyaganneftegaz, and JSC Orenburgneft.

As part of the pilot project called "Well flowback after hydraulic fracturing and gas condensate mixture treatment at the Vostochno-Urengoysky license block", the average duration of well flowback operations after hydraulic fracturing was reduced from 10 to 2 days, leading to a significant decrease in methane flaring.

In 2018, Rosneft's APG utilization volume totaled 35.3 bcm<sup>2</sup>, 1.9 bcm down year-on-year. The Associated petroleum gas utilization rate in 2018 was reduced by 4.8 p.p against 2017 and amounted to 84.4% (excluding fields at early stages of development – 89.7%).



The reduction of the indicators in 2018 was driven by a decrease in APG production, caused starting from design stage of by oil production cuts at brown under the OPEC+ Agreement, as well as external limitations driven by unscheduled disruptions at refineries, and an increase in oil and APG production at greenfields – Suzunskoye, Tagulsky, East Messoyakhskoye, and Yurubcheno-Tokhomskoye – as well as at Trebs and Titov fields.

Greenfield projects are key to Company development. Rosneft uses an integrated approach to developing greenfields and takes all the necessary steps to enable efficient APG use starting from design stage of field development. The Company plans to complete construction of the gas infrastructure at the above fields in 2020-2021.

### Associated Petroleum Gas (APG) Utilization

Period	2016	2017	2018
APG utilization CAPEX, RUB bln	17.8	20.1	16.3
APG production in Russia, bcm	40.2	41.6	41.8
APG production in Russia, excluding gas flared/utilized, bcm <sup>2</sup>	36.2	37.1	35.3
Associated petroleum gas utilization rate, %	90.0	89.2	84.4

<sup>1</sup> Under Directive No. 1148 of 8 November 2012, the Russian Government has set an Associated petroleum gas utilization rate target for the industry not exceeding 5% of production volume. This target excludes APG flared during scheduled maintenance at gas processing plants, gas from greenfields and gas with a concentration of non-hydrocarbons exceeding 50%.

<sup>2</sup> Including gas for liquid hydrocarbons production.

## Energy Consumption and Energy Efficiency



Rosneft is a major consumer of fuel and energy resources in the Russian Federation. The structural analysis of fuel and energy resources allocation by business types and areas shows that the major share of electrical energy consumption falls to oil and gas production (146 mln GJ). Refining and petrochemical processing require more heat and fuel than any other process (340 mln GJ). Overall, Rosneft consumed<sup>1</sup> 598.0 mln GJ, or RUB 227 bln, in 2018.

The Company aims to reduce GHG emissions and combat climate change through saving energy and enhancing energy efficiency.

In accordance with the Company's Energy Efficiency and Energy Saving Policy, the Energy Efficiency Commission has been in operation since 2013. The Commission is responsible for introducing advanced methods and approaches to energy consumption management by

### Energy Consumption, mln GJ

Period	2016	2017	2018
Total consumption of renewable and non-renewable energy resources for technological needs	347.8	440.1	288.2
Consumption of electricity	123.1	151.2	180.9
Consumption of heat energy	25.0	44.7	128.9
Total energy consumption	495.9	636.0	598.0

developing the energy management system in compliance with the International Standard ISO 50001. The Company has implemented the following key initiatives in the reporting period under the supervision of the Commission:

- successful implementation of the Energy Saving Program; actual energy and fuel resources savings amounted to 1.16 mmtoe, or 21.4 mln GJ;
- development of Rosneft's Energy Saving Program for 2019-2023; the forecasted saving of energy and fuel resources over 5 years amounts to 4.35 mmtoe, or RUB 49.1 bln;
- the Company has published guidelines "The Best Available Technologies, Technical Solutions, and Equipment for Enhancing Energy Efficiency and Energy Saving in Crude Hydrocarbon Processing"; the guide contains recommendations for applying 629 energy efficiency technologies. The guide has been communicated to the Group Subsidiaries so that they apply energy efficiency solutions in their projects and achieve energy savings by optimizing current production and auxiliary processes;

- LLC Bashneft-Dobycha has been certified under International Standard ISO 50001 Energy Management System. Therefore, by the end of 2018, 34 Rosneft Group Subsidiaries accounting for 79% of the Company's total energy consumption volumes were holders of these certificates. In view of the planned certification of more Group Subsidiaries in 2019, this indicator will exceed 95%.

To ensure uninterrupted energy supply to both current and future production facilities, the Company implements a number of energy efficiency and energy saving activities every year. In 2018, the Company held 8 technical audits of power equipment operation quality and developed actions to improve power supply reliability. These measures led to a 23% reduction year-on-year in the number of power-generating equipment emergency shutdowns in the private power networks of oil and gas producing subsidiaries. This resulted in a 26% decrease in the per-unit oil underrun rate during emergency shutdowns vs 2017. The technical audits also include checks of compliance with health and safety regulatory requirements during equipment operation.

## 34 Group Subsidiaries

have passed the certification under the International Standard ISO 50001 Energy Management System

## Atmospheric Air Protection, a Reduction in Greenhouse Gas Emissions



In the reporting year, Rosneft implemented a number of measures to reduce greenhouse gas emissions:

- The Company has launched a new environmentally friendly business – natural gas filling stations. In 2018, Rosneft built 10 compressed natural gas modules at existing filling stations, enabling a reduction in vehicle emissions.
- The Company expanded the list of its products with enhanced fuel efficiency and a low emission level ones (Pulsar 100 and AI-95 Euro 6, ACTIVE fuel family).
- Taas-Yuryakh Neftgazodobycha began operation of a sootless flaring unit, enabling a reduction of total emissions into the atmospheric air during APG flaring by more than fifty percent compared with the permitted volume.
- In 2018, the Company decided to reduce the number of business trips via greater reliance on telecommunication technologies as a means of con-

ducting meetings, negotiations and similar events. This initiative will help to decrease the environmental footprint of transport.

- In the course of the reconstruction of RN-Morskoy Terminal Tuapse, the Company developed and approved an investment project involving the Company oil heating station's transition from fuel oil to natural gas. The project will allow a reduction in air pollutant emissions into the atmospheric air by 60%. The Company will allocate RUB 177 mln to implement the project. Moreover, the Company has installed floating roofs on two 10 thsd m<sup>3</sup> vertical steel tanks for gasoline and aviation fuel. Rosneft has spent RUB 36 mln on its retrofitting. The result will be a 20% decrease in emissions when using these tanks.

### Decrease in Emissions Caused by Use of the Company's Products

Greenhouse gases from use of oil and gas products are mainly generated during their use by consumers. To mitigate the environmental impact and climate change, the Company consistently commissions new and renovated refinery units, expanding the list of output products with enhanced fuel efficiency and low emission levels, and informs customers about the advanced environmental and operational performance of the fuels. The Client Relations Section herein gives detailed information on new fuels with more environmentally friendly features (new EURO 6, Pulsar 100 gasoline, and BP ACTIVE fuel).



<sup>1</sup> In accordance with the Company's regulation on Collecting Aggregate Fuel and Energy Resource Consumption Data by Businesses, the following items have been recorded since 2018: fuel consumption by the Company's technological processes, electrical and heat energy for external suppliers, and electricity and heat.



## 04

Emergency Prevention  
and Response Readiness

Christoph Nehring

Rosneft Vice President  
for HSE

Along with our top priority to prevent man-made and natural disasters, we are committed and continuously engaged in preparations to respond quickly and effectively to emergencies. Through investment in response assets, training of our people, cooperation with stakeholders and rigorous exercises, we maintain a reliable and effective system of Response that ensures protection of the Company's employees and assets.

## Study of Marine Mammals

Caring for preserving the wildlife and maintaining the sustainability of eco-systems, Rosneft ensures environmental control and monitoring that includes overseeing marine mammals.

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In 2018, Rosneft and Group Subsidiaries implemented planned initiatives to enhance the safety of the Company's employees, facilities, territories, and the environment in the event of emergencies, including:

- maintaining the emergency readiness of command and on-site units that are part of the Unified State Emergency Prevention and Response System<sup>1</sup> of the Group Subsidiaries, expanding knowledge and skills;
- reducing risks and the impact of emergencies;
- replenishing financial and material resources for emergency response;

- increasing cooperation between the command, on-site units and local/functional subunits of the Company's Unified State Emergency Prevention and Response System;
- building up financial and material resources worth a total of about RUB 2 billion at the Group Subsidiaries level in 2018 for the purposes of emergency prevention and response.

Overall, measures taken by the command and on-site units of the Unified State Emergency Prevention and Response System helped prevent damage to the Group's sites from man-made and natural disasters in 2018.

## 2 RUB BLN

financial and non-financial reserves for emergency prevention and management in 2018

Prevention and Reduction  
Potential Damage from Man-Made Disasters

To improve protection from man-made disasters, the Company has implemented the following actions:

- upgrading of main production assets;
- monitoring of compliance with technological process requirements;
- staff training in prevention of and response to disasters;
- fire prevention;
- maintenance of firefighting equipment operated by the Company's firefighting departments to keep it in working condition;
- setup of professional and ad hoc rescue squads (training and certification).

To ensure timely alerts and communication in case of an emergency or potential emergency, the Group Subsidiaries have the command and on-site units' alert and communication systems in place. The local and on-site alarm systems, fire alarm and extinguishing systems are being upgraded, alongside the replacement or renovation of old and deteriorated technological equipment.

<sup>1</sup> Pursuant to the Regulation on the Unified State Emergency Prevention and Response System, approved by Decree No. 794 of the Government of the Russian Federation of 30 December 2003 as amended on 5 June 2013 (<http://base.garant.ru/186620/>).

## Prevention and Reduction Potential Damage from Natural Disasters



Key natural hazards that may have a negative effect on Group Subsidiaries' operations include floods, wildfires, hurricanes, heavy downpours, snowstorms, extreme colds, and earthquakes.

Comprehensive measures are taken every year to ensure accident-free operations and the readiness of the command and on-site units of the Unified State Emergency Prevention and Response System to respond promptly to natural disaster risks that may affect Group Subsidiaries. The key focus is on prevention and potential damage reduction.

Rosneft and Group Subsidiaries planned preventive measures in the flood hazard period of 2018, including forecasts of ice break dates for rivers in various federal districts.

Such measures included forming anti-flood commissions across the Group, drawing up and implementing prevention plans to prepare sites for trouble-free operations in the flood season, updating the list of the most susceptible sites, establishing cooperation with the emergency prevention and management offices of local governments, testing the readiness of the command and on-site units of the Unified State Emergency Prevention and Response System, and reviewing and replenishing response resources in flood-prone areas.

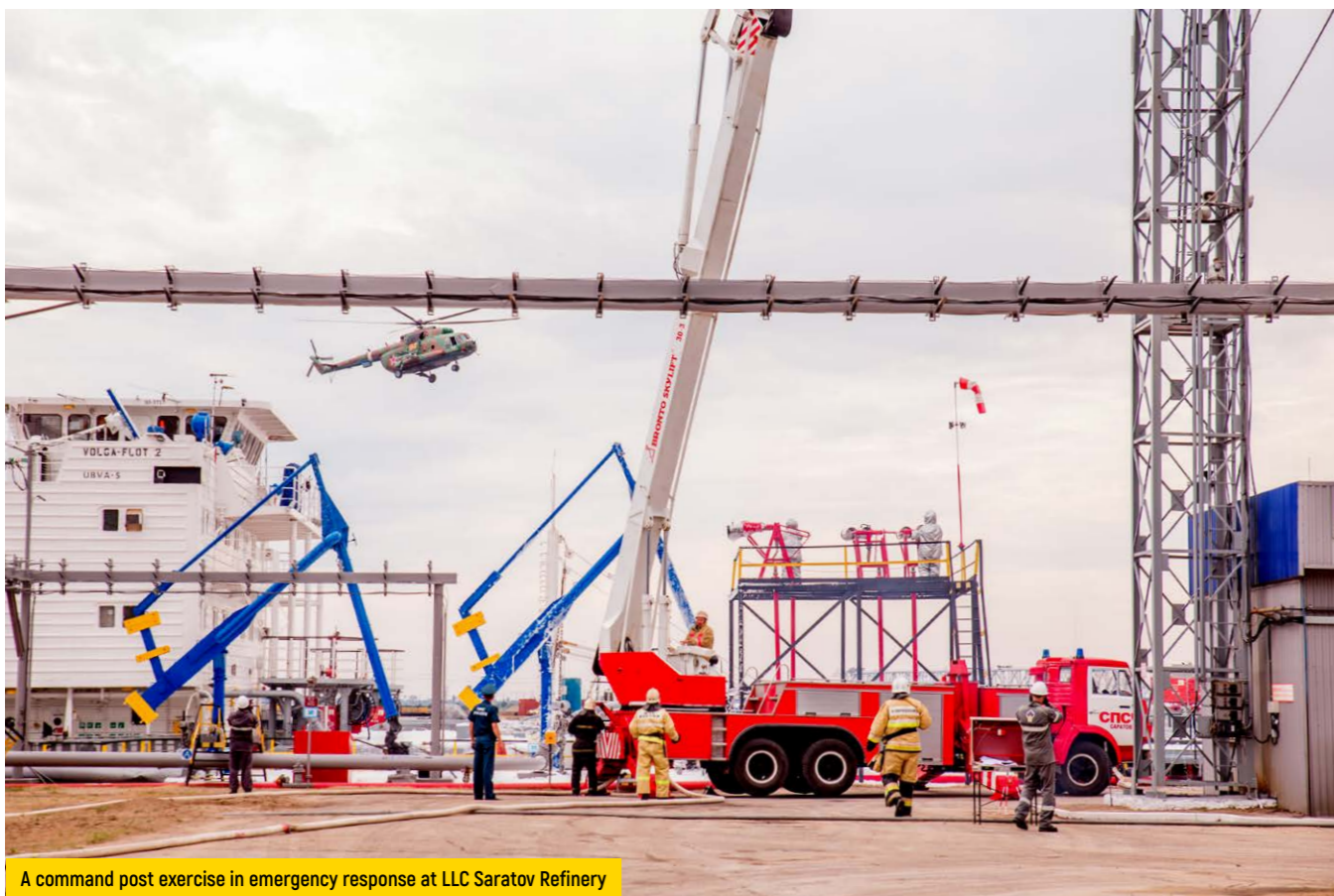
In March 2018, the Group held an exercise to enhance the emergency readiness of the command and on-site units of the Unified State Emergency Prevention and Response System and ensure trouble-free operations, as well as

the safety of workers and assets during spring floods.

These preventive measures ensured trouble-free operations across the Group's sites during the flood season.

Group Subsidiaries also developed and implemented a number of fire safety and response measures to prevent wildfires near oilfields, production sites, and other facilities in the fire season.

They also teamed up with Russia's local forest protection squads to monitor fire risks in the Group's areas of operation. The Group's sites were kept safe from wildfires in 2018.



A command post exercise in emergency response at LLC Saratov Refinery

## Response to Potential Emergencies



To ensure a prompt and effective response to emergencies, Group Subsidiaries implemented the following measures:

- updated action plans for emergency prevention and management;
- formed the on-site units of the Company's Unified State Emergency Prevention and Response System that plays an important functional

- part in the emergency prevention and response system of the Russian Ministry of Energy and Russia's entire energy sector;
- formed and certified 68 rescue and response squads;
- contracted external rescue services for subsidiaries with no such squads.

All in-house and external rescue squads of the Group have the necessary vehicles, equipment, and tools to ensure an effective response to any emergency as required by federal laws.

## Emergency Response Training for Employees



The Company strives to reduce the impact of emergencies, maintaining a strong focus on employee training and the readiness of the command and staff of the Unified State Emergency Prevention and Response System. Around 300,000 Rosneft employees received training in 2018.

To test the emergency response readiness of the command of on-site squads, Rosneft held 74 comprehensive training exercises, 242 command post exercises, 201 tactical training exercises, and 41,828 on-site drills.

A training session in civil defense and emergency management was held for the heads of the Group's civil defense and emergency management units in Ufa in June 2018 to improve their professional knowledge and competencies. 219 employees in charge of civil defense and emergency management, as well as managers of Group Subsidiaries operating in the Republic of Bashkortostan, took part in the training session.

The Group annually organizes competitions for Best Group Subsidiary in terms of civil defense and emergency management. 154 Group Subsidiaries participated in the competition held in the beginning of 2019 to review the performance in 2018.

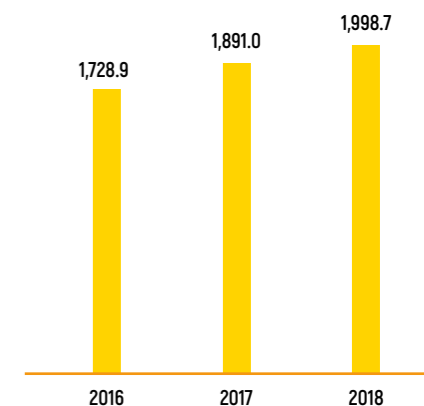
Supervision bodies of the EMERCOM of Russia conducted 32 inspections across the Group Subsidiaries in 2018 to check emergency response systems, detecting no violations of federal regulations at 27 Group Subsidiaries and issuing minor remarks to another five without imposing penalties.

The Company's Administration continuously monitors the elimination of violations detected by supervision bodies and supports the Company's business units in this respect. In 2018, 35 of the Company's Subsidiaries were inspected to check emergency prevention and response systems.

**~ 300**  
thsd  
employees

received emergency response training

Financial and material resources for emergency prevention and response, RUB mln



# 05

## Digital Transformation



**Peter Lazarev**  
Chief Financial Officer  
of Rosneft



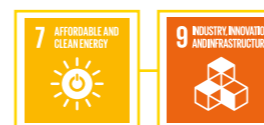
One of the principal challenges to oil business sustainability is the transition to a new technology level. The Company's business digitalization programs, including Digital Field, Digital Plant, and Digital Filling Station, will allow the Company to improve its business process management and reliability of production.

### Biological Diversity Conservation

Rosneft places a special focus on conservation of the Arctic marine ecosystems. The Company implements the Corporate Program on conservation of marine ecosystems' biological diversity in the Company's license areas located in the Arctic region of the Russian Federation

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## Accelerated Digitalization Programs



The development of technological capabilities is one of the key priorities of the Rosneft-2022 strategy. Rosneft focuses on the use of breakthrough digital and technological approaches in all areas of operation, recognizing technological leadership as a key competitive advantage.

Today the Company is implementing a range of programs, such as Digital Field, Digital Plant, Digital Supply Chain, and Digital Filling Stations, to reach a whole new level of business process management, improve production reliability and efficiency, and minimize risks and losses.

Under the Rosneft-2022 strategy, Rosneft has approved the Comprehensive Accelerated Digitalization Plan, including individual programs for the Company's businesses. These programs are implemented in close coordination with the basic and production automation programs. The Company has established a management system, including the collective bodies for digitalization of Upstream, Gas, Oil Refining, Petrochemicals, Commerce and Logistics, Retail Sales and Supply Service segments, and has appointed Group

Subsidiaries as test sites for digital solutions. Competencies in end-to-end digital technologies were built up on the base of the internal IT integrator.

**Rosneft has established a Digital Transformation Center and a Digital Cluster, which are the key mechanisms for implementing digital programs to fulfill the strategic digitalization objectives.** Today the Company is capable of forming highly professional teams in end-to-end digital technologies and digital programs due to its variety of competencies.

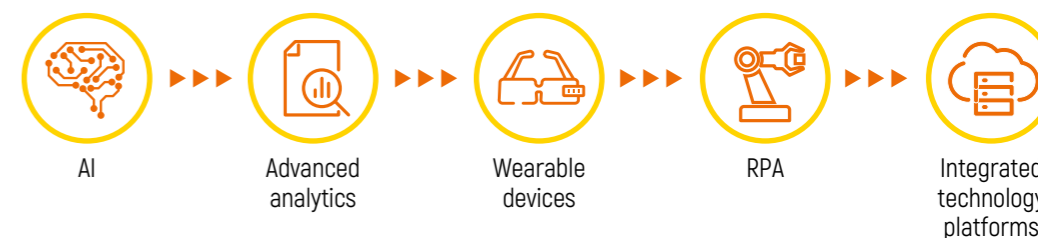
With new technologies coming into play every other day, Rosneft has set up dedicated mechanisms that are designed to test their value in the context of its business objectives. The Company keeps track of cutting-edge research and adapts

Digital transformation is a key strategic initiative for Rosneft that spans all its functions and business segments and changes existing business processes.

its findings to enhance its production operations across Russia. Rosneft spearheads collaboration between universities, specialized agencies, hi-tech companies and startups to address business challenges with advanced digital-technology solutions.

Digital transformation drives change in business processes and improved performance, prompting a shift from mostly manual operations to digital production that opens new horizons for the Company and each member of its staff.

End-to end digital technologies



Digital transformation contributes to changing the processes, enhancing their efficiency, facilitating a transition from the traditional production primarily based on human labor to the digital production opening new horizons for the Company's development and each employee.

**The Structure of Comprehensive Accelerated Digitalization Plan**



Report of Director of Department for Information Technology and Business Development with a virtual tour of the Digital Plant elements at the Fourth Conference "Exploration and Production Technologies" in 2018.

The key components are in place: the Analytical Center, the Prototyping Platform and the Partnership Center. The Company puts great emphasis on developing partnerships and mutual cooperation in digital solutions. Currently, the ecosystem includes the Rosneft R&D center comprising 29 corporate research institutes. The Company is cooperating with leading universities (Lomonosov Moscow State University, Gubkin Russian State University of Oil and Gas, National Research University Higher School of Economics, etc.), relevant agencies, technological partners and startups.

The Digital Cluster accelerator based on the internal IT integrator is being established to enhance the development of digital solutions, adopting advanced technologies and global practices, in particular, the system for development and effective cooperation with developer communities and entrepreneurs. The accelerator helps to test a solution from outside within the shortest possible time, improve it where necessary and integrate it into the Company's production chain. The program focuses on



Active application of Sphere 3D visualization platform for creating digital twins of assets

project activities of mixed teams from Rosneft, the Digital Cluster, the Group Subsidiaries and the digital ecosystem, thus advancing proprietary developments into ready-made prototypes.

The Company plans to issue a Digitalization Information Bulletin to inform the employees on the Company's digital transformation, key digitalization trends, and initiatives.

**In 2018, the key accomplishments in digital transformation were:**

**Upstream:**

- Launch of the Digital Field pilot program at the Ilishevskoye field in Bashkortostan with the use of predictive analytics, advanced visualization, machine learning and mobile and portable devices. The Company has established an Integrated Operations Control Center, which will allow field management and online monitoring. The project draws on an advanced Sphere Asset 3D visualization platform to create digital twins of physical objects.
- Testing of solutions for integrated control of production planning and production asset performance optimization using machine learning at RN-Uvatneftegaz's worksites.
- Development of the downhole pumping equipment failure prediction system and the decision support system (DSS) for artificial lift technologies. The new solution is intended to warn the process operator in advance of equipment failure to ensure a prompt response and adjustments to the equipment's operation mode.
- Creation of a computer cluster based on a proprietary data processing center and of a GeoPAK service package, which provides for an employee's remote access to software processing geological and geophysical data.
- Testing of the pipeline monitoring system in Group Subsidiaries with the use of Sibintek.Robotics autonomous drones, including automation of the drone swarm control. Machine learning and computer vision technologies are applied for onsite processing of monitoring data.



A digital field is a virtual replica of a real field that provides the on-line visualization of key operating parameters. All real processes, from oil lifting and transportation to movements of site personnel, vehicles and UAVs, are displayed on a digital dashboard.

Rosneft has developed and successfully deployed digital twins as computerized companions of physical assets. The digital-twin system helps to model a field's internal processes as well as the technical performances of individual objects. Predictive analytics allow users to forecast deviations in equipment behavior and deal with operating anomalies in a timely manner.

All data is aggregated in an Integrated Operations Control Center. 3D-visualization technology gives users the sense of really being there, including the features of real objects and the specifics of the terrain. Objects' parameters and process deviations can be immediately visualized and operations can be controlled remotely

if necessary. New technologies allow operators not only to locate a problem, but also to resolve it remotely.

All site personnel and vehicles are equipped with new-generation mobile devices with IIoT-based data transmission functionality to ensure personnel safety. These devices include individual gas sensors, personal protective equipment with integrated digital functions that send an alert if a wearer neglects safety rules when performing hazardous tasks, as well as GPS trackers that can send an SOS in case of emergency.

Special sensors are used to track the movement of vehicles in order to prevent unwanted deviations from the route. Unmanned aerial vehicles are employed to monitor pipeline integrity and prevent illegal siphoning from pipelines.

The adoption of disruptive digital technologies helps to save resources and keep close track of all on-site operations and processes, transforming the approach to production management and taking it to a whole new level.

**Refining, Commerce and Logistics :**

Rosneft owns 13 refineries across Russia. The Company is implementing the Digital Plant program, which is designed to drive efficiencies and added value from each of its refining assets as well as to reduce design times and accelerate upgrades.

Digital Plant forms an integral part of the Rosneft-2022 Strategy that seeks to achieve a step change across all lines of business. Accelerated technological development is high on the strategic agenda, as it will help the Company achieve a leap forward on the path to digital transformation and make its operations more reliable and cost-effective.

The program envisages the application of modern computer technologies, which allow users to perform real-time remote monitoring of critical equipment, gather and analyze all relevant data, maintain records and manage an asset's operations.

Drones and special robotic systems are expected to be used at refineries for the monitoring and aerial surveillance of on-site facilities. Smart bracelets, other navigation systems and mobile devices are planned to be used to monitor the health and wellness of local staff. These measures will help to achieve cost savings, reduce the risk of unplanned equipment downtime and increase workplace safety.

Digital twins, 3D tools, VR/AR technologies and other solutions are set to speed up facilities construction and renovation, reduce operating costs and improve the accuracy of budget planning.

A concept to monitor pipeline safety and protect on-site facilities by means of drones and UAV thermal cameras is now in place.

Ryazan Oil Refining Company has embarked on a pilot project to lever-

age predictive analytics in equipment health checks. The project will help to optimize repair and maintenance costs and achieve visible improvements in the asset's management.

In a move towards digital, Bashneft has introduced VR/AR simulators at its refinery, which also uses a digital system to detect leaks, monitor corrosion, calculate corrosion rates and analyze the global dynamic optimization of production. The first benefits are already visible in the form of improved safety and operating performance.

By 2024, the Company plans to introduce over 80 systems across its refineries to assist in more efficient production management.

Rosneft's Digital Supply Chain is a program that is focused on improvements in managing transport and logistics processes. It brings together the most advanced computer technologies and software to create digital replicas of product supply processes, logistics routes and physical objects. The digital platform allows modeling and forecasting future events and choosing the most effective processes to deliver final products from shop to end-users.

When it comes to commerce and logistics, the Company's primary focus is on maximizing the efficiency of its crude and oil product sales and providing guaranteed high-quality products to its customers using various means, including digital technologies. Rosneft is implementing a Digital Trading program that is designed to expand oil product sales and extract greater value from monetization channels. The program includes the establishment of a data exchange platform that will help to build commercial relations between suppliers and customers by creating a flexible and structured customer base.

Rosneft operates Russia's largest retail network and is the leader in most regional markets where it has a presence. The Company owns 138 active

The Company's priorities in commerce and logistics are to maximize the cost efficiency of crude oil and petroleum products and ensure high-quality product supplies to consumers, including through digital technologies

tank farms and over 1,000 fuel tank trucks.

Digital Filling Station offers a new perspective on running a retail business and improving customer experience. a digital platform manages supplies of fuel and ancillary merchandise, organizes the work of personnel and keeps track of equipment wear and tear and payment transactions. The system includes a mobile application for customers and various functionalities to support remote payments. The digital platform can process large amounts of data for integrating various communication channels in a single location, thus creating an omnichannel customer service. This drives a more personalized approach to customer service, whereby customers can gain access to the required product or service from any digital device.

At modern filling stations, not only can customers fill the tank; they can get an array of additional services, which turns a filling station into a sort of service hub, with customer interaction moving into a digital environment as a result of technological transformation.

**> 80 systems**  
of advanced process control will be implemented at the Company's refineries until 2024

Digitalization and the adoption of modern technologies are among the key targets of the Rosneft-2022 strategy. The Company is making significant strides to develop and implement various digital services, such as mobile applications and payment platforms featuring a pre-order functionality and allowing payment for all services offered at filling stations.

The Rosneft Fuel Station mobile app allows customers to choose the easiest route to the nearest station online, find their preferred fuel brand and services, and receive the latest updates on offers, products and services.

Rosneft was the first among Russian players to launch an app with a mobile fuel payment service. The Rosneft Fuel Station mobile app is the Company's proprietary product and it boasts security and convenience as its key advantages.

Complete with a virtual fuel card, the mobile app is an innovative product that leverages advanced digital technologies and allows users to optimize their spending on fuel and ancillary goods.

The Company is currently working on a software product designed to improve the performance of its retail business and expand the current service offering.

large amounts of information for the integration of different communication channels into a unified system in order to form omnichannel customer service. This leads to a more personalized service approach when the required goods or services are available to customers from any digital device.

A modern filling station is not just somewhere to fill up with fuel, but also a high-tech complex offering a wide range of additional services to its customers. Thus, the filling station has turned into some kind of a service hub ensuring the digitization of customer interaction due to technological transformation.

Digitization and introduction of state-of-the-art technologies are one of the key objectives of the Rosneft-2022 Strategy. The Company has been actively developing and implementing various digital services for the customers, including a mobile app and payment platforms with

a pre-order feature and an opportunity of paying for the full range of services offered by the filling station network.

The mobile app for Rosneft filling stations allows a real-time selection of the easiest route to the nearest station, taking into account the fuel cost and availability of services. The mobile app informs the customers about the latest offers, goods, and services.

Rosneft is first in Russia to launch a service of fuel payments via a mobile app for corporate customers. The mobile app was created with Rosneft's own inventions; its key advantages are security and user-friendliness.

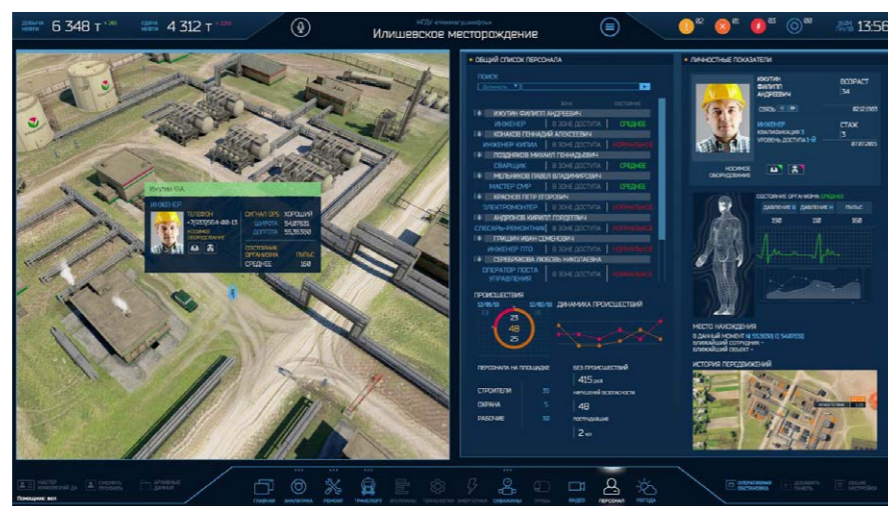
The mobile app equipped with a virtual fuel card is an innovative solution utilizing new digital technology that can improve the costs of fuels and associated goods.

The Company continues to work on the development of software to boost the efficiency of Rosneft retail business and expand the customer service.



### Cross-Segment Solutions

- Creation of a proprietary protected industrial internet platform, RN-Predix. The platform has already been deployed in a test environment. Five Company enterprises have already piloted RN-Predix. The latest RN-Predix-based digital solutions will optimize the system of collection, processing and analysis of industrial "well-to-wheel" data, enhance the monitoring of material flows and remove the risk of human error.
- Development of HSE - Real-Time Staff and Transport Monitoring, a digital solution to monitor the location of vehicles and performance of functions by employees. The solution automatically records breaches, including the appearance of unauthorized persons on



site, the non-use of personal protection devices, deviations from approved routes, etc. This solution has been successfully adopted at the Ilishevskoye

field of Chekmagushneft, which is part of Bashneft, and will soon be implemented at LLC Saratov Refinery and PJSC Ufaorgsintez.

## Information Security



In 2018, Rosneft elaborated and approved the strategy for information security development until 2022 based on the Company's data security factor analysis to ensure secure digital development of the Company in face of the growing level of computer threats. The strategy defines the basic data security principles and approaches, key aspects of the target system and priority areas for information security development.

Rosneft places great focus on information security: the Company has built IT-perimeter security and provides methodological support for information security processes; information security specialists participate in developing IT solutions from the earliest stages.

The minimization of human errors is an important aspect affecting the information security level. One of the priorities is to promote awareness of computer threats and enhance information security culture and skills among the Company's employees. In 2018, Rosneft held cyber training on a periodic basis and informed users and IT staff on new computer threats.

## 06

## Innovation and Technology Advancements



**Andrey Shishkin**

Vice President for Energy, Localization and Innovations at Rosneft



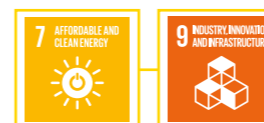
Our innovation efforts are focused on technological leadership in our key domains, notably oil and gas extraction and oil refining. We also strive to improve energy efficiency and comply with high international standards of environmental and industrial safety.

### Study of Marine Mammals of the Arctic and the Far East

As part of the program of geological exploration activities in the license areas in the Russian Arctic and Far East seas, Rosneft performs environmental monitoring, including marine mammal observations from ships of opportunity.

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## Strategic Goals in Innovative Development



Rosneft works on innovations in accordance with the Innovative Development Program approved by the Company's Board of Directors. The Program is focused on the Company's strategic goals and is based on such priorities as efficiency, sustainable growth, transparency, social responsibility, and innovations.

Total R&D expenses in 2018 amounted to RUB 32.1 bln. Over the reporting year, comprehensive efforts were made to implement the output of R&D and register intellectual property rights. Innovation in 2018 led to the Company filing 57 applications to obtain documents protecting intellectual property rights.

### Rosneft's Technological Council

In 2018, the Technological Council was established at the Company under Rosneft-2022 Strategy. This is a consultative

body aimed at promoting the Company's development strategy for technology and innovation, and at supporting the focus areas for technological growth. The primary aim of the Technological Council is to review advanced technologies and monitor their effective implementation.

The Council comprises the Heads of shareholding companies and Rosneft's technological partners, such as members of the Company's Board of Directors, leading members of the scientific community and key expert community, as well as Company top-managers.

The Technological Council held its first meeting in December 2018. During the meeting, the Council members approved a plan of activities for 2019 and reviewed issues concerning comprehensive digitization of production activities, as well as development of a high-tech geophysical survey and well development service.

Total R&D costs in 2018 amounted to

**32.1**  
**RUB BLN**

In 2018, the Technological Council was established at the Company under Rosneft-2022 Strategy

### THE INNOVATIVE DEVELOPMENT PROGRAM



DEVELOPMENT AND DEPLOYMENT OF NEW TECHNOLOGIES



DEVELOPMENT, PRODUCTION, AND LAUNCH OF NEW, WORLD-CLASS INNOVATIVE PRODUCTS AND SERVICES



ASSISTANCE IN THE COMPANY'S MODERNIZATION AND TECHNOLOGICAL DEVELOPMENT THROUGH SIGNIFICANT IMPROVEMENTS IN KEY PERFORMANCE INDICATORS FOR OPERATING PROCESSES



INCREASING THE COMPANY'S CAPITALIZATION AND COMPETITIVE ADVANTAGES IN THE GLOBAL MARKET

### Adaptation and Adoption of Advanced Technologies

As part of its efforts to adopt promising, efficient technologies developed by both Russian and foreign companies, the Company organized the testing, adaptation, and adoption of new technologies as part of pilot test projects in 2018. During the tests, the key features of the technologies were evaluated, and feasibility studies were conducted to assess the case for, and effectiveness of, their use in the geological and technical conditions of the Company's producing subsidiaries.

149 technologies were tested by the Company in 2018. a total of 721 tests were conducted as part of pilot test projects, and 119 thousand tonnes of incremental oil was recovered as a result. Performance analysis was attempted and economic efficiency in the use of technologies was evaluated. Plans for their roll out and implementation were created.

As part of the program, the Company implemented and rolled out 92 new

technologies that had been previously tested as part of the pilot tests and of which the economic viability had been confirmed. The technologies used at the phase of implementation and rolling out amounted to 3.9 thousand items, and the related financing amounted to RUB 1,889 mln.

As part of the efforts to implement the output of Target Innovative Projects, 10 license agreements worth a total of RUB 66.8 mln were signed for the transfer of software solutions (RN-KIM, RN-GRID, Gorizont+, technology for synthetic high-index low-cold-test base oils, technology for the detection of cavernous fractured reservoirs and their parameters' identification by innovative methods of scattered wave processing and interpretation), including the training of students on industry-related programs at leading Russian universities.

In 2018, the combined proven economic benefit from the output of Targeted Innovative Projects implemented over the last three years exceeded RUB 21 bln.

	Quantity, pcs	Total incremental oil production, thousand tonnes	Total economic benefit, RUB mln
Testing of new technologies	149	119	905
Implementation of tested technologies	92	552	5,898



# 149 technologies

tested

# 92 technologies

implemented and rolled out

# 21 RUB BLN

combined proven economic benefit from the results of Targeted Innovative Projects

## Key Achievements in Innovative Development



### Exploration and Production

- Positive results were obtained when testing low-permeability reservoir production technology based on horizontal producing and injection wells with multi-stage hydraulic fracturing at a pilot site of the Prirazlomnoye field. Development elements involving using horizontal wells as injection ones (the HW were used for reservoir pressure maintenance) proved to be effective: the average specific injectivity index of horizontal wells was three times higher than that of vertical wells, and the fluid flow rate decline in the pilot wells (the HW were used for reservoir pressure maintenance) was lower than that of the basic engineering technology. Based on the testing results, the technology was rolled out at LLC RN-Yuganskneftegaz, involving 77 wells.
- At the Priobskoye field, testing of high-speed hydraulic fracturing technology continued based on proprietary designs for testing development technologies for argillaceous and siliceous low-permeability rocks in Upper Jurassic deposits. The tests demonstrated that accident-free use of this hydraulic fracturing technology was possible.
- Approaches to the localization of potentially productive zones in argillaceous and siliceous low-permeability rocks of Upper Jurassic deposits were developed. Exploitability categories of these deposits were mapped, and LLC RN-Yuganskneftegaz planned horizontal drilling with multi-stage hydraulic fracturing accordingly.
- Rosneft developed procedures and technologies for the survey, localization, and development of reserves, as well as for the assessment of potential resources at the Berezovskaya suite deposits. While implementing the project, the Company booked significant B1-B2 gas reserves in 2018.
- Technology has been developed for the integration of multi-scale studies to research deposits of the Jurassic high-carbon formation (Bazhenov suite) of the Tomsk-Tyumen zone, Western Siberia. Maps of the relative density distribution of formed hydrocarbon compounds were constructed.
- The Company developed the design documentation for a mobile modular unit of early initial water separation and electricity generation from the separated APG. This unit reduces the time required before beginning production at a field and obtaining commercial output, and minimizes the risk of unreasonable expenses on capital construction facilities.
- Technologies of structure remodeling and prediction of oil and gas occurrence in paleobasins were developed to improve exploration efficiency and build up the Company's resource base.
- As part of APG monetization technologies, design inputs for a pilot GTL-1.5 production plant were prepared, and a sample of synthetic crude oil with higher isoalkane content was generated to investigate the impact of synthetic crude oil on qualitative parameters of commercial oil products.
- A test batch of ultra-lightweight polymeric proppant based on polydicyclopentadiene (PDCPD) was generated. At the end of 2018, the first stage of the pilot project was delivered, including low-capacity hydraulic fracturing operations with the use of proppant at three wells of the Samotlor field. The hydraulic fracturing performed proved that the proppant could be injected into the formation without any technical problems. Utilization of PDCPD proppant in the Company's operations will efficiently develop previously unprofitable, and thus, undeveloped hydrocarbon deposits.



## Oil Refining and Petrochemicals

- The design inputs and basic design of the pilot production plant for manufacturing synthetic high-viscosity polyalphaolefin base oils were developed. These oils are used as feedstock for gearbox oils and oils for high-load assemblies and mechanisms.
- The design inputs for industrial production of the third-generation fire-resistant oil used in high-power turbines, including nuclear power plant installations, were completed. Technical and regulatory documentation to produce a fire-resistant oil test batch was prepared: specifications, industry standards, and quality certificates for target and intermediate products.
- The design inputs for a pilot production plant making isopropyl alcohol by hydrogenation of acetone using a proprietary technology were developed.
- Technologies for producing a proprietary line of reagents for oilfield chemistry, including corrosion inhibitors, salting inhibitors, inhibitors/solvents for asphalt, resin and paraffin deposits, hydrate inhibitor/solvents, and mutual solvent, have been developed.
- The composition of and method of obtaining depressant-dispersant additives for diesel fuels with the advantage of bifunctionality – a combination of depressant-dispersant and anti-wear properties – were developed. The performance data was confirmed by independent testing at the Company's refineries.
- A pilot batch of Ht-100RN diesel fuel hydrotreating catalysts was produced and loaded into one of the diesel fuel hydrotreating units of the Company's refinery. The catalysts were developed by LLC RN-TsIR to obtain winter and arctic diesel fuel with a sulfur content of 7 ppm maximum.
- The preparation technology of the catalysts for hydrotreating the mixture of straight run diesel and secondary process diesel fractions was developed and issued as specifications and process manuals to prepare the catalyst test batch.
- Technology was developed to prepare the synthetic component of RN-RKM-7 and RN-RKM-10 oil bases for the aerospace industry.



Various technologies focused on reducing the ecological footprint, improving industrial and occupational safety level are developed and tested

- The Russian-made Mixoil V4-38 thickening agent was selected and adapted for the additive package for HVLP level all-season energy efficient hydraulic oils. Test batches of the additive package and all-season energy efficient hydraulic oils were produced using the technologies developed.

### Projects in the Field of Health, Safety and Environmental Technologies

In the course of innovation, various technologies focused on reducing the ecological footprint and improving industrial and occupational safety are developed and tested.

Some of the new technologies are subject to pilot testing:

- drilling waste disposal by means of injection into the formation. In 2017, a facility for injecting drilling wastes was constructed, it began pilot operation, and then began round-the-clock operation. Monitoring of the process flow was carried out in the reporting period;
- the use of geotextile for the restoration of drilling sludge pits during the winter season. The geotextile installation works have been completed, and the performance assessment is carried out following the germination results;

- active boom containment to clean the water and bottom sediments from hydrocarbons. Draft technical documentation focused on water body cleaning was prepared and approved, and public hearings were held. Works have been started at the cleaning facility in the area of Oil and Gas Production Unit 3 (Leningradskoye Lake), and monitoring has been implemented.

Active efforts are made under a number of target innovative projects:

- development of comprehensive scalable technology for long-acting drilling waste disposal. The Company's drilling waste disposal solutions are recorded and systematized, and drilling waste samples are subject to laboratory analysis;
- development of comprehensive disposal technology for oil sludge containing natural radionuclides. The physical and chemical composition of the soil samples was studied, and the process solutions for deactivating and disposing of the oil contaminated soils were substantiated;
- development of methods to reduce the negative effects of chemicals used in oil production and containing chlororganic compounds, formaldehyde, and other admixtures causing corrosion of refinery facilities. Procedures for determining the scavengers of hydrogen sulfide and products

of its interaction with hydrogen sulfide in oil and oil products were developed. The level of safe hydrogen sulfide content not causing process-, corrosion- and environment-related problems during oil transportation and refining was substantiated. Issues related to hydrogen sulfide rate setting changes are discussed with the Russian Ministry of Energy;

- research and monitoring of marine mammals that are indicators as to whether Black Sea ecosystems are in a stable state.

Part of the target innovative projects are at the preparatory stage:

- development of chemical methods for oil spill responses in respect of dispersion media for offshore zones;
- creation of a microbial compound for disposing of hydrocarbon pollution in the Arctic region seas. The project is implemented in cooperation with Lomonosov Moscow State University at the Microbial Biotechnology Laboratory, a subdivision of the Microbiology Department at the Faculty of Biology;
- development of the concept of the special-purpose oil spill response facility in the shelf area;
- development of standardized amphibious equipment with a rotary screw propulsion unit;
- analysis of worldwide and Russian experience in and approaches to systems for warning, search and rescue in case of incidents, contingencies and emergency situations in the marine environment;
- development of a series of atlases reflecting the output of Rosneft's environmental research into Russian Federation seas;
- development of a set of criteria and methods for evaluating and predicting metal's transition to a critical state belonging to oil refinery facility equipment;
- investigation into the possible use of commercially available reagent packages ensuring chemical and industrial protection of equipment;
- investigation of populations of key species and indicator species of whether the Arctic region ecosystems are in a stable state under the Biodiversity Conservation Program.

## High-Tech Software :

- The RN-GRID software suite developed in the Company, the first industrial hydraulic fracturing simulation module in Eurasia, has begun commercial production. Rosneft has become the first Russian company to phase out imports of hydraulic fracturing simulation software. The simulator makes all calculations required for hydraulic fracturing design and analysis. In 2018, RN-GRID software was used to conduct over 4 thousand hydraulic fracturing operations with a complete design cycle.
- The corporate RN-SIGMA software suite for industrial use was designed for geomechanical modeling of borehole stability during drilling. The software suite reduces drilling risks. Currently, the software suite is undergoing pilot testing at the Company's Subsidiaries.
- Development of software modules for the hydrodynamic simulator of the RN-KIM software suite. In 2018, 67% of hydrodynamic models were generated in RN-KIM. This software product has been provided to industry-related departments at leading universities to train the Company's experts. The project outcome was that the proprietary simulator will not only cover 80-90% of the Company's demand for hydrodynamic modeling but it will also allow the active use of artificial intelligence technologies for field development planning.



- The geological modeling software modules of the RN-Geosim software suite were designed to ensure task flow control, well logging data visualization and processing, 2D/3D visualization of geological features, and design of structural surfaces. The project outcome was that the RN-Geosim software suite will satisfy 80% of the Company's demand for geological modeling.
- Development of production process modeling software modules of the RN-Simtep software suite for the calculation of physical and chemical properties of both the pipelines network and surface infrastructure facilities. The project outcome was that RN-Simtep will satisfy up to 80% of the Company's demand for production process modeling. The software will be further developed to fit the refining and petrochemicals segments.
- Development of a prototype intelligent management system of the Company's standard design system for collecting, storing and using documentation during the preparation of the Company's design specifications, design and procurement activities.



## Development of Research and Technology Potential



### Corporate Research and Design Complex

The Corporate Research and Design Complex is Rosneft's core platform for making R&D and engineering decisions across the Company's areas of operations. This Complex covers all kinds of innovations, from exploration activities to the delivery of end-products in the petrochemicals and oil and gas processing industries, supporting the Company's operations across Russia and abroad.

Today the Complex combines 29 corporate R&D and design institutions run by Rosneft that employ over 13,500 skilled professionals, about 5% of them holding a candidate's degree or Ph.D. The employees participate in making all scientific, technological and technical decisions in respect of all of the Company's production areas: from geological exploration to the delivery of end-products in the petrochemicals and oil and gas processing industries.

### Lead Institutes

Rosneft introduced centralized management for its R&D and design institutions. Four major institutes were selected in the following areas: Research in Exploration and Production, Engineering in Exploration and Production, Research in Refining and Petrochemical Processes and Engineering in Refining and Petrochemical Processes; 39 specialized institutes were established.



Monitoring and enhancing R&D activities is a key priority for lead institutions helping the Company to achieve better performance and pursue the Rosneft-2022 Strategy. The lead institutions play a crucial role in enabling quicker, more informed and effective engineering decisions, balancing workloads across R&D and design institutions, driving research in existing and new fields, promoting digital transformation, expanding R&D capabilities and providing methodological support for the Group Subsidiaries.

### Specialized Institutes

Specialized institutes act as competence centers in field-specific and challenging activity areas.

One of these institutes (SI RSP) continues to develop and deploy a system of standard design solutions to support Rosneft's operations in cooperation with lead and specialized institutes. The key highlights of this work in 2018 included:

- increasing the number of projects for the Company's oil and gas field ground facilities, where standard design documentation is used, to 58% of the total amount of capital construction projects implemented in 2018;
- development, updating and practical evaluation of standard procurement documents for 163 categories of goods to improve the procurement process in the long run and reduce the number of goods procured by the Company;
- adoption of 13 internal regulations of the Company outlining the design rules and stating the requirements for the design solutions;
- issue of a system document stating the methodology for selecting the best design solutions.

In the reporting period, documents were developed describing the Company's standard design technology, which is

the methodological basis for the system of standard design solutions. Developing and improving a common information space of the standard design solutions system continued – a "Standard Design Solutions Portal" began operation, implementing automated planning tools, and monitoring and visualizing economic benefit. Pilot operation of the bench information management system prototype under the Company's standard design technology has started, involving several Group Subsidiaries and corporate R&D and design institutions. Wide-scale training of specialists from the Group Subsidiaries and corporate R&D and design institutions was conducted over three training courses on the standard design solutions system.

In line with the Rosneft-2022 Strategy, the reports of Group Subsidiaries confirmed the cumulative effect of the standard design solution system's implementation at over RUB 18 bln. Further, the effect exceeded the target in the reporting period and amounted to over RUB 10 bln.

In 2018, Rosneft continued to participate in working groups formed under Rosstandart to develop standards. One of its specialized institutes focuses on industry standards together with Rosstandart's Technical Committee on Oil Fuels and Lubricants (TK31) to develop and update 25 standards for oil and NGL oil products. Rosneft experts performed an assessment of more than 70 standards and regulations relevant to the Company's operations.

### International R&D Cooperation

The Corporate Research and Design Complex cooperates closely with global engineering companies. Currently, it has engineering and technology partnership arrangements with General Electric (Sapphire Engineering and Training Center), Fluor (Sakhalin Oil and Gas Technologies), and SNC-Lavalin (VNIPIneft). a joint venture with Saipem SpA has been established for further development of the agreement on strategic cooperation signed

### SAMARANIPINEFT SPECIALIZED ECOLOGICAL INSTITUTE

This special-purpose ecological institute was established in October 2016. In 2017, the Institute development strategy was approved under which the following activities were undertaken in the reporting year:

- creating an environmental protection technologies album;
- designer supervision at sites with newly implemented technologies;
- developing methods for drilling waste calculations, developing the design documentation and obtaining a conclusion from the state ecological expertise;
- developing a feasibility study, carrying out internal expertise

of decisions made in respect of disposal technologies for waste and project products;

- upgrading the drilling sludge treatment technology;
- a quantitative assessment of greenhouse gas emissions by the Company.

The specialists were actively involved in various industry conferences and organized the first Research and Practice Conference "Environmental safety. Key issues in legal practice and improvement of environmental protection" at LLC SamaraNIPIneft.

at the 10th Eurasian Economic Forum in Verona. a long-term cooperation agreement with SUEZ Groupe SAS was signed at the 22nd St. Petersburg International Economic Forum in 2018. In August 2018, a 100% Company subsidiary was established in Qatar, carrying out business at the Qatar Technology Park, called Rosneft International Center for Research and Development QSTP LLC.

### Sapphire Applied Engineering and Training Center

LLC Sapphire Applied Engineering and Training Center was established to develop the Company's projects with the use of a wide product range and General Electric technologies. Work is carried out in several areas:

- cooperation in the development of a 7.5 to 15 MW azimuth thruster for multi-purpose, reinforced ice-class supply vessels to be built at the Zvezda shipyard;
- development of a marine gas-turbine power system with heat recovery based on CO<sub>2</sub> supercritical cycle technology. In 2018, the technical requirements for a marine gas-turbine power system with pre-

dicted electrical efficiency of about 50% were specified; a positive expert review was obtained in respect of the proposed technology from JSC Central Marine Research and Design Institute, PJSC Sovkomflot, and JSC Rosnefteftlot;

- development of a mobile modular unit for initial water separation and electricity generation from separated APG. In 2018, the concept designs were developed, the feasibility study calculations were finished, and the design documentation was completed. The project has entered the pilot testing phase;
- development of a modular compressor-separator for operation as

**> 18 RUB BLN**

accumulated effect of implementation of the corporate standard design solutions system

### CENTRALIZED MANAGEMENT OF R&D AND DESIGN INSTITUTIONS

#### FOCUS AREAS OF LEAD INSTITUTIONS:

Research in Exploration and Production

Engineering in Exploration and Production

Research in Refining and Petrochemical Processes

Engineering in Refining and Petrochemical Processes

**39 SPECIALIST INSTITUTIONS**

part of compression plants for gas mixture separated from oil when its pressure is decreased to atmospheric pressure. Under the project, an engineering solution was adopted for the modular compressor-separator, and a positive expert review was obtained for the proposed technology from LLC RN-Vankor and Peter the Great St. Petersburg Polytechnic University;

- research is carried out to develop a low-powered power plant to be used as a drive for single artificial-lift wells using associated petroleum gas as a fuel.

In 2019, the following new projects at Sapphire Applied Engineering and Training Center are planned:

- initiating a project for the production of a domestic import-substituting inline vortex water separator intended for multiple reductions of dimensions and metal consumption of the initial water separation plant units, for a reduction of the burden on the oil-gathering system in view of increasing water content; and a reduction in the cost of transferring

water to the central facilities and back to the wells;

- initiating an import-substituting project for a marine fuel system ensuring the efficiency of vessels' technical operations and increasing the degree of localization in marine power engineering.

### Sakhalin Oil and Gas Technologies

LLC Sakhalin Oil and Gas Technologies (SNGT) was established in 2008 to implement the Sakhalin-1 project. Since the date of establishment through the present, SNGT has remained the main EPC<sup>1</sup>-contractor responsible for designing, procuring and managing the construction of its infrastructure facilities (Odoptu-2, Arkutun-Dagi, and Chaivo). So far, work has been carried out by SNGT on over 200 projects. In 2018, SNGT successfully implemented a number of projects, the largest of which was focused on completing construction and installation works at Odoptu facility (phase 2), which is aimed at delivering oil production growth for the Sakhalin-1 consortium

of 1.8 mtpa by 2025. In 2018, a record 20 mln hours of work with zero injuries was reached.

### VNIPIneft

Under an agreement concluded with SNC-Lavalin at the 21st St. Petersburg International Economic Forum in 2017, the development of a number of focus areas in the Russian Federation, the Republic of Kazakhstan, and the Republic of India has continued, and the competencies of OJSC VNIPIneft specialists in international design have been upgraded. In March 2018, officials from PJSC NK Rosneft and OJSC VNIPIneft made a study tour to SNC-Lavalin's engineering office in India to familiarize themselves with international practices and standards in engineering and design services. In the context of cooperation in 2019, OJSC VNIPIneft is planning to implement a project management and monitoring system and to organize a joint training seminar with SNC-Lavalin for further training of OJSC VNIPIneft specialists in global practices in engineering and project management.

## Import Substitution and Equipment Localization Program



In 2015, Rosneft developed and implemented a program called Import Substitution and Equipment Localization Program in the Russian Federation. The Program is aimed at developing Rosneft as a high-tech oil and gas company, achieving technological leadership in core competencies (oil and gas production and processing), and ensuring the Company's technological stability on the hydrocarbon market thanks to increased Russian-made products and the implementation of projects to localize the production of foreign equipment in the Russian Federation jointly with leading worldwide manufacturers of oil and gas equipment.

One of the main Program focuses is increasing oil production efficiency. In 2018, the share of advanced horizontal wells in the Company's drilling projects grew by 10% year-on-year. To promote self-sufficiency in high-tech drilling equipment, the Company implements import substitution projects in cooperation with JSC Bashneftegeofizika and ROSATOM, including the development and testing of a domestic rotary steerable system and equipment for high-tech well logging during and after drilling.

The Company has been implementing the import substitution project

"Technological Strategy for Developing Advanced Well Logging" as part of import substitution efforts in high-tech well logging. In accordance with a cooperative agreement between Rosneft and ROSATOM, the Company develops well logging instruments with elements of nuclear magnetic and neutron technologies.

The development of Russian catalysts production is another strategic focus area for the Company. In 2018, the Company introduced a new line of arctic motor oils that enable vehicles to operate reliably at extremely low temperatures.

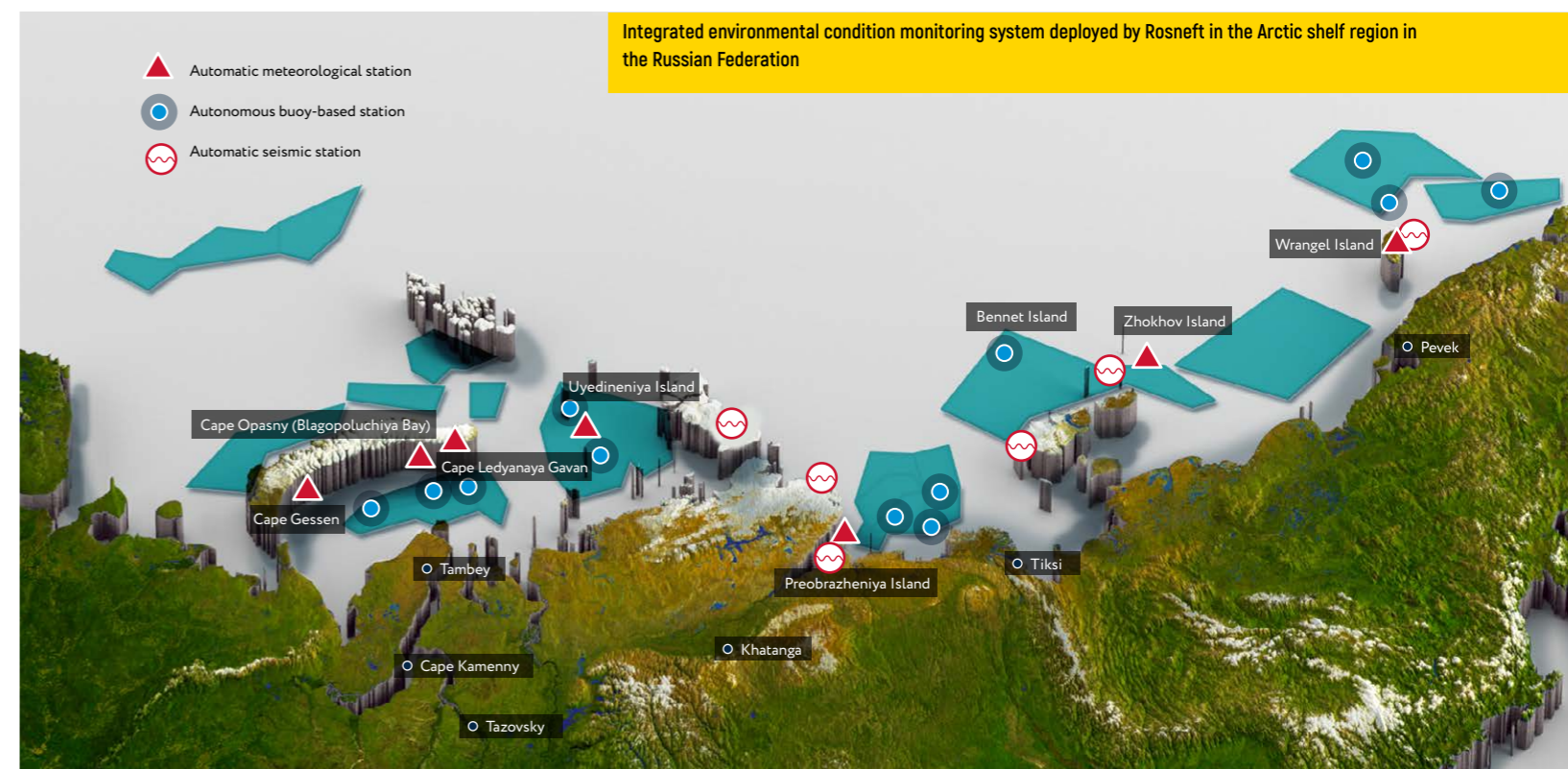
## Arctic Shelf Exploration and Safe Operations in Freezing Waters



Since 2012, Rosneft has been conducting research and collecting information on environmental conditions at the Arctic shelf in the Russian Federation. During this period, the Company has deployed an integrated monitoring system in the Arctic regions of interest, com-

prising state-of-the-art autonomous instruments: automatic meteorological stations, autonomous buoy-based stations, and seismic stations. Information is collected without human input, and the operational meteorological information is transmitted by a satellite

communication channel. This observational network, which is regularly maintained by the Company, is unique in terms of the scale of information collected in the Arctic shelf region.



Integrated environmental condition monitoring system deployed by Rosneft in the Arctic shelf region in the Russian Federation

In the reporting year, Rosneft continued to explore the Arctic shelf in order to ensure that work to design facilities and other operations in the Company's license areas can be carried out safely:

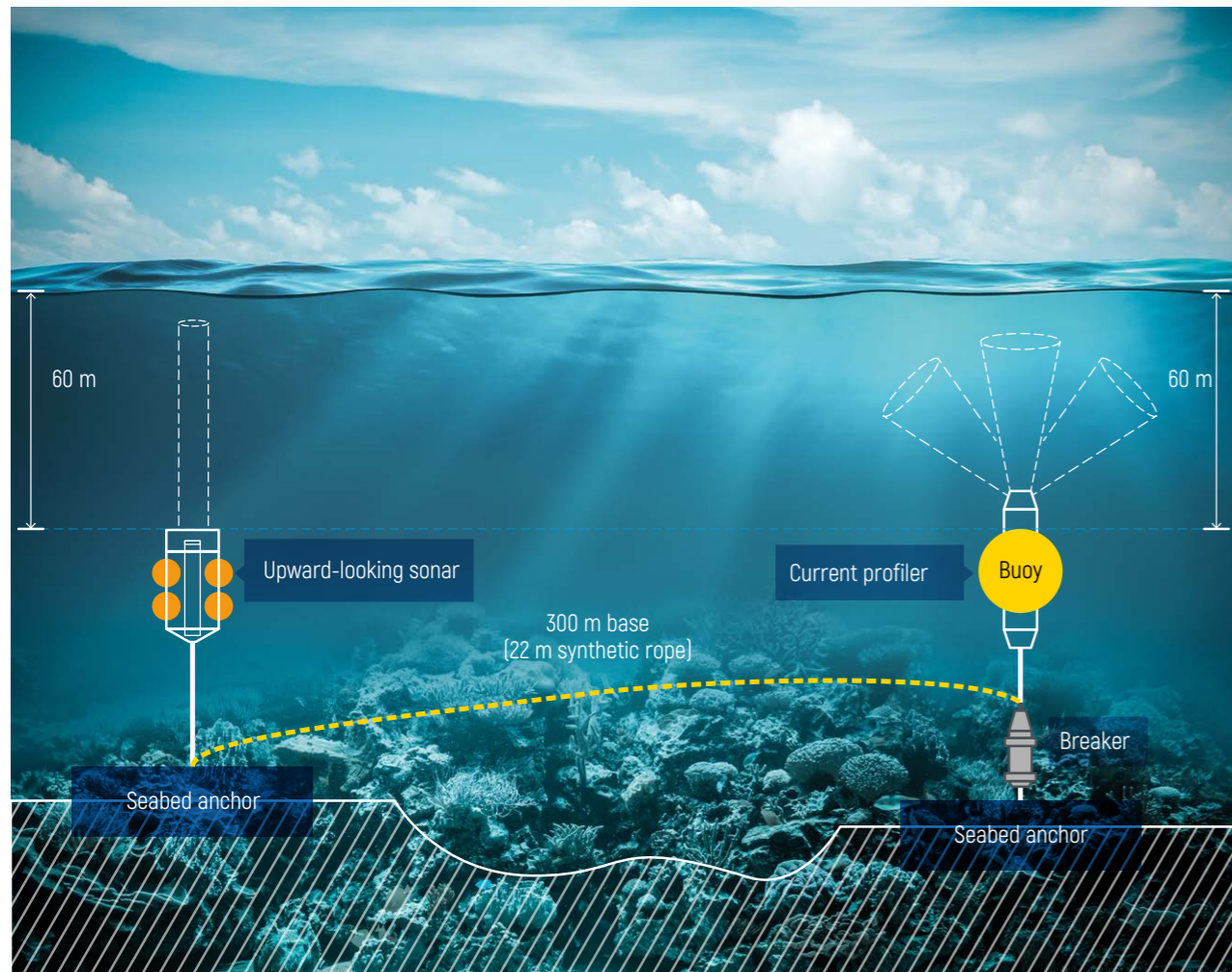
- the Kara-Summer 2018 research expedition was organized and conducted in the Kara Sea and the Laptev Sea;

- meteorological surveys were conducted in the vicinity of the Khatstyr temporary field base (the Khatanga Bay of the Laptev Sea). The data collected will also be used to forecast ice evolution in the Khatanga Bay, in accordance with thermodynamic conditions;
- the wellhead and wellhead setup winterization methods were studied

during a two-year cycle of exploration drilling on the Arctic shelf for two sites at the Vostochno-Prinovozemelsky-2 license area in the Kara Sea. Conceptual solutions were developed for protective structures that provide shelter for a wellhead setup from dangerous ice formations under various geotechnical conditions.

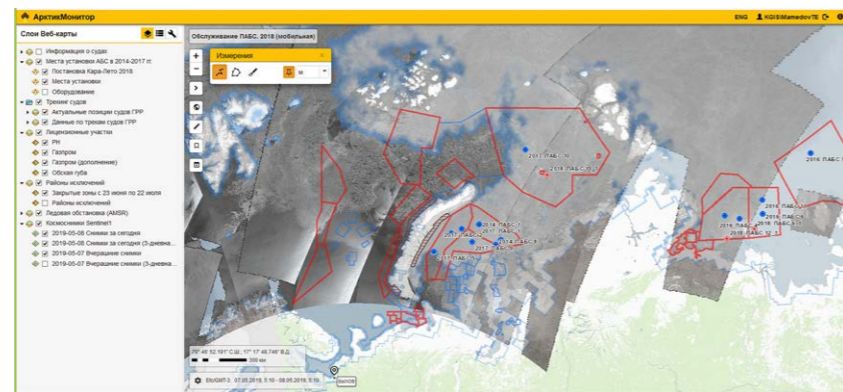
<sup>1</sup> EPC stands for engineering, procurement and construction.

KARA-SUMMER 2018 RESEARCH EXPEDITION



In October 2018, the Kara-Summer 2018 research expedition organized by LLC Arctic Research Center involving Roshydromet Arctic and the Antarctic Scientific Research Institute was successfully completed as part of the maintenance of the hydrometeorological and ice conditions observation network.

The work was carried out from the Bykhov special-purpose vessel. The expedition was focused on the annual recovery, data reading, servicing and deployment of submerged autonomous buoy-based stations. In the course of the expedition, some autonomous buoy-based stations were left at the same points to ensure long-term observations, while other ones



were redistributed among areas with promising geological features.

To ensure prompt information support for marine operations, the Company implemented software on the basis of the Arcticmonitor information

system for the integration and presentation of information transmitted from vessels and other sources. This resource can be operated on both a PC and mobile devices

ICE CONDITIONS MONITORING



Specialists of LLC SakhalinNIPmorneft conducted real-time monitoring of ice conditions throughout the year to ensure safe navigating in Aniva Bay, the north-eastern shelf of Sakhalin Island. Relevant information on ice conditions in this region. In addition, LLC RN-SakhalinNIPmorneft's information support center in Yuzhno-Sakhalinsk transmitted information on ice conditions to the Igor Parkhutdinov ferry, which fell into an ice trap with 127 passengers on board near the northernmost tip of Hokkaido island in February 2018. Owing to this information, the ferry was recovered from the ice trap by the Captain Khlebnikov icebreaker and completed its trip safely.

In addition, throughout the whole ice season, research was carried out to determine the dependence of the Sea of Okhotsk's ice cover on various factors, and to analyze the long-period variations of the sea ice area in order to use the results to improve the ice forecasts.

RN-SakhalinNIPmorneft staff continue their efforts to maintain maritime safety during the transportation of petroleum hydrocarbons and the operation of offshore oil and gas platforms.

## 07

## Human Resources



Yuri Kalinin

Rosneft Deputy Chairman of the Management Board, Vice President for HR and Social Policy



In 2018, in the context of severe competition, the Company succeeded in considerably enhancing its international presence and expanding into new markets. This would not have been possible without Rosneft's main asset – highly professional and motivated personnel.

Including social initiatives in respect of healthcare, helping retirees and supporting housing affordability in the Company's Strategy was a signature event of last year. The implementation of these programs is an important contribution by the Company to resolving social issues facing the country today.

### Program for Polar Bear Studies and Conservation

The Company pays special attention to polar bear studies and conservation. This is largely attributed to the fact that the polar bear is one of the main species indicating whether the Arctic ecosystems are in a stable state. In 2013, the Company took all the polar bear species kept in Russian zoos under its protection, and in 2014 studies of those species were initiated. Since 2016, the Autonomous Non-Profit Organization Wildlife Society has been the operator of Rosneft's program for studies and conservation of the polar bear population.

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## Development of the HR Management System



In 2018, Rosneft retained its status as one of Russia's largest employers. At the year-end, the Company's workforce numbered 325.6 thousand people, + 2.4% year-on-year. This increase resulted from newly created or acquired assets, including several R&D institutions<sup>1</sup> of LLC Kharampurneftegaz and LLC SevKomNeftegaz, as well as from growing production at its current assets.

The Company observes the direct guidelines of government agencies and actively pursues state social policy, including in issues of HR and social policy implementation.

In 2018, the key HR management objectives, reflecting the Company's strategic priorities, were as follows:

- growth in workforce productivity and higher efficiency;
- development of an effective incentives, benefits, and compensation scheme;
- talent management, development of the personnel skills system and corporate systems of continuous education;
- provision of the Company's projects with staff having the required competences;
- continuous self-improvement: improving the effectiveness of the HR Department;

- support of the state personnel training policy through interaction with executive authorities and cooperation with vocational education institutions.

Rosneft strictly follows the Social Charter of Russian Business and the Universal Declaration of Human Rights, recognizes the importance and value of fundamental human rights and freedom declared by the UN, including freedom of association, recognition of the right to collective bargaining, labor rights, as well as the right to health care.

Rosneft's HR management complies with Russian and international law and makes no use of forced, compulsory or child labor in any form, nor does it discriminate against employees on the basis of gender, age, ethnicity, race, or religion, etc. The Company employs underage people only to the extent permitted by Russian law. Operations of foreign assets are organized as per the Company's adopted practices and in conformity with local laws.

### Staff Composition

In 2018, the composition of Rosneft's staff generally remained the same as in the previous year. The majority of the Company's employees (99%)

# 325.6 thsd people

Company's headcount at the end of 2018

were located in Russia, while the largest percentage outside of Russia (0.5%) were employed in the Group Subsidiaries in Ukraine.

The average age of Rosneft's employees was also nearly the same at 40.2 years. The distribution of staff by age was as follows: employees under 30 years of age accounted for 19%, those from 30 to 50 years old made up 59%, and the remaining 22% were above 50. Employees in management positions accounted for 12.2% (39.8 thousand employees) of the total year-end headcount. The share of women in the Company's employees remained approximately the same and totaled 32.3%. Women held 23.4% of Rosneft's management positions at the end of 2018 and represented 13.5% of top management and the upper-level management of the Group Subsidiaries.

<sup>1</sup>JSC Volga Branch of the Institute of Geology and Fossil Fuels Development, JSC Institute of Geology and Fossil Fuels Development, JSC All-Russia R&D Technology Institute of Oil Refining and Petrochemical Industry Equipment, OJSC R&D Institute of Oil Refining and the Petrochemical Industry, and JSC All-Russia R&D Institute of Oil Refining

### The Role of Improving HR Processes in Protecting Personnel's Employment Rights

The consistent improvement of HR processes is of great importance in minimizing the risk of violating personnel's employment rights. Thanks to the system's automation, the violation of employees' rights under the Labor Code and the Company's internal regulations is technically impossible. Therefore, the Company makes efforts to unify and automate basic HR processes, as well as to unify functional units at the Group Subsidiaries.

#### Unification and Automation of Basic HR Processes

In 2018, the Company continued to introduce template-based solutions for the approved "Plan to Strengthen HR Control and Automation, Payroll Calculation, and Social Development through 2020". As a result, the Unified Corporate HR, Compensation and Social Development Template was rolled out on a unified IT platform at another 34 Group Subsidiaries with a total of over 49 thousand employees.

By the end of 2019, unified procedures and a unified methodology on a single IT platform are expected to be used for HR records and payroll calculation for 190 thousand employees of the Group Subsidiaries (approximately 58% of the Company's total workforce).

#### Unification of Functional Units at the Group Subsidiaries

In order to unify the Company's organizational structuring processes, standard organizational/ functional structures have been under development within the corporate functions of the Group Subsidiaries since 2014. Standard organizational structures, sets of competences and standard headcounts for various functions are defined and passed on to the Group Subsidiaries for implementation. The organizational/ functional structures of the Group Subsidiaries are updated every three years on average.

The following standard organizational/ functional structures were unified and passed on to the Group Subsidiaries for implementation in 2018:

- special works;
- civil defense and emergency prevention;
- working with local regulations;
- capital construction;
- production development;
- procurement;
- economic security;
- transport service;
- major repairs.

Further, efforts were also made in 2018 to standardize the divisions and functionality of the Group Subsidiaries' production units. In particular, standard organizational structures for Production Development units and Oil-and-Gas Production Equipment units were drafted and passed on to the Group Subsidiaries for implementation. These efforts are to continue in 2019, resulting in the progressive introduction of standard headcounts for various production functions.

### HR Performance in 2018

#### Personnel Remuneration

Rosneft creates comfortable working conditions and an environment for all employees to fulfill their potential in line with the Social Charter of Russian

Business and the Universal Declaration of Human Rights, which guarantee respect for the rights and freedoms declared in them for everyone. The Company uses transparent approaches to the remuneration, assessment, incentive, and employee promotion system. Rosneft follows the principle of equal pay for work of equal value. The same position with the same functions is paid equally, and there is no difference between payments to male and female employees with identical functions.

With regards to personnel remuneration, Rosneft adheres to the principles of high social responsibility and providing decent standards of living for its employees. Thus, the Company aims to maintain a job compensation level exceeding the average salary in the regions, for which reason it indexes salaries annually. Moreover, the Company annually monitors the regional labor markets and additionally raises salaries for separate personnel groups if any lagging is detected.

The average monthly salary for all Group Subsidiaries was RUB 84,000 in 2018, and the great majority of these subsidiaries have traditionally paid

salaries that exceed both the minimum wage established by law and the average salary in the respective regions, which is on average 2.6 times higher than the minimum wage rate. Quantitative information to compare the average salary in the Group Subsidiaries with the average and minimum salaries across the regions is given in Annex 3 herein.

Social payments, systemic benefit payments and one-time bonuses included in the gross payroll averaged RUB 49,750 per employee in 2018.

In April 2018, salaries were indexed by 4% for employees of the Group Subsidiaries in Russia to boost real salaries and compensate for inflation.

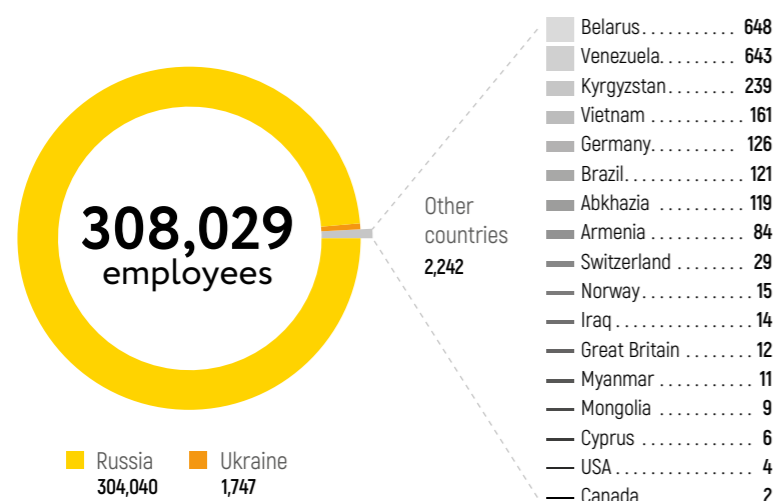
To make the incentive system more transparent and tie the employees' remuneration more closely to their performance, work continued in 2018 to formulate and approve unified job compensation principles for individual business lines taking into account the specific features of each one. In particular, a draft target employee compensation system was developed for the Upstream segment in the reporting year.

### Key Performance Indicators

Rosneft's system of key performance indicators (KPI) plays an essential part in the motivation and compensation of managers. The KPI system includes a number of sustainable development indicators that are tied to bonuses for the Company's management. These include fuel and energy savings, injury rate and efficiency of procurement from small- and medium-sized enterprises.

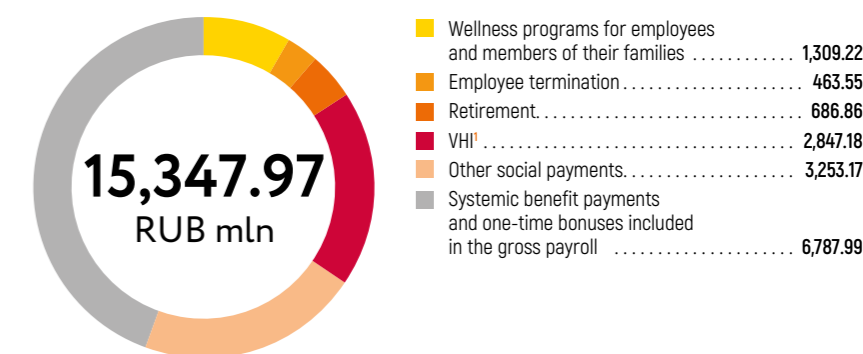
The injury rate is the most important indicator of the Company's activities as it reflects the labor safety processes and is distributed from top management to all subordinate levels.

Staff Breakdown by Country (Average Headcount), employees



Over the years, Rosneft management has shown an unwavering commitment to high standards of social security for its employees. Social payments, benefit payments and one-time bonuses included in the gross payroll totaled RUB 15.4 bln in 2018.

Social Payments, Benefit Payments and One-Time Bonuses Included in the Gross Payroll in 2018, RUB mln



<sup>1</sup> VHI - Voluntary Health Insurance

## Training and Career Development



Rosneft has a unified corporate system of career development across all business areas and categories of personnel. The Company meets its legal requirements in terms of education and develops employees' competencies in line with its business needs, corporate policies and procedures and best Russian and international practices.

Rosneft's personnel training and development system aims at constant building up of professional and management skills of all Company employees, as well as regular work to create an external young talent pool.

### Strategic Areas

The Rosneft-2022 Strategy approved by the Company in 2018 defines the strategic benchmarks in HR development:

- **Leader of the Future** is a program to develop skills of both the management talent pool and current managers;
- **A look-through system of mentoring** at the Company's enterprises is intended to enhance the effectiveness of the onboarding process for young specialists and workers;

- **Training programs at Russian and foreign education institutions** – the creation of special-purpose Master's courses and specialized academic departments at partner universities, and the implementation of corporate programs for further professional education;
- **Rosneft Classes** is a project to train highly-qualified personnel from school to enterprise and including career guidance for school students;
- **Practical Bachelor's Degree** is a program for creating joint training courses together with vocational education institutions to prepare workers for high-tech jobs;
- **Advanced Training for Young Mothers** is a program providing women on maternity leave with the opportunity to gain further education.

### Key Results of Staff Training

A total of 534.8 thousand man-courses (or 12.3 million man-hours) were provided for the Company's personnel in 2018, which was 122% of the target.

### Staff Training and Professional Development in 2018, man-hours

Показатель	
Total training duration	12,268,958
Average annual duration of training per employee	37.7
By category	
▪ Managers	62.6
▪ White-collar employees	23.7
▪ Workers	40.1
By gender <sup>1</sup>	
▪ Male	46
▪ Female	20.2

<sup>1</sup> the difference in the number of training hours between male and female employees is attributed to the significant amount of mandatory training for hazardous work, where mainly men are engaged.

### Development of Corporate Training and Institution of In-house Coaches

In 2018, 347 training programs were conducted for the Company's specialists and managers as a part of corporate training. 47% of the training (253 thousand man-courses) was provided internally through corporate training centers with in-house coaches, experts, and workplace mentors. By the end of the reporting period, 203 in-house coaches worked at the Company, 20% of which were highly-qualified employees with an MBA, post-graduate degree and/or international certificates.

A total of 537 internal training courses were held in 2018, in which 10.5 thousand Company employees participated. Over 53 thousand distance learning man-courses were conducted.

In 2018, the Company completed the pilot operation of the WebTutor-based Personnel Skills Level Assessment and Development System, which has the following functions:

- generation of demand for training the Company's employees, and training planning;
- completion of distance courses by the personnel;
- issuing of reports on preparing and holding training activities.

### Corporate Training Centers

Sixty-two effective training centers have been incorporated into the Group Subsidiaries or established at education institutions in the regions of the Company's operations. The centers are equipped with testing areas/practical training sites, and offer Rosneft employees advanced, vocational, and requisite training. As part of these initiatives, the Corporate Training and Development Center at MGIMO University (Odintsovo Branch) was provided with additional equipment. The project to build the Company's Technical Skills Center at the Gu-

### Staff Training and Professional Development, man-courses

Period	2016	2017	2018
Total for the year, including by category:	438,507	533,298	534,838
▪ Managers	83,981	99,715	105,878
▪ Talent Pool	2,625	3,077	2,339
▪ Specialists	103,094	121,198	124,762
▪ Young specialists	3,706	3,847	3,378
▪ Workers	245,101	305,461	298,481

### THE WORLDSKILLS COMPETITION



In order to promote vocational professions and raise the training level to international standards, Rosneft's Third Corporate Championship in Laboratory Chemical Testing was held in 2018 in line with WorldSkills standards.

30 chemistry lab technicians and 34 experts employed by 32 of the Company's oil refineries and petrochemical plants entered the competition at the corporate production facility in Novokuybyshevsk.

The winners represented the Company at the Fifth National WorldSkills Hi-Tech Championship of Universal High-Tech Occupations held in autumn of 2018 in Yekaterinburg.

Moreover, the Company participated in the National WorldSkills Championship "Skills of the Wise 50+". The team from Ryazan Oil Refining Company came third in the Laboratory Chemical Analysis category.

bin Russian State University of Oil and Gas continued.

In 2018, the Company also started a project to create a Professional Training Center with practical training sites

in 2018-2020 at Grozny State Oil Technical University in the Chechen Republic. The first stage was completed in 2018, including renovation and equipment of premises in the Center's laboratory building.

### Competency Assessment System

A unified system for employee skills assessment is implemented at both Group Subsidiaries and the Company's Head Office. The assessment is conducted for three purposes:

- for training planning;
- for creating the talent pool and expert groups;
- for hiring and promotion.

Corporate and management skills are assessed based on Rosneft's Model of Corporate and Management Competencies, which reflects the Company's culture and values and describes the managers' skills. This Model was used to assess 17.6 thousand employees in 2018.

The professional and technical skills assessment of the personnel is based on materials detailed in the Target Innovative Project titled the Skills-Based Method for Personnel Development in All Business Segments of the Company (which started in 2011), as well as using materials for skill-based assessment of the employees. The professional and technical skills of over 14 thousand employees were evaluated in 2018.

### Comprehensive Personnel Assessment System, thousand employees

Period	2016	2017	2018
Professional and technical skills assessment	over 9	over 13	over 14
Corporate and management skills assessment	over 12	over 15	over 17

### Talent Pool

Rosneft is committed to developing the corporate and management skills of the employees enlisted in its Talent Pool. The Talent Pool program allows it to identify, motivate and retain the most talented employees by offering them opportunities for career development and growth.

The Company has implemented a multi-stage skill assessment system that aids in selecting Talent Pool members, setting their development priorities and creating individual development plans. In 2018, 10.3 thousand employees were assessed to select the talent pool members, and over 2.3 thousand talent pool members completed their training.

The key achievements in 2018 included the following initiatives:

- organization of training for 124 managers and talent pool members under four MBA Programs hosted by MGIMO University of the Ministry of Foreign Affairs of the Russian Federation, the Higher School of Management of St. Petersburg State University, and the Gubkin Russian State University of Oil and Gas;
- the Company's partnership in the National Management Competition, Leaders of Russia 2018-2019;
- creation of the education concept and design solutions for leadership development programs to train the Competition semi-finalists and finalists, as well as the Company's talent pool members.

### BEST IN THE PROFESSION



The Best in the Profession competition is an important element of the incentive system as a means of developing the professional skills

and knowledge of the Company's employees. As part of the competition, the Company holds annual major events to promote best practices

and workplace culture, implement new technologies, enhance the status of skilled professions and reward self-motivated employees.

In 2018, more than 970 employees from over 100 Group Subsidiaries took part in the 9th Competition held at Rosneft production facilities in the cities of Krasnodar and Tuapse.

Both theoretical and practical skills were assessed, and special attention was paid to knowledge of industrial, fire, and occupational safety. Over seven days, the participants competed in 27 skill categories covering oil and gas production, oil refining, marketing, and distribution.

### International Education Projects

In 2018, Rosneft continued to implement international education projects aimed at the active development of personnel's skills needed to achieve the Company's strategic goals.

Within the reporting period, the Company established cooperation with the representatives of nine countries under international education programs, among them: Cuba, Venezuela, Mongolia, Qatar, China, India, Italy, Kazakhstan and Portugal.

In 2018, Rosneft continued to implement its joint education projects with CUPET (Cuba), Petróleos de Venezuela S.A. (PDVSA) (Bolivarian Republic of Venezuela), and the Mongolian Ministry of Education, Culture, and Science. Rosneft also continued to organize on-the-job training for JSC KazMunayGaz employees (the Republic of Kazakhstan) at Rosneft's facilities.

In 2018, the Company signed several new agreements on cooperation in science and education with the following organizations:

- the Qatar Foundation of Education, Science and Social Development (Qatar Foundation) – the Agreement provides for the arrangement of advanced training and further training courses for Russian and Qatar specialists and engineers;
- the Qatar Foundation for Education, Science and Community Development (Qatar Foundation) and Russian partners (the Gubkin Russian State University of Oil and Gas, MGIMO University of the Ministry of Foreign Affairs of the Russian Federation, Saint Petersburg State University) on cooperation in education and employee development;
- China National Petroleum Corporation (CNPC) – two-way on-the-job training was organized for 43 employees of both companies at RN-Uvatneftegaz and RN-Center of Expert Support and Technical Development in Tyumen, as well as at CNPC facilities in China under this agreement;



- ONGC Videsh Ltd (India) – 20 managers and experts of Indian oil and gas companies in the production, refining and sales segments completed a training course at the Gubkin Russian State University of Oil and Gas
- NOVA University (Lisbon, Portugal) and Saint Petersburg State University – the implementation of joint programs started.

Within the reporting period, the Gubkin Russian State University of Oil and Gas and the Polytechnic University of Turin organized joint modular further education programs for 68 employees of the Company. The offsite module of the MGIMO MBA program on Innovative, Process and Environmental Management in the Production Segment for 38 employees of the Company was hosted by the University of Turin and Eni production sites.

### STATE PROFESSIONAL STANDARDS

Since 2016, Rosneft has systematically implemented professional standards in both the parent company's activities and at the Group Subsidiaries to support the state policy to improve employment law. Out of 1,189 professional standards registered by the end of 2018, over a quarter are classed as applicable for 30% of the Company's employees.

In 2018, Rosneft established the mandatory use of 38 standards applicable

to over 11% of the Company's employees. The implementation of mandatory standards in the reporting period delivered the following results:

- 592 employees obtained further professional education and completed professional training courses;
- changes were introduced to job descriptions for over 3.9 thousand employees with regard to qualification requirements.



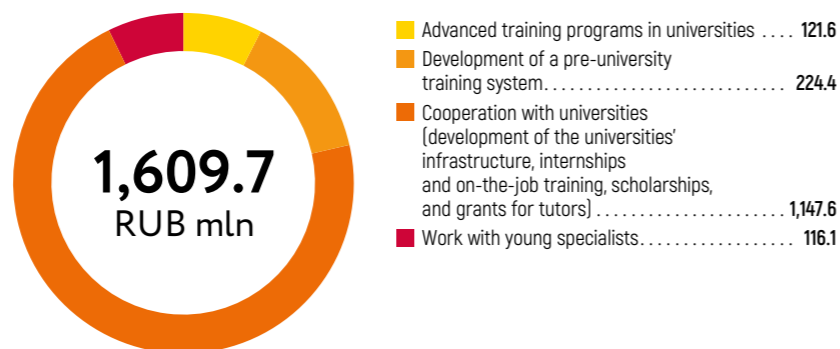
### Youth Policy

Rosneft, being a socially responsible partner of the state education system and a key industry player, follows a policy that ensures a steady influx of young qualified specialists from among university graduates.

Rosneft also implements its youth policy through its corporate higher education program, School – University – Enterprise. Within that unique system, the Company prepares top-class professionals starting from special-purpose school classes through specific institutional training to further educational and onboarding events for young specialists directly at the Company's enterprises. As part of the School – University – Enterprise corporate system, the Rosneft Classes project is implemented in schools of 26 Russian regions, the Company actively cooperates with 60 universities, and it carries out consistent work for the onboarding and development of young specialists at all Group Subsidiaries.



Financing of Continuous Education System Events in 2018, RUB mln



### Work with Young Specialists

The Company works comprehensively with young specialists to develop the talent pool and improve the effectiveness of onboarding efforts at Rosneft's enterprises<sup>1</sup>. In 2018, the Company's remarkable results in this area were demonstrated by its win in a competition organized by the Russian Ministry of Energy for the best socially oriented program in the Fuel-Producing Industries in Youth Policy category.

A total of 3,994 young specialists worked in the Company in 2018.

77 young specialist councils and the Supervision Institute work on the onboarding of young specialists at the Group Subsidiaries. Training and professional growth of young specialists are

#### Young Specialists at Rosneft

Period	2016	2017	2018
Number of young specialists hired after their graduation, persons	1,273	1,437	1,459
Number of young specialists in the Company, persons	4,027	4,161	3,994
Number of young specialists who participated in R&D conferences, persons	1,853	2,072	2,391
Financing of the young specialist development program, RUB mln	94.5	102.7	116.1

<sup>1</sup> An employee of a Group Subsidiary who is classified as a "young specialist" and meets the following criteria: graduated from a full-time program at a state-accredited university with a bachelor's degree, professional qualification (engineering) or master's degree; is employed for the first time in this specialization; was hired by the Group Subsidiary within one year after graduation as a result of a competitive selection process; was hired as a manager, specialist, administrator or worker in his/her primary area of activity.

# 1,372 RUB MLN

Company's investments in the development of partner education institutions in 2018

### Partnership with Universities

Rosneft actively supports state education policy and cooperates with general, higher and vocational education institutions in all regions of operation. The Company's investments in the development of partner education institutions in 2018 totaled RUB 1,372 mln.

Moreover, Rosneft's representatives work with the Boards of Trustees and Supervisory Boards of 10 partner universities, as well as the National Intellectual Development Foundation, Lomonosov Moscow State University Grammar School, and the Russian Academy of Education. In June 2018, Rosneft and the Talent and Success Educational Foundation signed a cooperation agreement to support the initiatives of the President of the Russian Federation and develop a system for working with talented school students. The event took place during the St. Petersburg International Economic Forum.

The number of institutes with long-term integrated cooperation agreements with the Company rose to 60 in 2018. Among them, 25 are Rosneft's partner universities. Agreements with the universities contribute to the rapid development of cooperation in personnel training and retraining, scientific and innovative activities, and improvement of the education and research infrastructure of universities for highly-qualified specialists that provide training to meet current business needs.

#### Partnership with Universities

Period	2016	2017	2018
Number of partner universities, psc	54	58	60
Number of student interns, persons	6,645	6,661	7,014
Expenditure on partnerships with universities, RUB mln	908.8	1,049.8	1,147.7

matched with their individual development plans. In 2018, 3,378 man-courses were conducted for the development of the professional, technical, corporate and managerial skills of young specialists.

The Company holds annual Research and Design conferences for young specialists. In 2018, 2.4 thousand young specialists took part in regional and cluster R&D conferences. The final selection stage of the Interregional Research and Development Conference was attended by 334 young specialists. 93 of them were winners and prize-winners, and 83 submitted projects that were recommended for implementation.

The Company pays special attention to building up a strategic young talent pool. For that purpose, seven competitive business evaluation games were conducted for 360 young specialists from 74 Group Subsidiaries in 2018. Following the assessments, 171 young specialists from 56 Group Subsidiaries were recommended for enrollment in the strategic young talent pool for further development under the young specialists training and development target program (Three Steps). In 2018, training courses were organized for 115 young specialists, the winners of the competitive business evaluation games held the year before.

In 2018, the Company took the following steps in line with cooperation agreements with universities:

- continued functioning of 21 departments and the establishment of two new specialized departments involving 78 Company employees to enable educational research activities to be carried out in 2018;
- continued implementation of university infrastructure development projects to improve the quality of specialist training, for example, the Marine Engineering Research and Educational Center at the Saint Petersburg State Marine Technical University; Rosneft's drilling laboratory at Tyumen Industrial University; the Engineering Research and Educational Center Rosneft – Ufa State Petroleum Technological University, etc.;
- continued financial support for establishing an interdisciplinary and convergent research cluster in the field of educational sciences under the Russian Academy of Education Development Program for 2017-2020;
- over 20 thousand students took part in the Rosneft Days career guidance events;
- over 7 thousand students and 39 academics and tutors from universities underwent practical training at the Company's enterprises;
- in 2018, the Company's Head Office organized long-term on-the-job training for 105 Master's students of Rosneft's partner universities.

The Company hired 1,459 university graduates as young specialists in 2018 through its systemic cooperation with educational organizations.

### Rosneft Classes

Rosneft contributes to the system of pre-university education and career guidance by creating specialized Rosneft Classes in Russia's regions. These classes, supported by the Group Subsidiaries, help secondary school students obtain high-quality general education so that they are able to pursue university engineering degrees required in the oil and gas industry and, ultimately, to be hired by Rosneft after graduation.

In 2018, a total of 2,762 secondary school students were enrolled in 117 Rosneft Classes efficiently working in 62 general education organizations in 56 cities and settlements of 26 regions of the Russian Federation.

In the reporting year, four Rosneft Classes were opened in Ufa (the Republic of Bashkortostan), Tyumen (the Tyumen Region), Vladivostok (Primorsky Territory) and Izluchinsk urban settlement (the Khanty-Mansiysk Autonomous District – Yugra).

When opening and supporting Rosneft Classes, the Company takes into account specific economic prospects in the region. The Rosneft Classes in Vladivostok and Bolshoy Kamen focus on training specialists in shipbuilding in response to the rapidly developing shipbuilding cluster in the Russian Far East. In general, all Rosneft Classes provide additional education for school students in major subjects (chemistry, mathematics, physics, and computer studies) with the involvement of partner universities' tutors, as well as providing regular career guidance.

Another important achievement of 2018 was the pilot partner program for talented students of Rosneft Classes



Rosneft Classes Project Development

Period	2016	2017	2018
Number of Rosneft Classes, psc	105	111	117
Number of students, persons	2,499	2,615	2,762
Number of regions, psc	25	25	26
Investments in Rosneft Classes, RUB mln	185.2	191.1	224.4

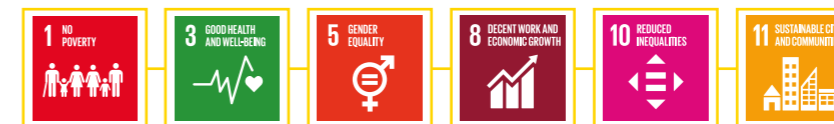
hosted by the Sirius Educational Center in Sochi. 60 students of Rosneft Classes participated in the program selected competitively from 272 candidates. The program comprised participants' project work supervised by young scientists and engineers from nine Company R&D Institutes.

Graduates of Rosneft classes who have received relevant specialized education are employed at the Company, reflecting the effectiveness of the project. In 2018, 116 graduates of Rosneft Classes were hired by 33 Group Subsidiaries. a total of 678 graduates of Rosneft Classes worked at the Group Subsidiaries in the reporting year.

# 2,762 school students

were enrolled in 117 Rosneft Classes in 2018

## Social Policy



In 2018, the Rosneft-2020 Strategy was supplemented with important social initiatives that defined a new vector of the Company's social policy development.

Adhering to the principles of high social responsibility, Rosneft traditionally focuses on creating a favorable social environment at the enterprises and in the regions of operation.

The Company's activities to achieve this purpose include the following:

- constant improvement of social conditions at the production facilities,

- in particular, when operating in remote regions and adverse climatic conditions;
- provision of emergency medical treatment at the Company's facilities;
- an integrated housing program, including corporate mortgages;
- an employee health program, support, and promotion of a healthy lifestyle;

- a corporate pension program and social support of veterans;
- insurance programs.

In 2018, the Rosneft-2020 Strategy was supplemented with important social initiatives that defined a new vector of the Company's social policy development.

### THE ROSNEFT-2022 STRATEGY INCLUDED THREE NEW SOCIAL INITIATIVES



#### THE SOCIAL MEDICINE

program provides for a greater number of industrial medical stations, the development of telemedicine technologies, and implementation of a brand new standard medical examination program



#### THE ACTIVE LONGEVITY PROGRAM

includes regular indexation of corporate pensions covered by the investment income of the Company's pension fund



#### THE AFFORDABLE HOUSING PROGRAM

allows employees to purchase housing through cheap targeted loans without interest secured by the Company, and a reduction in mortgage interest rates by partner banks

### Creation of Favorable Working Conditions

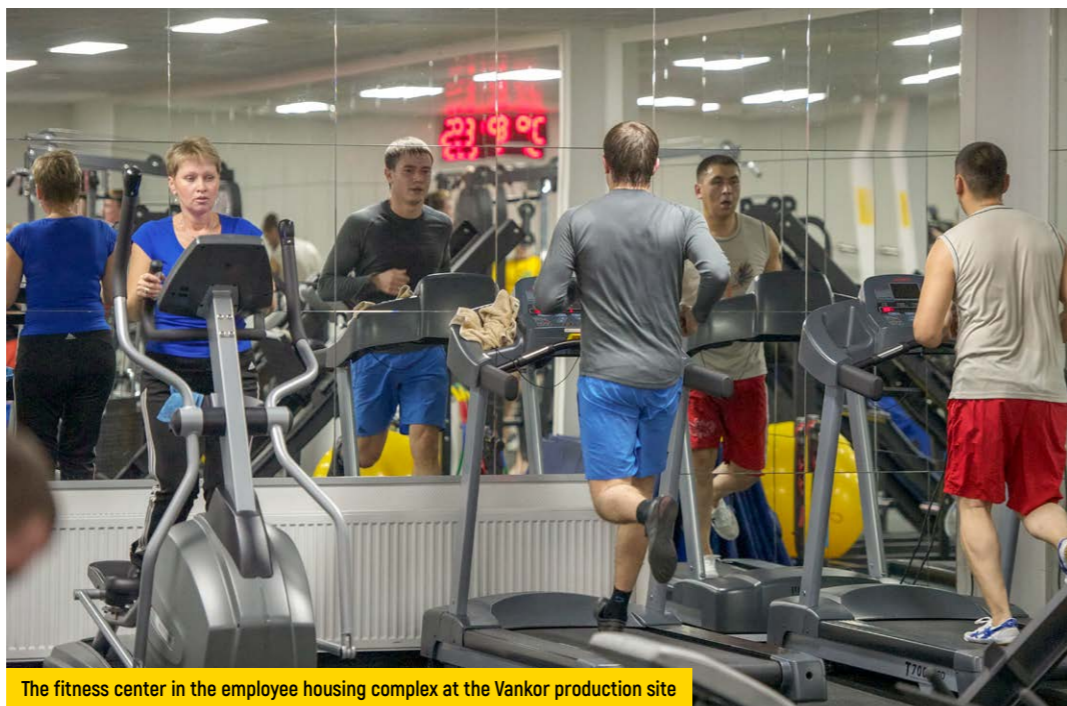
In 2018, Rosneft continued its systemic efforts to create decent working conditions at its production and welfare facilities. The key focus was the construction and development of 95 employee housing complexes. Rosneft's living quarters accommodated close to 35 thousand employees of the Company and its contractors in 2018.

Rosneft provides decent working and recreation conditions for those who work in remote regions and adverse climatic conditions. The Company has adopted unified standards in design, construction, and operation of employee housing complexes, the arrangement of crew supporting facilities, sites, and workshops. In 2018, a number of inspections were performed to check the providers of food, housing and other services in the Company's employee housing complexes.

Further, in the reporting period, the Company was actively engaged in improving the living conditions of drilling crews. In particular, guidelines were developed establishing the unified technical requirements for the design of modular administrative and support buildings, modular trailers of various functionality, and heating units for rotation workers. The living and working conditions of drilling crews were noticeably improved as a result of these measures.

# 8 RUB BLN

investments in the construction of production and social facilities in 2018



The fitness center in the employee housing complex at the Vankor production site

In 2018, expenditures on the maintenance and integrated servicing of industrial social service facilities in the reporting year totaled RUB 7.6 bln. The capital investments in construction, renovation, development, and arrangement of employee housing, crew supporting facilities, sites, and workshops amounted to RUB 8 bln.

### Decent Living Conditions

Rosneft's corporate social policy places a high priority on a comprehensive housing program. The program ena-

bles the Company to attract and retain highly qualified and valuable specialists for the long term by providing cheap mortgages and corporate apartments.

886 families of employees improved their living conditions through long-term corporate mortgages provided in 2018; by the year-end, the mortgage interest rate was reduced to 9% for all employees.

Relocated specialists are provided with corporate apartments, the total number of which in the Company's regions of operation exceeds 1.5 thousand.

### Education Support for Employees and Members of Their Families

One of the areas of Rosneft's corporate social policy in the reporting period was the financing of intramural university education for employees and their children.

In 2018, 288 Company employees were granted interest-free student loans totaling RUB 20.6 mln.

### Promotion of Employee Health

In 2018, Rosneft continued its successful employee health program aimed at providing personnel with timely and high-quality medical services, wellness initiatives, treatment and recreation at sanatoriums and resorts, disease prevention and promotion of a healthy lifestyle.

In the same year, Rosneft spent over RUB 4 bln on personnel health care, including voluntary health insurance programs.

### System of Health Care and Emergency Medical Treatment

The Company is successfully applying unified standards of health care, emergency medical treatment, and evacuation at production facilities.

Under the Rosneft-2022 Strategy, implementation of the following target programs started in 2018:

- Creating a corporate telemedicine network consolidating the medical stations of remote production facilities and the major regional advisory centers in order to improve significantly the availability and quality of medical services in the remote regions of the Company's operations;

- Organizing and conducting standard medical examinations for the Company's employees focused on early identification of cardiovascular and oncological diseases;
- Equipping the medical stations with modern training aids to exercise emergency medical treatment skills.

All of the Company's medical stations are currently supplied with modern medical equipment providing outpatient medical care. There is considerable focus on medical personnel qualifications and large-scale medical drills, which involve exercising emergency medical treatment skills, including aeromedical evacuation.

In 2018, Rosneft organized large-scale emergency response drills at several major production Group Subsidiaries operating in remote and hard-to-access regions of Western and Eastern Siberia and the Subarctic zone. Participation in such drills allows the company to maintain a high level of emergency preparedness of the divisions and helps to define the focus areas for further development of medical support at the Company's production facilities.

For the first time, the drill program included mandatory training in emergency medical treatment and evacuation of five or more theoretically injured persons using an aeromedical aircraft. Fire teams of LLC RN-Fire Safety, gas rescue teams, employees of the civil

defense and emergency management unit and other units of the Group Subsidiaries took part in the activities. Emergency medical treatment was provided using manpower and resources of industrial medical stations, while rapid cooperation with territorial centers for emergency medicine and municipal health care facilities was tested. Subsequently, it is planned to spread the practice of similar drills to all the Company's enterprises.

To improve the system of health care and emergency medical treatment at remote production facilities, the Company established an Occupational Medicine Advisory Board in 2015, including physicians responsible for the health care system at the Group Subsidiaries. The Board's achievements included comprehensive audits of the health care system and emergency medical services at all of the Company's medical stations.

In 2018, 54 audits of medical stations were performed at 10 Group Subsidiaries. During the audits, experts assessed the medical station equipment, readiness of the medical response system, and the qualifications and practical skills of the medical personnel. Based on the audit, the experts and specialists from the Group Subsidiaries agreed on corrective measures that are monitored regularly.

## ROSNEFT WAS NAMED THE MOST SOCIALLY RESPONSIBLE OIL AND GAS COMPANY

In 2018, for the second year in a row, Rosneft was ranked the Most Socially Responsible Oil and Gas Company of the Year in a contest organized by the Russian Ministry of Energy. As a result of the voting, which was held by secret ballot, the Company was also announced the winner in the following three categories: Employee Motivation and Growing Loyalty, Creating a Safe Working Environment to Protect

Health and Safety of Employees, and Youth Policy. This contest is designed to promote good social policy in the energy sector and is aimed at finding top performers among socially responsible businesses who strive to improve the living and working conditions of their employees, as well as at exploring and extending their best practices to other companies.



# > 4 RUB BLN

spent by the Company for the employee health program in 2018



**Training of Health Care Professionals**

The Company puts great emphasis on providing guidance and support for health care professionals and the medical station staff at the Group Subsidiaries.

In 2018, a Program to develop skills of industrial medicine professionals was started at the Group Subsidiaries. a wide range of training events and several organizational meetings with a focus on the strategic development of the Company's personnel health management were organized under the Program. 477 Company employees participated in the Program. As part of this work, 78 employees from 38 Group Subsidiaries took part in the Second Corporate Research and Practice Healthcare Conference on industrial medicine, occupational pathology, and telemedicine.



**Disease Prevention**

Disease prevention is an important part of Rosneft's efforts to develop occupational medicine. Since 2017, the Company has successfully implemented a program to prevent cardiovascular diseases among Group Subsidiaries' employees, focusing on preserving career longevity, and reducing the risks of temporary disability, permanent disability, and early mortality. In 2018, over 100 thousand employees from 140 Group Subsidiaries were involved in the Program.

In the course of preventive measures, 48 thousand Company employees from 161 Group Subsidiaries were offered flu vaccinations.

**Sanatoriums and Resorts**

Resort treatment and rehabilitation aimed at extending employee careers

and preventing diseases is an integral part of the social security provided to the Company's employees, their families, and retirees (labor veterans). In 2018, over 78 thousand Rosneft employees and their family members improved their health at sanatoriums in the Krasnodar Territory and resorts in Belokurikha, Bashkortostan and other regions of Russia.

The program for employee recreation and rehabilitation in the Republic of Cuba continued. In 2018, 2.4 thousand people vacationed and improved their health at Cuban resorts. Throughout the whole period of cooperation since December 2013, over 10 thousand employees and members of their families have improved their physical wellbeing in the Republic of Cuba.



**Personal Insurance Programs**

Employee personal insurance programs, such as voluntary health insurance (VHI) and voluntary accident insurance, are a key part of the social package provided to Rosneft personnel. Personal insurance programs covered over 300 thousand employees of the Group Subsidiaries and Rosneft Head Office last year.

Voluntary health insurance primarily focuses on extending the number of medical and preventive treatment institutions available, including the involvement of high-tech multi-field clinics with modern equipment, the proximity of medical aid services to employees' place of residence, and improvement of the quality of medical services.

Voluntary accident insurance agreements concluded by the Group Subsidiaries ensure twenty-four-hour protection of employees in case of total/partial disability and the resulting loss of income. Insurance terms and conditions provide insurance compensation to an employee's family in case of accidental death. In 2018, 38 Group Subsidiaries considerably increased the individual insured amounts, out of which insurance indemnity can be paid to employees or their families.

**Promotion of a Healthy Lifestyle and Sports**

For many years, Rosneft has made far-reaching efforts to develop sports and promote a healthy lifestyle among its employees and in local communities. Annual summer and winter Spartakiads are an important part of those initiatives. Rosneft corporate sports events promote an active way of life and give employees an opportunity to demonstrate their athletic achievements.

A total of 25 thousand employees from 92 Group Subsidiaries took part in 2018 Spartakiads (including the team building stage).

The 8th Winter Spartakiad was held in Ufa at the Ufa Sports Center and Biathlon Sports and Recreation Complex, where 500 athletes from 29 teams representing the Company's Subsidiaries and Head Office competed for medals in 14 sports: hockey, skating, skiing, and luge relay. Sportsmen from the Angara team were the winners in terms of the overall team score. The silver medal went to the Bashneft-1 team and the bronze medal was won by Samaraneftegaz.

At the finals of the 2018 Summer Spartakiad in Sochi, over 780 participants from

20 teams representing Group Subsidiaries from nine regional zones, from Khabarovsk to Ryazan, competed in 14 sports, including indoor football, basketball, volleyball, tug-of-war, table tennis, chess, powerlifting, track and field, billiards, and bowling. The Angara team took gold, followed by Samaraneftegaz with silver, and the RN-Security team took the bronze.

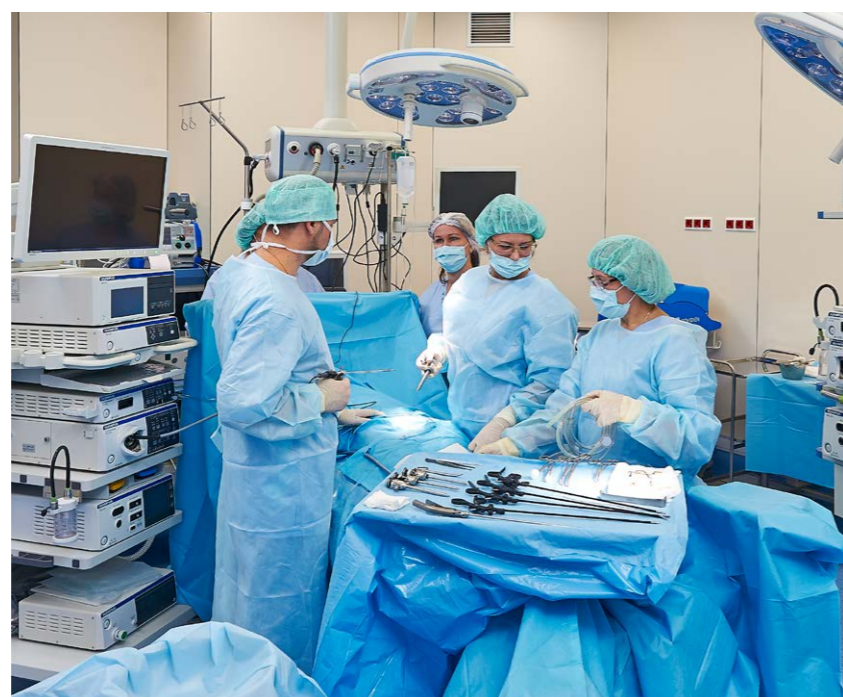


**MULTIPURPOSE MEDICAL CENTER IN GELENDZHIK**

A Multipurpose Medical Center was opened in Gelendzhik in February 2018. The Center was built by Rosneft in cooperation with SOGAZ International Medical Center under the resort city infrastructure development program.

The new Medical Center is a high-tech multi-field clinic that will significantly increase the medical service level in the Krasnodar Territory. The clinic is fitted with state of the art medical equipment: Russia's first unit for an in-depth examination of arteries and veins, top of the range magnetic resonance imaging and computed tomography scanners, as well as an immunochemistry analyzer. Installed telemedicine equipment allows the center to perform complicated high-tech surgeries under the supervision of leading Russian specialists.

In 2018, over 83 thousand medical services were provided, and 573 surgeries were conducted, including 172 high-



tech ones. Round-the-clock admission of patients with acute coronary syndrome and cerebral circulation disorder was organized. Three international

research and practice conferences and a range of master classes for surgeons on current issues in surgical aid were hosted by the Center.



**THE "LIVE LONGER!" PROGRAM TO PROMOTE A HEALTHY LIFESTYLE**

The successful "LIVE LONGER!" Program to promote a healthy lifestyle continued in 2018. The Company uses this unique program to make a positive impact on its employees' health by reducing the incidence of disease, popularizing a healthy lifestyle and involving employees of various ages and fitness levels in athletic events. Successful implementation of the "LIVE LONGER!" Program in 2018 was confirmed by victory in the annual National Sports and Healthy Lifestyle Support Program held by Sport and Russia in the Best Corporate Program for Developing a Healthy Lifestyle among Company Personnel category.

To prevent diseases or diagnose them early, maintain and build up the health of the Company's personnel, and to establish health as a core value, Rosneft organized Health Marathons that covered over 100 thousand employees of the Head Office and Group Subsidiaries.

In 2018, the Program also comprised the following activities:

- Support for Rosneft sports clubs: running, GTO (Ready for labor and defense fitness promotion system) and CrossFit, Nordic walking, triathlon, and cross-country skiing;
- participation of the Company's employees in several major sports events, including the SPORT FOR GOOD Ski Race, the Ready for Labor and Defense Festival for the workforce team in Sochi, the IRONSTAR International Triathlon Competition, and the Moscow Marathon;
- the organization of large-scale family events, including sports ones: the Winter Festival at the CSKA Ice Palace together with CSKA ice hockey club, the Safety in the City corporate event for Rosneft employees and their families, and Russia's first Corporate Triathlon Competition for Rosneft personnel.

Another important event in 2018 was the participation of 61 members of the amateur Rosneft Triathlon Team in the IRONSTAR international competition in Sochi. The Rosneft Triathlon Team is the biggest and most successful corporate team in Russia, combining over 140 amateur athletes across Russian regions. The team confirmed its class by being ranked the Top Corporate Team in the annual triathletes ranking according to the organizer of the IRONSTAR International Triathlon Competition.

Rosneft employees also took part in the Moscow Marathon. The race enlisted 200 employees of the Head Office and Group Subsidiaries who ran the 42.2 km marathon distance or a 10-km minor race, as well as three Rosneft corporate relay teams of 5 persons each. In fact, the Company's relay teams occupied the whole podium, beating 50 other corporate teams.

**Corporate Pension Benefits and Care for Veterans**

The Corporate Pension Program that has been in place since 2000 is an important means for enhancing the security of Rosneft employees.

**In 2018 Rosneft and the Group Subsidiaries paid a total of RUB 11.6 bln in pension contributions to Neftegarant Non-State Pension Fund, while RUB 455.4 mln went to the Veterans Social Support Project.**

The average monthly corporate pension rose to RUB 4,420 in 2018. Corporate pension payments to Neftegarant Non-State Pension Fund in 2018 reached RUB 2.79 bln under two programs: the Corporate Pension Program and the Veterans Social Support Project. a total of over 76 thousand people received corporate pensions in 2018.

Rosneft extends its Corporate Pension Program to all Group Subsidiaries and affiliates, including those recently acquired. In 2018, JCS Targin, JSC Kondanef, and PJSC Bashneft, which had already been integrated into the Group, as well as a number of other Group Subsidiaries, signed pension agreements with JSC Neftegarant Non-State Pension Fund. Thus, since the beginning of 2018, about 17 thousand employees of the Group Subsidiaries have been provided with a corporate pension as additional social security.

The Veterans Social Support Program including monthly payments of corporate pensions was continued in the reporting year. By the end of 2018, the Program covered 27.1 thousand people who received corporate pensions every month through JSC Neftegarant Non-State Pension Fund. The corporate pensions were indexed by 5% a year under signed veterans' contracts. Rosneft also held holiday celebrations for veterans on the occasion of WWII Victory Day, Oil and Gas Workers' Day and New Year's Day. Moreover, the Company pays for necessary treatment and recreation at sanatoriums and resorts and provides one-time financial assistance in difficult circumstances.



In addition to corporate pension schemes for the Company's employees, in 2018 the Active Longevity Program was drafted and approved by the Board of Directors as a supplementary initiative to the Rosneft-2022 Strategy. The Program focuses on improving the social conditions for non-working pensioners. The Program will be implemented by the end of 2021 and includes two initiatives:

- one-time indexation of corporate pensions granted through the year 2010;
- annual indexation of all corporate pensions covered by the investment income of JSC Neftegarant Non-State Pension Fund, that ensures maintenance of the purchasing power of corporate pensions during the whole period of payment.

**>76  
thsd retirees**

received corporate pensions in 2018

Implementing these initiatives not only allows an extension of the existing amount of social benefits and guarantees for the Company's employees but also raises the social protection of non-working pensioners.

**Private Pension Schemes**

Period	2016	2017	2018
Company's payments to Neftegarant Non-State Pension Fund under the pension scheme, RUB mln	5,175	6,843	11,577
Number of persons receiving corporate pensions	67,167	72,841	76,892
Pension payments, RUB mln	2,001	2,196	2,786
Total value of personal pension plans with Neftegarant Non-State Pension Fund, RUB mln	5,062	6,868	8,833
Number of persons with personal pension plans (cumulative total)	64,023	76,460	91,124
Company's employees – fund participants, thousand persons	above 206	above 233	above 266

## THE "ROSNEFT LIGHTS UP THE NIGHTS" FESTIVAL

In 2018, Rosneft held its 8th corporate "Rosneft Lights Up the Nights" Festival, where more than 6.5 thousand participants from 125 Company Subsidiaries competed in various categories: dancing, vocal singing, instrument performance, "reflection" (painting and photography), circus and variety art, and original genre in three age groups: 7 to 12, 13 to 17, and 18 and older. The performances were notable for their innovative ideas

and high level of professionalism. The level of talent increases significantly each year, and the Festival is growing in importance as a cultural event, uniting several generations of oil workers in various cities and regions of the country.

The best festival performances were shown during the gala concert timed to coincide with Oil and Gas Workers' Day. The event took place

in the Moscow Youth Palace in the form of a 3D show "Impossible is Nothing". The well-organized festival and proficiency of the performers were highly appreciated by the spectators.

The "Rosneft Lights Up the Nights" Festival reveals new talents and proves to be an outstanding cultural event uniting the Company's employees from across Russia.



## Collective Bargaining



The principle of freedom of association is a core value for Rosneft, which also recognizes the inviolability of the workers' right to collective bargaining and the right of each employee to the representation of common interests, including by trade unions. 76% of employees are covered by collective bargaining agreements.

In 2018, Rosneft continued constructive cooperation with its social partner, the Rosneft Interregional Trade Union Organization<sup>1</sup>, to improve the Template of the Standard Collective Bargain, which ensures additional social security for the Group Subsidiaries' personnel.

In 2018, Rosneft introduced around 35 amendments to the Template to enhance the social security of its employees. The most important changes were as follows:

- providing free vouchers to employees in need of treatment and recreation at sanatoriums and resorts;
- providing an additional vacation for women with two or more children under the age of 16;
- increasing payments to employees injured in occupational accidents up to the levels provided for by the Industrial Agreement;
- assisting the employment of children whose parents died as a result of occupational accidents;
- enabling the trade union members in charge of occupational health and the Occupational Health and Safety Committee members to perform public duties during work time with pay maintained;
- providing trade union representatives with certified overalls, safety shoes and other certified personal protection means at the expense of the enterprise.

### Cooperation with Trade Union Organizations

Rosneft endorses employees' right to freedom of association and collective bargaining. The Company does not prevent its employees from joining associations or trade unions.

The Rosneft Interregional Trade Union Organization is a partner that plays a key role in the Company's personnel management and social policies.

As many as 180 trade unions of the Rosneft Interregional Trade Union Organization operated at the Group Subsidiaries at the end of 2018. The number of trade union members in the reporting period exceeded 153 thousand employees, or 69% of the personnel of Group Subsidiaries where trade unions are established.

The tradition of annual meetings between representatives of Rosneft's HR and social services and the leaders of trade union organizations included in the Rosneft Interregional Trade Union Organization continued in 2018. The meeting held in November 2018 in Moscow focused on major aspects related to explaining the global Strategy-2022 and key strategic initiatives in social development, as well as issues of labor compensation, salary and its indexation, pension programs, purchasing of subsidized vouchers and local problems which cannot be solved at the Subsidiary level and require the Company's attention.

The establishment of an industry social partnership is another essential aspect of the Social Partnership Program. In 2018, Rosneft made considerable progress in this area – a Company representative joined the Industry Commission

for Social and Labor Relations Regulation. The Company also initiated the introduction of changes to the Industrial Agreement concerning oil and gas industry organizations and the construction of oil and gas facilities in the Russian Federation. These changes allowed the organizations to join the Agreement on special terms. As a result of this work, 52 Group Subsidiaries joined the Industry Agreement in 2018.

Besides the specified development areas of the Social Partnership Program, the Company established cooperation with the All-Russian Association of Employers ("Employers Association") in the Oil and Gas Industry in the reporting year. The Employers Association and over 160 Group Subsidiaries representing the interests of more than 200 thousand employees signed cooperation agreements. A Rosneft representative was appointed to the Employers Association Board to review issues of social and labor relations in the oil and gas industry, including agreeing a unified position of the enterprises during the development of a new Industry Agreement for 2020-2022.

**>76%**  
**Company's employees**

covered by collective bargain agreements

<sup>1</sup> <http://www.mporosneft.ru>

## 08

## Contribution to Development of the Company's Regions of Operation



**Elena Zavaleeva**  
State Secretary,  
Rosneft Vice President



Rosneft implements a policy of integrated social and economic development in all key regions of operation, supporting health care, education, fitness, sports, science, and technology projects, among others. Over RUB 9 bln was invested last year in the social sector of the regions.

Rosneft respects the cultural heritage and traditions of the local residents, supports the existing historical and cultural environment of the regions and creates infrastructural conditions for the development and self-fulfillment of local communities, including those living in the remote and hard-to-access Extreme North and Far East areas.

### The Siberian Sable Project

The Central Siberia Nature Reserve conducts regular studies of the Siberian sable movement in the Evenk District of the Krasnoyarsk Territory. The project was launched in 2016 with the support of a grant from the East Siberian Oil and Gas Company.

Based on the project data, conclusions were drawn on the population number and its trends, migration routes and factors affecting them, and the animals' daily activities, etc.

See page 69

## Support for Regional Economic Development



The Company's activities are significant in providing income for both federal and regional budgets. They promote sustainable development of the regions and related industries, help to create added value and jobs along the entire value chain, boost the population's welfare, and facilitate sustainable development of social infrastructure.

The Company's systematic approach to social investments includes support for development programs in health care, education, fitness and sports, science and technology, and social equality, as well as establishing partnerships with the regions of operation through signing contracts with regional authorities and the Company's participation in targeted charity projects.

### Supporting Fiscal Stability and the Budget

Rosneft is the largest taxpayer in Russia. The Company ensures fiscal stability in the country and its regions, which helps the government to pursue a balanced state social and economic policy. The Company paid RUB 4 trln last year to budgets and ex-

tra-budgetary funds of different levels as taxes, duties, and fees. The Company's share in the Federal Budget for 2018 totaled 18%. RUB 393 bln in tax proceeds were transferred to the regional budgets.

### Support for the Development of Infrastructure, Related Industries, and Industrial Complexes

The Rosneft Investment Program together with anchor orders significantly impact the development of related industries and the national economy as a whole, and support advanced industrialization and the implementation of new technological solutions. The Company runs oil and gas projects and, thus, ensures the creation of new oil production provinces and the development of regions. It further does so through creating infrastructure required for current industry players and the oilfield service sector.

Rosneft consistently implements the Investment Program, including the start-up of new oil and gas production projects, renovation of existing facilities, and the creation of high-quality, sustainable infrastructure for doing business in the regions of operation. The Company's investment portfolio and anchor orders build up the base for establishing, retro-

fitting, and expanding enterprises across industries.

Rosneft is developing a project to create an industrial and shipbuilding cluster in the Far East, with the Zvezda Shipyard being its core. In particular, Rosneft ensures pilot loading of the complex. The Shipyard has already been provided with an anchor order for vessels and marine equipment covering 178 items through to 2035. The project implementation promotes the development of related industries, including metallurgy, the chemical industry, instrument engineering, and electronic engineering.

The Company facilitates the creation of infrastructure for carrying out new projects in remote regions (including Eastern Siberia), developing oil and gas fields on the continental shelf, and manufacturing oilfield service equipment.

Stable Rosneft demand for goods, works, and services in the regions of operation constantly creates opportunities for the Company's suppliers and contractors to develop their businesses, and ensures employment and progress in related industries. For details on this, refer to the Supplier and Contractor Relationships section herein.

~4  
RUB TRLN

taxes, duties, and fees paid by the Company to different-level budgets in 2018

### Supply to Remote Regions and Support for Joint Use of Infrastructure

During the Company's operations, the infrastructure that it has created facilitates a rise in living standards and social and economic development, which is

particularly important for remote regions of the country.

The implementation of projects in the remote areas of Siberia and the Far East includes building road infrastructure, with winter roads and water crossings that are used both by the Company (for delivery

of equipment and personnel to the facilities) and by local residents (for the continuous supply of food, consumer goods, and fuel to remote regions). Rosneft enterprises take part in supplying petroleum products under the Northern Supply Haul program.

### FAR EAST DEVELOPMENT. CONSTRUCTION OF THE ZVEZDA SHIPBUILDING COMPLEX

The Zvezda Shipbuilding Complex is a large-scale project that is crucial for the whole country and the Russian shipbuilding industry. This is the first Russian shipyard allowing the construction of large-capacity vessels with a metal working capacity of 330 ktpa, meeting the demand of Russian oil and gas producers for building nuclear-power vessels, drilling platforms and marine equipment for natural resource production on the Russian continental shelf. Total investments in the Zvezda Shipbuilding Complex project will exceed RUB 200 bln.

In 2018, the Zvezda Shipbuilding Complex was equipped with a unique floating transfer dock with a carrying capacity of 40 thousand tonnes, which allows the launching of vessels with a maximum length of 300 m and a maximum width of 50 m, together with other marine facilities.

In 2018, an ice-class tanker was constructed and delivered to the Customer at the Dalzavod Ship Repair Center, which is part of JSC FESRC. Moreover, the keel-laying ceremony of the first Aframax class tanker was held on the open-air heavy outfitting berth. The Zvezda Shipyard has started serial manufacturing of modern large-capacity vessels for crude oil and petroleum products transportation. Aframax tankers will be the first ships of such a type built in the Russian Federation.

As at the end of 2018, the Zvezda Shipbuilding Complex had concluded contracts for the construction



of 37 vessels, including Aframax class tankers, Arctic shuttle tankers, supply vessels, and a shallow-draught ice-breaker in accordance with the long-term capacity utilization plan.

An industrial shipboard equipment cluster is being formed around the Zvezda Shipbuilding Complex. The cluster also comprises a workshop for a steerable thrusters production plant that can be used for ice-class vessels, including gas carriers. LLC VRK Sapphire Plant is managing the project.

So far, the building for the steerable thruster production plant has been constructed, and the design of 7.5 MW steerable thrusters for multi-functional support of the ice-breakers is near completion. The design of 15 MW steerable thrusters has also started.

Rosneft places particular emphasis on expanding social infrastructure in Bolshoy Kamen and the construction of housing for shipyard employees, hence the Company has spent RUB 1 bln on that purpose.

### Support for Regional Social Development



#### Regional Partnerships

Rosneft promotes the development of social infrastructure, and provides financing for social and cultural projects in areas that are important for the Company's regions of operation. Regional projects are largely financed under partnership agreements with administrative bodies in the regions of key importance for Rosneft. Such framework agreements are concluded for several years. Obligations relating to specific initiatives implemented in the Company's regions of operation are included in Addenda.

In 2018, Rosneft had ongoing agreements with 37 entities of the Russian Federation. Within the reporting period Rosneft signed cooperation agreements with the governments of the Republic

of Bashkortostan, the Republic of Sakha (Yakutia), the Chechen Republic, the Krasnoyarsk Territory, the Primorye Territory, the Khabarovsk Territory, the Moscow Region, the Orenburg Region, the Samara Region, the Sverdlovsk Region, the Tyumen Region, and the Khanty-Mansiysk Autonomous District - Yugra.

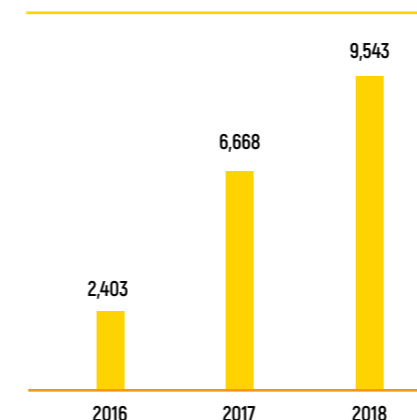
Rosneft spent RUB 9,543 mln to finance socio-economic partnership agreements with various regions in 2018.

When selecting particular buildings and events for financing, Rosneft focuses on social and infrastructural projects with maximum social reach and a direct impact on living standards of the population in the Company's regions of operation, including employees of Group Subsidiaries.

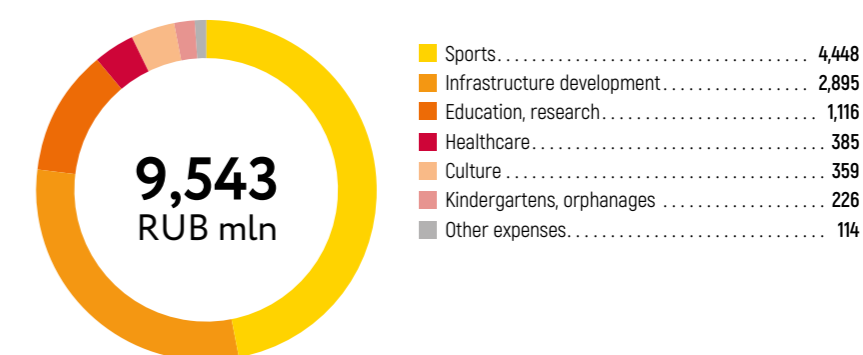
# 9,543 RUB MLN

Company's social investments in the regions of operation in 2018

Financing of Regional Social Projects, RUB mln



Financing of Regional Social Projects by Key Area, RUB mln



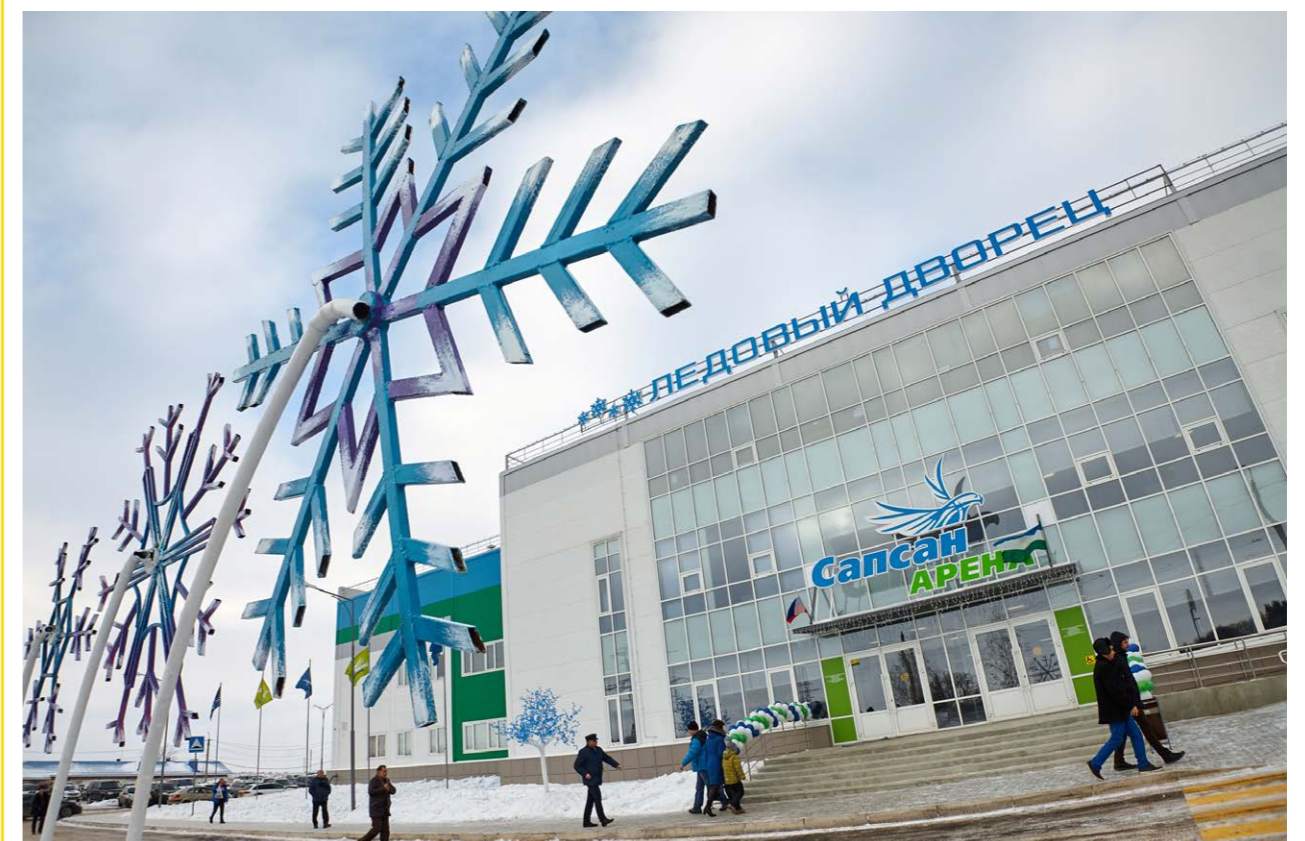


Under current agreements with government bodies in the Company's regions of operation, Rosneft and the Group Subsidiaries have financed various budgetary institutions and social organizations, including for the following projects:



Support for fitness and sports remains one of the focus areas of the Company's Social Policy. Through investments in this area, Rosneft primarily strives to develop mass sports, including sports for children and youth. Rosneft helps to generate conditions for people to aim for a healthy lifestyle, creating infrastructure to provide the regional population with the opportunity to engage in sports easily.

SAPSAN-ARENA ICE PALACE IN KUMERTAU, THE REPUBLIC OF BASHKORTOSTAN



Sapsan-Arena Ice Palace was opened in December 2018 in Kumertau. It is a modern sports facility that enables training and exercise for both professional sportsmen and anybody who is interested. Hundreds of people can build up their health or watch sports

competitions at the new Sapsan-Arena ice rink in comfortable conditions. The complex is designed for 610 seats and provides space for a fitness center and sports groups for ice hockey (both for adults and children) and figure skating. The Company has

purchased an ice covering required for holding both sports and other public events, including entertainment. In this case, the facility seating capacity more than doubles to 1.5 thousand people.

### Charity

Rosneft engages in charity work under the Federal Law On Charity and the Company's Regulations on the Procedure for Charitable Activities of Rosneft and Group Subsidiaries.

The Company spent a total of RUB 3,185 mln<sup>1</sup> on charity in 2018. In the reporting period, the major charity projects were as follows:

- Maintaining a children's home for orphans called Children of the Future;
- Organization of a military-patriotic camp, Homeland Warriors – Borodino 2018;
- Site improvement at Alexandrovskaya General Secondary School named after Hero of the Soviet Union V.D. Roschepkin in the Oktyabrsky District of the Orenburg Region;
- Upgrade of the infrastructure at Yel-hovka General Secondary School, including the pre-school group building in the Buzuluksky District of the Orenburg Region;
- Maintenance of the War Memorial in the settlement of Alekseevo, in the Alekseevsky District of the Orenburg Region;
- Upgrade of the infrastructure of the Centralized Library and Club System in the Krasnogvardeisky District of the Orenburg Region;
- Procurement of medical equipment for the Krasnoyarsk Regional Hospital;

- Renovation of the Youth Sports School stadium in the Parabelsky District of the Tomsk Region;
- Renovation of the Yunost Stadium at Kargasok Youth Sports School in the Tomsk Region;
- Organization of vocational recreation and summer-time activities for orphaned, disadvantaged and underprivileged children from the Strezhevoy urban district of the Tomsk Region;
- Renovation of the children's tuberculosis sanatorium in the Saratov Region;
- Procurement of a tank for water transportation to municipal residents, and installation of fencing in the mini-park for WWII veterans in the settlement of Yerbogachen of the Irkutsk Region;
- Overhaul of the rural health post in the settlement of Podvoloshino of the Irkutsk Region;
- Purchase of a concert-level grand piano for the general-purpose concert hall of the Alexei Tolstoy Drama Theatre in the Samara Region;
- Construction and procurement of equipment for multi-functional playgrounds in Ryazan;
- Construction and repair of infrastructure facilities in the Purovsky District of the Yamalo-Nenets Autonomous District;
- Completed construction of an annex to the gymnasium at General Secondary School No. 3 in Lensk of the Republic of Sakha (Yakutia);

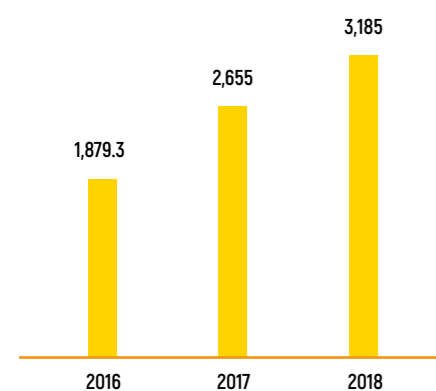
# 3,185 RUB MLN

Company's charity expenses in 2018

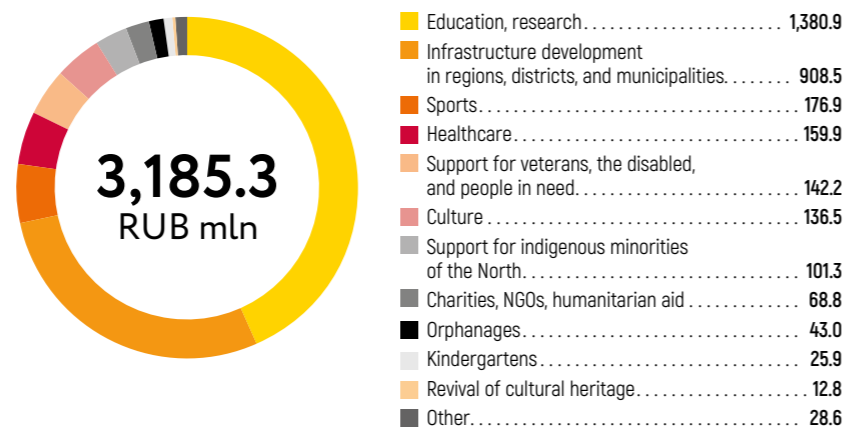
- Site improvement at General Secondary School No. 9 in the settlement of Taas-Yuryakh, Mirninsky District of the Republic of Sakha (Yakutia).

The Group Subsidiaries also implement socially-oriented projects abroad as part of the Charity Program for the regions of operation. The money was invested in the organization of medical treatment and rendering medical services to underprivileged people, including those with congenital heart diseases, as well as on the implementation of programs aimed at the prevention of cold-related diseases, health care, nutrition, the physical development of children and young people. Funds were also provided for the development of social infrastructure and the promotion of educational and scientific activities. In 2018, similar projects were implemented in Brazil, Mongolia, and Vietnam.

Charity Expenditures, RUB mln



Charity Expenditures Breakdown in 2018, RUB mln



<sup>1</sup>Data on some charity projects in the Company's Annual Reports for 2016, 2017 and 2018 is presented excluding charity support for educational institutions and support for the Veterans Council.

### SUPPORT FOR HEALTH CARE INSTITUTIONS. RYAZAN REGION



The Ryazan Refinery has financed the procurement of new high-technology equipment for leading medical institutions of the Ryazan Region. Financial support was provided to the Regional Clinical Hospital, Emergency Care Hospital, and City Clinical Hospital No. 8.

At least 30 thousand residents of Ryazan and the Ryazan Region receive medical treatment and over 13.5 thousand surgeries are carried out in the Regional Clinical Hospital every year. The hospital is planning to spend the charity money

on purchasing an electrosurgical generator that is used in open and subcutaneous surgeries.

The Emergency Care Hospital will also use the funds received to strengthen its surgical infrastructure. Annually, the hospital renders emergency medical services to at least 25.5 thousand people. Medical treatment is provided on both outpatient and inpatient bases. The hospital will buy traumatological instruments required for joint surgeries, prosthetics, and osteotomy.

The City Clinical Hospital No. 8. is also a significant component of the regional health care system. Over 12 thousand people obtain medical treatment and over 5.5 thousand surgeries are conducted here each year, including the use of minimally invasive technologies. The hospital has commenced rendering high-technology medical services, which has resulted in an increased number of surgeries with laparoscopic access. Consequently, the hospital will spend the charity funds to purchase an endoscopic video camera.



**Sponsorship**

Rosneft traditionally contributes significantly to the social and economic development of the Russian Federation by supporting ambitious projects to revive spiritual and national values while promoting scientific development, culture, industry, education, and sports. Rosneft spent RUB 2,057 mln on sponsorship in 2018.

The Company is a strong supporter of both professional and amateur sports. It finances the CSKA Moscow Hockey Club and is a sponsor of the Arsenal Tula Football Club. Rosneft supports Russian car manufacturers and contributes to the development of motorsports in Russia, being a sponsor of the Lada Sport ROSNEFT racing team. The Company is a key sponsor of the International Sambo Federation.

Rosneft is reviving and building the traditions of business and cultural community partnership. In 2018, the Company provided financing for a unique exhibition of Japanese Edo engravings in the Pushkin Museum of Moscow and an exhibition of works of an Italian artist of the XV century, Piero della Francesca, at the State Hermitage Museum. Rosneft sponsors and is bolstering its partnership with the D.D. Shostakovich St. Petersburg Aca-

demical Philharmonic Orchestra. The Company sponsored a symphony concert performed by the orchestra in Berlin, conducted by Yu.Kh. Temirkanov. Rosneft is a primary sponsor of the International Bravo Music Awards, the White Nights Festival, and others.

The Company is actively involved in developing cultural relations between countries. In 2018, as part of the Russia-Qatar

bilateral year, Rosneft was a key partner of a painting exhibition at the State Tretyakov Gallery called "Russian avant-garde: Pioneers and Direct Descendants". It also organized a Sretensky monastery choir concert. Both events were held in the capital city of Qatar, Doha.

Rosneft significantly contributes to environmental protection and particularly focuses on the protection of endangered species and the studying of marine mammals. In 2018, the Company continued its comprehensive program (started in 2013)<sup>1</sup> to protect polar bears living in Russian zoos. The Company provided financial support to the first sea expedition to study Black Sea dolphins undertaken by the P.P. Shirshov Institute of Oceanology affiliated with the Academy of Sciences. The studies were conducted for the first time since the early 1980s and were very important in obtaining information about the Black Sea's condition as a whole. In addition, the Company supports a number of projects developed by scientists of Siberian Federal University and focused on the study of Evenk deer, sable, and Red Book goose species.



**Volunteering**

An active voluntary movement has been developed among the Group Subsidiaries. The Company's employees organize themselves to participate in voluntary

charity projects. The projects have various focuses: Group Subsidiaries' personnel help disadvantaged population groups (veterans, disabled persons, children from orphanages, lonely elderly people, etc.) participate in arranging and holding

sports, educational, social, and cultural events, and implement projects for environmental protection that facilitate the development of an environmental culture.

**BASHNEFT NEW YEAR VOLUNTARY MARATHON**

Hundreds of volunteers from PJSC Bashneft took part in the organization of Pre-New Year campaigns Gift of Warmth to Veterans and Father Frost's Present.

Visits to WWII participants with presents from the Company have become a good New Year tradition. Last year, the volunteers also visited veterans and brought them food gift baskets and greeting cards.

Over 10 thousand employees from all Bashneft divisions were involved in the Father Frost's Present campaign and helped to raise funds and collect gifts for one thousand children from 24 sponsored organizations. The campaign covered the entire Republic of Bashkortostan, as well as Tyumen and Naryan-Mar. Bashneft managers also joined the voluntary campaign. They organized their own fund raising and took part in trips to visit the children. The total amount of money obtained last year broke all the records. As well as purchasing the desired presents for the children, the Company bought activity room components, rehabilitation massage equipment, and sports equipment, etc. for rehabilitation centers and centers for children with disabilities.



<sup>1</sup> For more detailed information on animal studies and protection programs see the Biological Diversity Conservation section herein.

## Support for Indigenous Minorities of the North



Rosneft respects the cultural heritage, traditions, and rights of the indigenous minorities whose areas of habitation fall within the Company's area of operation. When interacting with the indigenous minorities of the North, the Company follows the provisions of International Labour Organization Convention 169 and the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). Rosneft fully complies with all Russian laws and regulations that ensure the rights of the indigenous minorities of the Russian Federation, including the right to protection of their indigenous environment, traditional way of living, farming, and trading. In particular, the Company ensures participation of the indigenous minorities' representatives in making decisions related to their interests during the assessment of environmental impact and public environmental expert reviews.

The Company's approach to cooperation with the indigenous minorities' representatives is formalized in the Rosneft Sustainable Development Policy. The Company supports projects that serve the sustainable development interests of the indigenous minorities of the North and the local communities, defend the unique ethnic cultures, traditional lifestyle and farming, and provide high-quality education and medical services.

Rosneft and the Group Subsidiaries help to resolve a range of social issues: procurement of snow-clearing equipment and load-carrying vehicles, vehicles for transporting children to schools, the organization of sports and playgrounds in schoolyards and child care centers, and the improvement of public spaces. The Company finances work

to raise legal literacy among the community leaders, and purchases fuel and lubricants, cross-country vehicles, equipment and communication means for hunters and nomadic communities of reindeer-breeders living in inaccessible areas.

The Company helps to make health care services more accessible in distant northern areas: it actively invests in road repairs and the procurement of medical equipment for district hospitals and rural health posts in remote settlements.

It also promotes the development of local trades and the employment of indigenous people, while providing social support for children living in distant settlements.

### NEW YEAR PRESENTS FOR CHILDREN OF THE INDIGENOUS MINORITIES OF THE NORTH

Every year as the New Year celebration approaches, Rosneft delivers presents to children of the indigenous minorities of the North.

In 2018, the Company's employees presented the children with toys and sweets. The festive event took place in one of the most important social facilities of Ugut settlement in Khanty-Mansiysk Autonomous District – Yugra, i.e. at the boarding school constructed with financial support from Rosneft.

The Khanty children get their education in outstanding facilities, while their parents work in their traditional trades in remote areas.



### SUPPORT FOR INDIGENOUS PEOPLES OF THE NORTH



The monograph New Projects for the Evenki Language and Cultural Revival was recognized in a Krasnoyarsk Territory Competition as the Best Book about Krasnoyarsk in 2018. This book is included in the series Way to the Future – Siberia Through the Eyes of Scientists, compiled by linguists of the Siberian Federal University under a grant project financed by the East Siberian Oil and Gas Company.

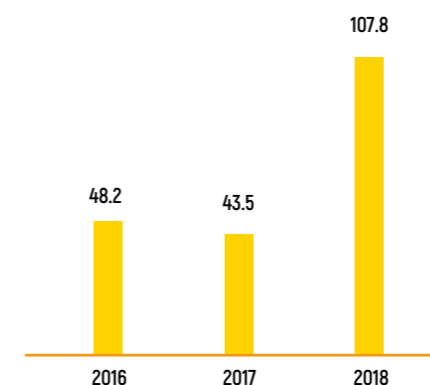
The monograph was based on information obtained during field studies in distant settlements of the Evenk Autonomous District of the Krasnoyarsk Territory. The grant project

of the East Siberian Oil and Gas Company – the Evenki Language Revival – is intended to resolve current issues in preserving the native language of the Evenkiya indigenous population. Statistically, the level of native language proficiency among this indigenous nation is steadily declining. In 1997, about 30% of the Evenkis spoke the native language fluently, while in 2018, the share was just above 15%. In the course of the project, audio and video files, expert interviews with dozens of Evenki native speakers, as well as the folklore, legends and fairy tales of the Evenkis were recorded.

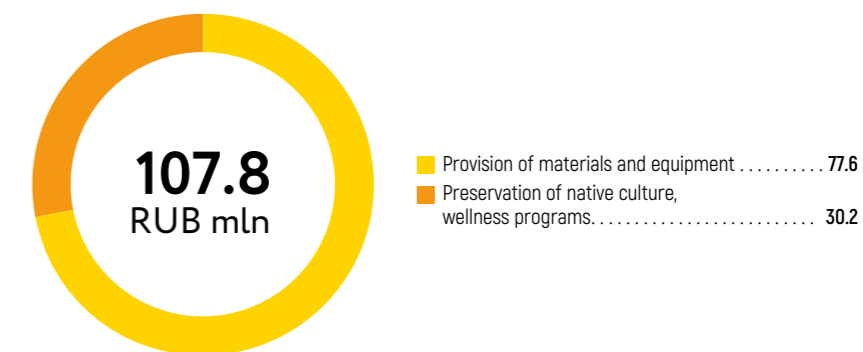
They were added to a special-purpose website – the first digital audio library of the Evenki language.

The Company also supported the release of an audio disk of the Tokogon (Glimmer) ensemble from the settlement of Baikit. This is the first studio recording of a folklore ensemble that is well-known among the indigenous minorities of the North. The recorded songs include rare Evenki melodies that are passed on from generation to generation. The disk will be handed over to the district Community Centers and schools to promote and preserve the Evenkis' culture

Expenditures to Support the Indigenous Minorities of the North, RUB mln



Breakdown of Expenditures to Support the Indigenous Peoples of the North, RUB mln





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## Independent Assurance Report on the Sustainability Report 2018

### To the Board of Directors and Stakeholders of Rosneft Oil Company

#### Subject matter

At the request of Rosneft Oil Company (the "Company") we have completed an engagement to obtain a limited level of assurance on the qualitative and quantitative information disclosed in the Sustainability Report 2018 of Rosneft Oil Company (the "Report"), except for the following aspects:

- ▶ Forward-looking statements on performance, events or planned activities; and
- ▶ Correspondence between the Report and the Oil and Gas Industry Guidance on Voluntary Sustainability Reporting developed by the International Petroleum Industry Environmental Conservation Association and American Petroleum Institute, Basic Performance Indicators issued by the Russian Union of Industrialists and Entrepreneurs (RUIE), and UN Global Compact principles.

#### Applicable criteria

The criteria for our engagement were the Global Reporting Initiative's Sustainability Reporting Standards (the "GRI Standards"), the Company's sustainability reporting principles and approaches to defining certain sustainability performance indicators as set out in section "About the Report" and the corresponding notes in the text of the Report. We believe that these criteria correspond to the objectives of our engagement.

#### Management's responsibilities

The management of the Company is responsible for the preparation of the Report and for ensuring that the information contained therein represents fairly, in all material respects, the Company's sustainability policies, activities, events and performance for the year ended 31 December 2018 in compliance with the GRI Standards and the Company's sustainability reporting principles and approaches to defining certain sustainability performance indicators as set out in section "About the Report" and the corresponding notes in the text of the Report. This responsibility includes designing, implementing and maintaining internal controls relevant to the preparation of a sustainability report that is free of material misstatements, selecting and applying appropriate reporting principles and using measurement methods and estimates that are reasonable in the circumstances.

#### Our responsibilities

Our responsibility is to independently express conclusions that:

- ▶ The information in the Report is, in all material respects, a fair representation of sustainability policies, activities, events and performance of the Company for the year ended 31 December 2018;
- ▶ The Report is prepared 'in accordance' with the GRI Standards using the Core option.

We apply International Standard on Quality Control 1 and accordingly maintain a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

#### Summary of work performed

Our engagement was conducted in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by IFAC, and accordingly included the following procedures:

- ▶ Interviews with representatives of the Company's management and specialists responsible for sustainability policies, activities, performance and relevant reporting;
- ▶ Analysis of key documents related to the Company's sustainability policies, activities, performance and relevant reporting;
- ▶ Obtaining an understanding of the process used to prepare the information on sustainability performance indicators of the Company and other engagement circumstances by reviewing the reporting process used for the preparation of sustainability reports;
- ▶ Analysis of stakeholder engagement activities via reviewing minutes of stakeholder meetings conducted by the Company;
- ▶ Benchmarking of the Report against sustainability reports of selected international and Russian peers of the Company and lists of sector-specific sustainability issues raised by stakeholders;
- ▶ Analysis of material sustainability issues identified by the Company;
- ▶ Identification of sustainability issues material to the Company based on the procedures described above and analyzing how they are reflected in the Report;



- ▶ Review of data samples on key performance indicators relating to human resources, energy use, environmental protection, industrial and occupational health and safety and charitable activities for the year ended 31 December 2018 to assess whether this data has been collected, prepared, collated and reported appropriately at the central office level;
- ▶ Visits to selected subsidiaries in order to (i) interview those responsible for human resources management, environmental protection, industrial and occupational health and safety and charitable activities, (ii) gather evidence supporting the assertions made by the Company on its sustainability policies, activities, events and performance, and (iii) observe the aspects of operations relating to industrial and occupational health and safety and environmental protection;
- ▶ Collection on a sample basis of evidence substantiating the qualitative and quantitative information included in the Report at the central office level;
- ▶ Assessment of compliance of the Report and its preparation process with the Company's sustainability reporting principles; and

- ▶ Assessment of compliance of information and data disclosures in the Report with the requirements of the Core option of reporting 'in accordance' with the GRI Standards.

Our evidence gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement.

#### Conclusion

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the information in the Report does not represent fairly, in all material respects, the sustainability policies, activities, events and performance

of the Company for the year ended 31 December 2018 in accordance with the GRI Standards and the Company's sustainability reporting principles and approaches to defining certain sustainability as set out in the Report.

Nothing has come to our attention that causes us to believe that the Report is not prepared 'in accordance' with the GRI Standards using the Core option.

D.E. Lobachev  
Partner  
Ernst & Young LLC

7 June 2019

#### Details of the subject of the independent assurance

Name: Rosneft Oil Company  
Entered in the Unified State Register of Legal Entities on 12 August 2002 and assigned state registration number 1027700043502.  
Registered address and location: Russia, 115035 Moscow, Sofiyskaya emb., 26/1.

#### Details of the assurance provider

Name: Ernst & Young LLC  
Entered in the Unified State Register of Legal Entities on 5 December 2002 and assigned state registration number 10277397072033.  
Registered address and location: Russia, 115035 Moscow, Sadovnicheskaya emb., 77, bld. 1.  
Ernst & Young LLC is a member of self-regulated organization of auditors "Russian Union of Auditors" (Association) ("SRO RUA"). Ernst & Young LLC is included in the control copy of the register of auditors and audit organizations, main registration number 11603050648.

# Annex 1.

## GRI Standards Compliance

In preparing this Report, the Company was guided by the GRI Standards, UN Global Compact principles, RUIE basic performance indicators for non-financial reporting (2008), and the Oil and Gas Industry Guidance on Voluntary Sustainability Reporting by IPIECA/API (2016). The table below provides links to the relevant content in this Report reflecting compliance with the above documents.

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
<b>COMMON REPORTING ELEMENTS</b>					
<b>Common elements</b>					
GRI 102-1	Name of the organization	Contact information			✓
GRI 102-2	Main brands, products, and services	2018 Annual Report, Performance, pp. 41-130			✓
	Main products – oil, gas, and related refining products				
GRI 102-3	Location of headquarters	The Company's head office is located in Moscow			✓
GRI 102-4	Location of operations	2018 Annual Report (Assets and Regions of Operation section, pp. 7-8, Company Structure section, pp. 13-14)			✓
GRI 102-5	Ownership and legal form	2018 Annual Report (Information for Shareholders and Investors, Share Capital section, p. 259)			✓
GRI 102-6	Markets served	2018 Annual Report (Assets and Regions of Operation section, pp. 7-8, Company Structure section, pp. 13-14, Annex 1 Consolidated Financial Statements, Note 8: Information on Segments, pp. 296-297, Note 39: Key Subsidiaries, pp. 320-321, Annex 6 Accounting [Financial] Statements and Audit Opinion, Note 26: Figures for Segments, p. 395)			✓
GRI 102-7	Scale of the organization	Key sustainability performance indicators; Human Resources			✓
		See 2018 Annual Report (Business Model section, pp. 11-12, Long-Term Development Program and Progress Report section, p. 27; Annex 1 Consolidated Financial Statements, Note 8: Information on Segments, pp. 296-297, Note 39: Key Subsidiaries, pp. 320-321, Note 6: Accounting [Financial] Statements and Audit Opinion, Note 26: Figures for Segments, p. 395)			
GRI 102-8 RUIE - 3.1.1	Information on employees and other workers	Key sustainability performance indicators; Human resources – HR management system development – Staff composition			✓
		Headcount at the end of 2018, persons, including: Permanent employment contract: women – 96,834, men – 203,794 Temporary employment contract: women – 8,455, men – 16,500 Full-time job: women – 104,465, men – 219,776 Part-time job: women – 824, men – 518			
GRI 102-9	Supply chain	2018 Annual Report (Business Model section, pp. 11-12)			✓
GRI 102-10	Significant changes to the organization and its supply chain	2018 Annual Report (Message from the Chairman of Rosneft's Board of Directors, page 3; Message from Rosneft's Chief Executive Officer, page 5)			✓
GRI 102-11 UN GC Principle 7 IPIECA-EN5, HS4	Precautionary Principle or approach	The Company considers it important to conduct an environmental impact assessment (EIA) that provides inputs for measures to mitigate any environmental impact from future operations. When planning and conducting EIA procedures, the Company adheres to the precautionary Principle set out in the Rio Declaration on Environment and Development (Rio Declaration Principle 15. United Nations Conference on Environment and Development, 1992).			✓
GRI 102-12 RUIE - 3.3.4	External initiatives				✓
		In 2009, the Company joined the UN Global Compact and the Social Charter of Russian Business. It has been supporting the Anti-Corruption Charter of Russian Business since 2013. In 2018, the Company's Board of Directors approved the strategic guidelines and the public statement of the Company - "Rosneft: contributing to implementation of UN Sustainable Development Goals". Rosneft also shares and supports the principles derived from the Universal Declaration of Human Rights, the International Labor Organization's Declaration of the Fundamental Principles and Rights at Work, and the Declaration on Environment and Development.			
GRI 102-13 RUIE - 3.3.5	Membership of associations	The Russian-German Foreign Trade Chamber, the Chamber of Commerce and Industry of the Russian Federation, Russian Pacific Economic Cooperation Council, National Petrochemical & Refiners Association, Russian Gas Association Group, National Association for Subsoil Examination, Non-Profit Russian Corporate Counsel Association.			✓
GRI 102-14	Statement from the Chairman of the Management Board	Message from the Chairman of Rosneft's Board of Directors; Message from Rosneft's Chief Executive Officer			✓

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
GRI 102-15 IPIECA-HS4	Key impacts, risks, and opportunities	Message from the Chairman of Rosneft's Board of Directors; Message from Rosneft's Chief Executive Officer, Chairman of the Management Board; Key sustainability performance indicators; Rosneft's sustainable development management – Rosneft's strategic vision of sustainable development Sustainable development management – Sustainability risks management, Stakeholder engagement, Approaches to human rights compliance, Compliance framework Health, Safety and Environment; Combating climate change; Emergency prevention and response readiness; Human resources; Contribution to the development of the Company's regions of operation			✓
		For more information, please visit <a href="https://www.rosneft.com/">https://www.rosneft.com/</a>			
GRI 102-16 UN GC Principle 10	Values, principles, standards, and norms of behavior	Rosneft's sustainable development management – Rosneft's strategic vision of sustainable development			✓
		For more information, please visit <a href="https://www.rosneft.com/Investors/Documents/Sustainable_Development_Policy">https://www.rosneft.com/Investors/Documents/Sustainable Development Policy</a> <a href="https://www.rosneft.com/upload/site2/document_file/development_policy_eng.pdf">https://www.rosneft.com/upload/site2/document_file/development_policy_eng.pdf</a> Code of Business and Corporate Ethics <a href="https://www.rosneft.com/upload/site2/document_file/ENG_P3-01_KS-01_izm1.pdf">https://www.rosneft.com/upload/site2/document_file/ENG_P3-01_KS-01_izm1.pdf</a>			
GRI 102-17 UN GC Principle 10	Mechanisms for advice and concerns about ethics	Rosneft's sustainable development management – Sustainable development management – Approaches to human rights compliance, Compliance framework			✓
GRI 102-18 IPIECA-HS4	Governance structure	Rosneft's sustainable development management – Sustainable development management – Corporate governance			✓
		See the 2018 Annual Report (Corporate governance system, pp. 207-256, Members of Rosneft's Board of Directors section, pp. 216-228).			
GRI 102-20	Executive-level responsibility for economic, environmental, and social topics	Rosneft's sustainable development management – Sustainable development management – Corporate governance			✓
GRI 102-40	List of stakeholder groups	About the Report; Rosneft's sustainable development management – Sustainable development management – Stakeholder engagement			✓
GRI 102-41 UN GC Principle 3 RUIE - 3.1.4 IPIECA SE 15	Collective bargaining agreements	Human resources – HR performance in 2018 – Social policy – Collective bargaining agreement			✓
		76% of employees are covered by collective bargain agreements.			
GRI 102-42	Identifying and selecting stakeholders	Rosneft's sustainable development management – Sustainable development management – Stakeholder engagement			✓
		The Company engages with all stakeholder groups which influence the Company's activities or which are influenced by the Company's activities.			
GRI 102-43	Approach to stakeholder engagement	About the Report; Rosneft's sustainable development management – Sustainable development management – Stakeholder engagement			✓
GRI 102-44	Key topics and concerns raised	About the Report; Rosneft's sustainable development management – Sustainable development management – Stakeholder engagement			✓

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
GRI 102-45	Entities included in the consolidated financial statements	About the Report – Reporting boundaries			✓
	See the 2018 Annual Report, IFRS consolidated financial statements as of 31 December 2018, Note 39: Key subsidiaries, pp. 320-321				
GRI 102-46	Defining report content and topic Boundaries	About the Report			✓
GRI 102-47	List of material topics	About the Report; This Annex			✓
GRI 102-48	Restatements of information	About the Report; Key sustainability performance indicators; Health, Safety and Environment			✓
	The development and improvement of the corporate reporting system and changes in the reporting boundaries and retrospective information are the key reasons for the restatements of information provided in the Report.				
GRI 102-49	Changes in reporting	About the Report			✓
GRI 102-50	Reporting period	About the Report			✓
GRI 102-51	Date of most recent report				✓
	The Rosneft 2017 Sustainability Report was published in July 2018.				
GRI 102-52	Reporting cycle	About the Report			✓
GRI 102-53	Contact point for questions regarding the report	About the Report; Contact information			✓
GRI 102-54	Claims of reporting in accordance with the GRI Standards	About the Report – Reporting principles			✓
GRI 102-55	GRI content index	This Annex			✓
GRI 102-56	External assurance	About the Report – Reporting principles; Independent Assurance Report on the sustainability Report 2018; This Annex			✓
<b>Management approach</b>					
GRI 103-1	Explanation of the material topic and its Boundary	About the Report; This Annex			✓
GRI 103-2	The management approach and its components	Message from the Chairman of Rosneft's Board of Directors; Message from Rosneft's Chief Executive Officer, Chairman of the Management Board; Rosneft's Sustainable Development Management; Health, Safety and Environment; Combating climate change; Emergency prevention and response readiness; Digital transformation; Innovation and Technology Advancements; Human resources; Contribution to the Development of the Company's Regions of Operation			✓
GRI 103-3	Evaluation of the management approach	Message from the Chairman of Rosneft's Board of Directors; Message from Rosneft's Chief Executive Officer, Chairman of the Management Board; Rosneft's sustainable development management – Sustainable development management – Corporate governance, Sustainability risks management			✓
	See the 2018 Annual Report (Section KPI system, p. 28, Section KPI progress, p. 30)				

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
<b>MATERIAL TOPICS</b>					
<b>Economic performance</b>					
GRI 201-1	Direct economic value generated and distributed	Key sustainability performance indicators			✓
	RUIE – 1.2, 1.3, 1.4, 1.5, 1.6, 1.7 IPIECA-SE4, SE13				
GRI 201-3	Defined benefit plan obligations and other retirement plans	Human resources – HR performance in 2018 – Social policy – Corporate pension benefits and care for veterans			✓
	RUIE – 1.8	According to the findings from the actuarial valuation of Neftegarant Non-State Pension Fund in 2018, the fund's current financial position is stable and there is no doubt that the fund will be able to meet its obligations (see <a href="http://www.neftegarant.ru/pokazateli/actuar.php">http://www.neftegarant.ru/pokazateli/actuar.php</a> ).			
GRI 201-4	Financial assistance received from government				✓
	The Company and the Group Subsidiaries benefit from tax relief established by federal tax legislation. In some regions, the Company and the Group Subsidiaries benefit from tax relief for income tax and property tax provided in accordance with regional legislation.				
<b>Indirect economic impacts</b>					
GRI 203-1	Infrastructure investments and services supported	Key sustainability performance indicators; Contribution to the Development of the Company's Regions of Operation			✓
	IPIECA-SE7				
GRI 203-2	Significant indirect economic impacts	Message from the Chairman of Rosneft's Board of Directors; Message from Rosneft's Chief Executive Officer, Chairman of the Management Board; Contribution to the Development of the Company's Regions of Operation			✓
	IPIECA-SE6				
GRI OG1	Volume and type of estimated proven reserves and production	Key sustainability performance indicators			✓
<b>Procurement practices</b>					
GRI 204-1	Proportion of spending on local suppliers	Rosneft's sustainable development management – Sustainable development management – Stakeholder engagement – Contractor relations Contribution to the Development of the Company's Regions of Operation			✓
	IPIECA-SE5				
	With Russia being a key region of its business, Rosneft is strongly focused on supporting local suppliers. In its procurement activities, the Company gives priority to Russian goods, work and services, including by purchasing them directly from SMEs under current law. Local supplies to the Company exceeded 90% in 2018. The Company's procurement process is aligned with the principles established by Federal Law No. 223-FZ, On the Procurement of Goods, Work and Services by Certain Types of Legal Entities, such as openness and transparency, the elimination of unjustified restrictions on competition, and appropriate and cost-effective spending. Contracts for the supply of goods, work and services required by the Company are awarded based on procurement procedures set forth in the Federal Law, including through a competitive bidding process.				
<b>Anti-corruption</b>					
GRI 205-1	Operations assessed for risks related to corruption	In 2018, 16 business units of the Company were assessed for risks related to corruption, representing 88.9% of the total number of business units. Countering corruption is part of the Code of Business and Corporate Ethics adopted by Rosneft. The Company has approved the Anti-Corruption Policy and Anti-Fraud Policy. Relevant implementation activities took place in 2018 as part of the Comprehensive Anti-Fraud and Anti-Corruption Program.			✓
	UN GC Principle 10 IPIECA-SE11, SE12				
GRI 205-2	Communication and training about anti-corruption policies and procedures	Rosneft's sustainable development management – Sustainable development management – Compliance framework			✓
	UN GC Principle 10 IPIECA-SE11				
GRI 205-3	Confirmed incidents of corruption and actions taken	Rosneft's sustainable development management – Sustainable development management – Compliance framework			✓
	UN GC Principle 10 IPIECA-SE11, SE14	Three confirmed incidents of corruption were recorded in 2018. The actions were taken for all incidents according to the Company's internal regulatory documents. Anti-corruption issues are also handled by the Company's Security Function and the Internal Audit and Control Function.			

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
<b>Energy</b>					
GRI 302-1 UN GC Principles 7, 8 RUIE - 2.2 IPIECA-E2	Energy consumption within the organization	Combating climate change – Energy consumption and energy efficiency			✓
	The Group Subsidiaries use various fuels, primarily natural gas and associated petroleum gas, as well as fuel oil (88% and 7% of total fuel consumption, respectively).				
GRI 302-4 UN GC Principles 8, 9 IPIECA-E2	Reduction of energy consumption	Combating climate change – Energy consumption and energy efficiency			✓
	The implementation of the Energy Saving Program resulted in energy savings of 214 million GJ in 2018 (heat, electricity and fuel).				
GRI 063 IPIECA-E3	Total amount of renewable energy generated by source		The indicator is disclosed partially. Information is not available due to insignificant volumes of renewable energy generation. The Company intends to start keeping record of this type of energy when it begins using it more extensively.		✓
	At present, the amount of generated renewable energy represents an insignificant portion of total energy generation.				
<b>Water</b>					
GRI 303-1 UN GC Principles 7, 8 RUIE - 2.3 IPIECA-E6	Water withdrawal by source	Key sustainability performance indicators; Health, Safety and Environment – Environmental impact in the Company's regions of operation – Water consumption and wastewater discharge			✓
	According to its data collection methodology, the Company publishes data on total water withdrawal, including rainwater, wastewater and bottom water.				
GRI 303-2 UN GC Principle 8 IPIECA-E6	Water sources significantly affected by withdrawal of water	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Water consumption and wastewater discharge			✓
	The Company identified no significant impacts of water withdrawal on water sources. The volume of water withdrawn from surface and ground sources is within the allowable level.				
GRI 303-3 UN GC Principle 8 RUIE - 2.4 IPIECA-E6	Water recycled and reused	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Water consumption and wastewater discharge			✓
	The percentage of water recycled and reused in 2018 was around 55.7% [2,280 million cubic meters].				
<b>Biodiversity</b>					
GRI 304-1 UN GC Principle 8 IPIECA-E5	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Biological diversity conservation			✓
	The Company conducts exploration activities in fragile ecosystems and protected areas, including in Yamalo-Nenets Autonomous District, Krasnoyarsk Territory, Arkhangelsk Region and the Republic of Sakha, and in the Sea of Okhotsk, the Kara Sea and the Barents Sea. It also extracts, treats and transports oil near the Verkhnee Dvuobye wetlands, in the Yugansky state nature reserve in Khanty-Mansiysk Autonomous District, in various protected areas in Samara Region, including near the Sprygyn Zhigulevsky state nature reserve, and the More-Yu wildlife sanctuary, the Pym-Va-Shor natural monument in the Nenets Autonomous District, and in the wildlife sanctuaries and wetlands of Krasnodar Territory. In addition, the Company carries out oil and gas extraction, treatment and transportation operations in areas with natural resources traditionally used by indigenous peoples of the North and sells petroleum products in the vicinity of various protected areas, including the Utrish state nature reserve, the Losiny Ostrov, Samarskaya Luka, Tunkinsky and Pribaikalsky national parks, the Baikal nature reserve, the Teberdinsky state nature reserve, the Kumysnaya Polyana nature park and the Vysokovsky Bor natural monument. The Company carries out operations, including in the vicinity of fragile ecosystems and protected areas, in full compliance with environmental law.				

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
GRI 304-2 UN GC Principle 8 IPIECA-E5, HS4	Significant impacts of activities, products and services on biodiversity	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Biological diversity conservation	The indicator is disclosed partially. Due to the scale of the Company's operations, it is impossible to indicate all affected species and the extent of the impacted areas.		✓
	The main impacts on biodiversity come from Rosneft's exploration, production, treatment, transportation and marketing activities and generally last for as long as the Company leases or operates production facilities. The Company does not exert any irreversible impact on biodiversity. The most common impacting factors are the pollution of areas and the construction and use of production facilities.				
GRI 304-3 UN GC Principle 8 IPIECA-E5	Habitats protected or restored	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Biological diversity conservation – Waste management and contaminated land remediation	The indicator is disclosed partially. Due to the scale of the Company's operations, it is impossible to indicate the location and status of all protected and restored habitats.		✓
	The final stage of the land remediation process is an independent assessment. Land remediation is evidenced by certificates of acceptance to be submitted to local government authorities.				
GRI 304-4 UN GC Principle 8 IPIECA-E5	IUCN Red List species and national conservation list species with habitats in areas affected by operations				✓
	Species with habitats in areas affected by the Company's operations include gray whale, cachalot, reindeer, grey heron, golden eagle, Eurasian otter, pond turtle, sturgeon and others. The Company analyzes its impact on the above species and seeks to mitigate it.				
GRI 064 UN GC Principle 8 IPIECA-E5, HS4	Number and percentage of significant operating sites in which biodiversity risk has been assessed and monitored	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Biological diversity conservation			✓
	The percentage of significant operating sites in which biodiversity risk has been assessed was 1.5% in 2018 (4 sites).				
<b>Emissions</b>					
GRI 305-1 UN GC Principles 7, 8 RUIE - 2.5 IPIECA- E1	Direct (Scope 1) GHG emissions	Combating climate change			✓
GRI 305-2 UN GC Principles 7, 8 RUIE - 2.5 IPIECA- E1	Energy indirect (Scope 2) GHG emissions	Combating climate change			✓
GRI 305-3 UN GC Principles 7, 8 IPIECA- E1	Other indirect GHG emissions	Combating climate change			✓



GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
GRI 305-4 UN GC Principle 8 IPIECA- E1	GHG emissions intensity	Combating climate change			✓
GRI 305-5	Reduction of GHG emissions	Combating climate change			
GRI 305-6 UN GC Principles 7, 8 IPIECA-E8	Emissions of ozone-depleting substances (ODS) The Company does not use any ozone-depleting substances on an industrial scale.				✓
GRI 305-7 UN GC Principles 7, 8 RUIE - 2.6 IPIECA-E8	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other air emissions	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Reducing air pollutant emissions			✓
<b>Effluents and waste</b>					
GRI 306-1 UN GC Principle 8 RUIE - 2.7 IPIECA-E7, E9	Water discharge by quality and destination	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Water consumption and wastewater discharge	The indicator is disclosed partially. Due to the scale of the Company's operations, it is impossible to present information by destination		✓
In accordance with its data collection methodology, the Company publishes data on total effluents (those of its own and of third parties) discharged via a centralized wastewater disposal system of its own and of third parties. The Company also publishes data on domestic wastewater discharge.					
GRI 306-2 UN GC Principle 8 RUIE - 2.8 IPIECA-E9, E10	Waste by type and disposal method	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Waste management and contaminated land remediation			✓
Oily sludge and drill cuttings are the main types of waste produced by the Company. Rosneft does not transport, import, export or treat waste deemed hazardous under the terms of the Basel Convention Annexes I, II, III, and VIII. The Company does not consolidate data on waste by hazard class, the relevant records are kept at a subsidiary level.					
GRI 306-3 UN GC Principle 8 RUIE - 2.9 IPIECA-E9	Total number and total volume of recorded significant spills	Key sustainability performance indicators; Health, Safety and Environment – Environmental impact in the Company's regions of operation – Waste management and contaminated land remediation, Ensuring safety – Industrial safety – Equipment integrity			✓
GRI 306-4 UN GC Principle 8 IPIECA-E10	Transport of hazardous waste				✓
Oily sludge and drill cuttings are the main types of waste produced by the Company. Rosneft does not transport, import, export or treat waste deemed hazardous under the terms of the Basel Convention Annexes I, II, III, and VIII.					
GRI 306-5 UN GC Principles 8, 9 IPIECA-E7, E9	Water bodies affected by water discharges and/or runoff				✓
The Company's discharges in 2018 had no significant impact on water bodies.					
GRI 065 UN GC Principles 8, 9 IPIECA-E10	Volume and disposal of formation or produced water	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Water consumption and wastewater discharge			✓

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
GRI 066 UN GC Principles 8, 9 IPIECA-E4	Volume of flared and vented hydrocarbon	Key sustainability performance indicators; Combating climate change – Associated petroleum gas (APG) utilization In 2018, associated petroleum gas was flared only by upstream entities in Russia.			✓
GRI 067 UN GC Principles 8, 9 IPIECA-E10	Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Waste management and contaminated land remediation The total amount of drill cuttings produced in 2018 using aqueous and non-aqueous drilling fluid was 5,447,000 tonnes and 44,000 tonnes, respectively.			✓
<b>ENVIRONMENTAL COMPLIANCE</b>					
068	Benzene, lead and sulfur content in fuels	The Company does not produce fuels with benzene, lead and sulfur content significantly exceeding that established by national standards (technical regulations).			
GRI 307-1 UN GC Principle 8 RUIE - 2.10	Non-compliance with environmental laws and/or regulations	Health, Safety and Environment – Environmental impact in the Company's regions of operation – Some Group Subsidiaries faced administrative fines for non-compliance with environmental regulations. The total amount of fines in 2018 was RUB 290 mln. The amounts of individual fines are insignificant. In 2018, one incident of non-financial sanctions was recorded (the suspension of a permit for the emission of harmful (polluting) substances into the atmosphere because of an identified excess of pollutant emissions at the emission sources. All violations were promptly corrected, and a new permit for emissions was obtained).			✓
<b>Employment</b>					
RUIE -3.1.9	Occupational health expenditures	Health, Safety and Environment – Expenditures on personal and process safety, including fire safety and blowout prevention			✓
GRI 401-1 UN GC Principle 6 RUIE - 3.1.2, 3.1.3	New employee hires and employee turnover	Key sustainability performance indicators; Human resources – HR management system development – Staff composition	The indicator is disclosed partially. Information on new employee hires and turnover by gender and age is currently not gathered. The Company intends to gather such information after all Group Subsidiaries have implemented a single automated HR administration system within the scope of centralized business planning (not earlier than 2020).		✓
GRI 401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Human resources – HR performance in 2018 – Social policy – Decent Living Conditions Human resources – HR performance in 2018 – Social policy – Education support for employees and members of their families Human resources – HR performance in 2018 – Social policy – Collective bargaining agreement			✓
<b>Labor/management relations</b>					
GRI 402-1	Minimum notice periods regarding operational changes, including whether these are specified in collective bargaining agreements	Human resources – HR performance in 2018 – Social policy – Collective bargaining agreement			✓
The Company fully complies with regulations governing notice periods for operational changes.					

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
<b>Occupational health and safety</b>					
GRI 403-2 RUIE - 3.1.5, 3.1.6, 3.1.7, 3.1.8 IPIECA-HS3	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Health, Safety and Environment – HSE performance	The indicator is disclosed partially.  The information required to calculate the absenteeism rate is currently not available, as no such records are kept by the Company.		✓
GRI 403-3	Workers with high incidence or high risk of diseases related to their occupation				✓
The Company analyzed historical data on injuries and occupational diseases to identify jobs with the highest risk rates. Jobs with the highest risk of injury include drilling rig and other machine operators, filling station attendants, and oil and gas field workers; jobs with the highest risk of occupational diseases include machine operators, bulldozer operators, and drivers of special-purpose vehicles. Rosneft makes every effort to mitigate negative impacts from these jobs.					
GRI 403-4 IPIECA-HS1, HS2, HS3, SE16	Health and safety topics covered in formal agreements with trade unions	Health, Safety and Environment – HSE management system – HSE Committee; Human resources – HR performance in 2018 – Social policy – Partnership with trade union organizations			✓
IPIECA-HS2, HS3	Programs and processes for identifying and addressing significant workforce health issues	Human resources – HR performance in 2018 – Social policy – Promotion of employee health			✓
GRI 0613 IPIECA-HS1, HS5	Number of process safety events, by business activity	Health, Safety and Environment – HSE management system, Ensuring safety	The indicator is disclosed partially.  The Company does not register loss of containment events according to the methodology for calculating this indicator. Currently, such events are recorded and classified in accordance with the requirements of Russian law.		✓
Safety is a priority for Rosneft. To prevent accidents, the Company regularly conducts OHS reviews, it has built an OHS personnel training system, and it practices emergency skills during training exercises and on-site drills.					
<b>Training and education</b>					
GRI 404-1 UN GC Principle 6 RUIE - 3.1.10 IPIECA-SE16	Average hours of training per year per employee by gender and employee category	Health, Safety and Environment – Ensuring safety – Occupational safety – HSE training; Human resources – HR performance in 2018 – Training and career development			✓
GRI 404-3 UN GC Principle 6 IPIECA-SE16	Percentage of employees receiving regular performance and career development reviews	Human resources – HR performance in 2018 – Training and career development	The indicator is disclosed partially.  The Report presents data on the total number of employees who have been subject to reviews. Currently, the Company does not collect data on reviews by category or gender.		✓
Company-wide reviews were conducted for more than 17,600 employees in 2018.					

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
<b>Diversity and equal opportunity</b>					
GRI 405-1	Diversity of governance bodies and employees	Corporate governance; Human resources – HR management system – Staff composition			✓
<b>Non-discrimination</b>					
GRI 406-1 UN GC Principles 6	Incidents of discrimination and corrective actions taken	Rosneft's sustainable development management – Sustainable development management – Approaches to human rights compliance, Compliance framework  The Company detected no incidents of discrimination in the reporting period.			✓
<b>Freedom of association and collective bargaining</b>					
GRI 407-1 UN GC Principles 3	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk				✓
The Company is committed to complying with the requirements of legislation on freedom of association and collective bargaining. The Company has no business units or suppliers that may violate these rules.					
IPIECA – SE18 RUIE – 3.2.1	Labor disputes				✓
The Company is committed to complying with the requirements of labor legislation. The Company seeks to resolve all labor disputes by means of negotiation.					
<b>Rights of indigenous peoples</b>					
GRI 411-1 UN GC Principles 1, 2 RUIE – 3.2.3	Incidents of violations involving rights of indigenous peoples				✓
The Company is committed to complying with the requirements of legislation prohibiting any forms of human rights violation. No violations involving the rights of indigenous peoples were reported in 2018.					
GRI 069	Operations where indigenous communities are present or affected by activities and where specific engagement strategies are in place	Contribution to the development of the Company's regions of operation – Support for regional social development – Support for indigenous peoples of the North			✓
In some regions, the Company carries out oil and gas production operations in the areas where indigenous communities are present. In all these regions, the Company has programs to engage with, and provide support to, such communities.					
<b>Local communities</b>					
GRI 413-1 UN GC Principle 1 IPIECA-SE1, SE2, SE3, SE4, SE5	Operations with local community engagement, impact assessments, and development programs	Rosneft's sustainable development management – Sustainable development management – Stakeholder engagement – Regional partnerships; Contribution to the Development of the Company's Regions of Operation			✓
The Company implements procedures for stakeholder engagement and community impact assessment and management in key regions of operation, including when developing new projects. These approaches cover the absolute majority of the Company's operations.					
RUIE – 3.3.2	Engagement with government authorities when handling publicly important tasks	Rosneft's sustainable development management – Sustainable development management – Stakeholder engagement – Regional partnerships; Contribution to the development of the Company's regions of operation –			✓
Social investments					
Contribution to the development of the Company's regions of operation – Support for regional social development					
GRI 413-2 UN GC Principle 1	Operations with significant actual and potential negative impacts on local communities				✓
The Company takes action to avoid adverse impacts of employee relocation on local communities. It also implements measures to mitigate adverse environmental impacts and enhance safety management performance.					
GRI 0610 RUIE – 3.2.3	Number and description of significant disputes with local communities and indigenous peoples				✓
No significant disputes with local communities and indigenous peoples were recorded in 2018.					
<b>Public policy</b>					
GRI 415-1 UN GC Principles 10 IPIECA-SE11, SE14	Political contributions				✓
The Company does not provide finance for political purposes.					

GRI Standard	Name	Report section / references to other public documents	Omission	Page	External assurance
RUIE – 3.31	Position on public policy, participation in public policy development and lobbying	Sustainable development management – Stakeholder engagement – Government relations			✓
	<ul style="list-style-type: none"> <li>The following decisions and actions were taken by the Company in 2017 pursuant to public policy:</li> <li>Rosneft updated its long-term development program in line with new strategic targets and changes in its consolidation perimeter by providing a more detailed description of measures aimed at achieving long-term goals and revising measures prescribed by Russian Government directives.</li> <li>In accordance with the instructions of the Russian President, Vladimir Putin, the Company constructed and commissioned a 10 kV, 5 km long submarine cable duct on the bottom of Lake Ladoga from Vladimirskaaya Bay to Konevets Island, as well as a 10/04 kV 2x2 500 kVA central distribution transformer substation.</li> <li>In pursuance of Resolution No. Pr-1553 of the President of the Russian Federation dated 11 July 2013, Rosneft is continuing to build support infrastructure for oil and gas projects on the Russian Arctic shelf in the residential area of Roslyakovo in Murmansk.</li> <li>Pursuant to Instruction No. DM-P9-705r of the Russian Prime Minister dated 31 January 2014 and with the support of the Russian President expressed in Instruction No. Pr-2579 dated 29 December 2016, the Company continued work on the construction project of Eastern Petrochemical Company, the largest oil refining and petrochemical facility in Far Eastern Federal District.</li> <li>Acting on the instructions of the Russian President and the Russian Government, Rosneft's Board of Directors made a number of decisions in 2018 with respect to the following:                             <ul style="list-style-type: none"> <li>implementing recommendations on managing intellectual property rights and inventory auditing intellectual property rights;</li> <li>embedding professional standards into the Company's operations;</li> <li>innovative development;</li> <li>compliance with laws on the procurement of goods, works, and services;</li> <li>approval of planning and program-targeted documents on the development of the Far East by the Ministry for Development of the Russian Far East.</li> </ul> </li> <li>Pursuant to the instruction of the Russian President, a consortium of Rosneft, ROSNEFTEGAZ and Gazprombank is building an industrial and shipbuilding cluster in the Russian Far East based on the Far Eastern Shipbuilding and Ship Repair Center, with the Zvezda Shipbuilding Complex in Bolshoy Kamen at its core.</li> <li>Rosneft fully met the demand for petroleum products from the military units of the Russian Ministry of Defense deployed in the Central and Eastern military districts, as well as from the Ministry of the Interior, the Ministry of Emergency Situations and the Russian Investigative Committee. In accordance with resolutions of the Russian Government, the Group Subsidiaries act as sole suppliers to the Russian Ministry of Defense, the Investigative Committee, the Ministry of Emergency Situations, the Ministry of the Interior, and the National Guard of Russia.</li> </ul> <p>For details, see the 2018 Annual Report (Annex 4: Information on compliance with instructions issued by the President of the Russian Federation and the Government of the Russian Federation, pp. 345-359).</p>				
GRI 419-1	Non-compliance with laws and regulations in the social and economic sphere				✓
	<p>In 2018, substantial fines imposed for non-compliance with legislation and regulations and confirmed by judicial acts totaled RUB 52 mln.</p>				

## Annex 2. UN Sustainable Development Goals

This Annex contains a list of UN sustainable development goals. The goals are broken down into the strategic priority goals for Rosneft and the goals integrated into Rosneft's current operations. The respective images are presented before the Report sections containing information about the methods used by the Company to achieve a particular UN sustainable development goal.



Information about the Company's contribution to achieving the UN sustainable development goals can be found in the public statement "Rosneft: contributing to implementation of UN Sustainable Development Goals". See the corporate web-site.

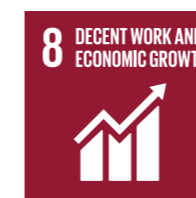
### Strategic Priority Goals



- 3.1. Health care and occupational safety. Promoting the occupational safety of suppliers and contractors
- 3.2. Environmental policy and obligations
- 3.3. Risk and incidents management
- 3.4. Road-traffic safety
- 3.5. Fostering a positive social environment



- 7.1. Higher energy efficiency across all of the Company's business areas
- 7.2. Creating conditions for enhancing energy efficiency through the use of the Company's products
- 7.3. Affording access to energy and reliable energy products supplies to consumers, including developing markets
- 7.4. Innovative activities



- 8.1. Contribution to the sustainable development and diversification of the national economy
- 8.2. Health care and occupational safety. Promoting the occupational safety of suppliers and contractors
- 8.3. Fostering a positive social environment
- 8.4. Support for the family and children
- 8.5. Freedom of association and collective bargaining
- 8.6. Productivity and efficiency growth
- 8.7. Education as a tool facilitating youth's integration into the energy industry
- 8.8. Generation of a sustainable procurement system along the entire value chain
- 8.9. Higher energy efficiency across all of the Company's business areas
- 8.10. Decent living and working conditions in remote regions





- 13.1. Risks and opportunities from climate change
- 13.2. Higher energy efficiency across all of the Company's business areas
- 13.3. Creating conditions for enhancing energy efficiency through the use of the Company's products
- 13.4. Environmental policy and obligations
- 13.5. Innovative activities



- 17.1. Participation in global initiatives
- 17.2. Participation in the sustainable development of the energy industry
- 17.3. Efficient partnership with government entities, business and society

## Goals Integrated into Current Operations

 <p><b>1</b> NO POVERTY</p>	<p>1.1. Promoting social and economic regional development and enhancing well-being 1.2. Social responsibility and social investments</p>	 <p><b>11</b> SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>11.1. Meeting the growing demand for energy resources 11.2. Improving living standards in cities and other settlements 11.3. Environmental policy and obligations 11.4. Support for indigenous minorities of the North and local communities 11.5. Culture and heritage 11.6. Fostering a positive social environment</p>
 <p><b>2</b> ZERO HUNGER</p>	<p>2.1. Meeting demand for energy resources 2.2. Supply to remote regions and support for joint use of infrastructure 2.3. Support for indigenous minorities of the North and local communities</p>	 <p><b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>12.1. Environmental policy and obligations 12.2. Sustainable and efficient use of natural resources 12.3. Efficient procurement system</p>
 <p><b>4</b> QUALITY EDUCATION</p>	<p>4.1. Corporate system for continuous employee training and education 4.2. Intermediate and higher professional education support 4.3. Education as a tool facilitating youth's integration into the energy industry</p>	 <p><b>14</b> LIFE BELOW WATER</p>	<p>14.1. Biodiversity of marine ecosystems 14.2. Environmental policy and obligations 14.3. Innovative activities</p>
 <p><b>5</b> GENDER EQUALITY</p>	<p>5.1. Strengthening the talent pool and equal opportunities for professional growth and development 5.2. Support for the family and children</p>	 <p><b>15</b> LIFE ON LAND</p>	<p>15.1. Biodiversity of land ecosystems 15.2. Sustainable use of natural resources and reducing the environmental burden 15.3. Promoting the stable functioning of ecosystems in the regions of the Company's operation</p>
 <p><b>6</b> CLEAN WATER AND SANITATION</p>	<p>6.1. Water resource management 6.2. Water treatment and reuse programs 6.3. Minimizing spillage effects and spillage risk management 6.4. Innovative activities</p>	 <p><b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>16.1. Human rights and freedoms 16.2. Generation of a sustainable procurement system along the entire value chain 16.3. Engaging in dialogue with key stakeholders 16.4. Compliance and anti-corruption</p>
 <p><b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>9.1. Support for the development of infrastructure, related industries and industrial complexes 9.2. Creation of economic value 9.3. Innovative activities 9.4. Support for stable infrastructure</p>		
 <p><b>10</b> REDUCED INEQUALITIES</p>	<p>10.1. Partnership relations and social investments in the regions of operation 10.2. Fiscal stability and contributing to budget income 10.3. Strengthening the talent pool and equal opportunities for professional growth and development 10.4. Social policy 10.5. Support for indigenous minorities of the North and local communities 10.6. Compliance and anti-corruption 10.7. Fostering a positive social environment</p>		

## Annex 3.

## Comparison of Monthly Salaries at Select Rosneft Group Subsidiaries and Their Local Regions in 2018, RUB

Region	Group Subsidiary	Average salary at Subsidiary, RUB	Average salary in the region, RUB (as at November 2018 according to data of Russia's Federal State Statistics Service - Rosstat)	Average salary at Subsidiary as a percentage of the average for the region, %	Minimum wage rate
Primorye Territory	LLC RN-Morskoy Terminal Nakhodka	58,340.70	42,025.98	139%	16,920
Khabarovsk Territory	LLC RN-Komsomolsky Refinery	80,137.54	46,583.25	172%	22,560
Sakhalin Region	LLC RN-Sakhalinmorneftegaz	104,015.25	73,260.91	142%	29,328
Republic of Sakha (Yakutia)	LLC Taas-Yuriakh Neftegazodobycha	143,366.51	65,880.69	218%	28,200
Republic of Bashkortostan	LLC Bashneft-Dobycha	66,842.64	33,137.44	202%	12,972
	PJSC Ufaorgsintez	80,906.84	33,137.44	244%	12,972
	UFA Refinery (branches of PJSC Bashneft)	88,077.90	33,137.44	266%	12,972
	LLC Bashneft-Roznitsa	39,477.42	33,137.44	119%	12,972
Orenburg Region	JSC Orenburgneft	62,898.94	29,891.78	210%	12,972
Samara Region	JSC Samaraneftgaz	63,207.56	33,086.38	191%	11,280
	OJSC Kuybyshev Refinery	61,691.36	33,086.38	186%	11,280
	OJSC Novokuybyshevsk Refinery	60,710.64	33,086.38	183%	11,280
	OJSC Syzran Refinery	62,091.31	33,086.38	188%	11,280
	OJSC Novokuybyshevsk Petrochemical Company	47,809.87	33,086.38	145%	11,280
	LLC Novokuybyshevsk Oil and Additive Plant	55,904.41	33,086.38	169%	11,280
	JSC Samaraneftprodukt	33,248.24	33,086.38	100%	11,280
Saratov Region	LLC Saratov Refinery	66,463.94	26,554.65	250%	11,280
	OJSC Saratovneftprodukt	29,438.14	26,554.65	111%	11,280
Arkhangelsk Region	LLC RN-Arkhangelskneftprodukt	43,424.04	47,525.73	91%	15,792
Komi Republic	LLC RN-Severnaya Neft	114,188.82	48,315.60	236%	18,048
Nenets Autonomous Area	LLC Bashneft-Polyus	150,021.09	77,277.41	194%	18,567
Republic of Karelia	JSC Karelianefteprodukt	34,460.72	39,754.77	87%	18,612
Murmansk Region	PJSC Rosneft-Murmanskneftprodukt	40,918.49	56,005.48	73%	25,944
Saint Petersburg	LLC RN-Severo-Zapad	50,582.26	58,310.17	87%	18,000
Republic of Ingushetia	OJSC RN Ingushneft	27,929.57	25,663.35	109%	11,280
	LLC RN-Ingushneftprodukt	27,984.66	25,663.35	109%	11,280
Chechen Republic	OJSC Grozneftegaz	33,581.27	26,107.78	129%	11,280
	LLC RN-Chechenneftprodukt	18,264.36	26,107.78	70%	11,280
Republic of Khakassia	JSC Khakasneftprodukt VNK	31,196.20	37,949.39	82%	18,048
Krasnoyarsk Territory	LLC RN-Vankor	141,281.31	44,692.25	316%	18,048
	JSC Vostsibneftegaz	135,579.61	44,692.25	303%	18,048
	OJSC Achinsk Refinery VNK	73,613.08	44,692.25	165%	18,048
	LLC RN-Krasnoyarskneftprodukt	66,621.26	44,692.25	149%	18,048

Region	Group Subsidiary	Average salary at Subsidiary, RUB	Average salary in the region, RUB (as at November 2018 according to data of Russia's Federal State Statistics Service - Rosstat)	Average salary at Subsidiary as a percentage of the average for the region, %	Minimum wage rate
Irkutsk Region	OJSC Angarsk Petrochemical Company	70,492.47	42,920.84	164%	18,048
	OJSC Angarsk Polymer Plant	68,943.94	42,920.84	161%	18,048
	JSC Irkutskneftprodukt	43,585.74	42,920.84	102%	18,048
	OJSC Verkhnechonskneftegaz	117,831.97	42,920.84	275%	18,048
Tomsk Region	JSC Tomskneft VNK	96,942.53	39,707.31	244%	24,816
	JSC Tomskneftprodukt VNK	45,038.86	39,707.31	113%	14,664
Tyumen Region	JSC Tyumenneftegaz	138,110.30	61,936.51	223%	13,043.3
	LLC RN-Uvatneftegaz	134,872.27	61,936.51	218%	13,043.3
Khanty-Mansiysk Autonomous District	LLC RN-Yuganskneftegaz	108,294.77	62,555.11	173%	24,816
	PJSC Varyoganneftegaz	112,965.26	62,555.11	181%	24,816
	JSC RN-Nyaganneftegaz	108,178.15	62,555.11	173%	24,816
	OJSC Samotlorneftegaz	105,262.62	62,555.11	168%	24,816
	LLC Krasnoleninsky Refinery	95,556.59	62,555.11	153%	24,816
	LLC Nizhnevartovsk Oil Refining Association	105,038.96	62,555.11	168%	24,816
	LLC Zapsibneftprodukt	70,756.42	62,555.11	113%	24,816
Yamalo-Nenets Autonomous District	LLC RN-Purneftegaz	111,492.43	86,560.33	129%	28,200
	JSC Sibneftegaz	190,941.60	86,560.33	221%	28,200
Yaroslavl Region	JSC RN-Yaroslavl	31,057.91	33,882.07	92%	11,280
Ryazan Region	OJSC Ryazan Oil Refining Company	74,168.06	31,192.24	238%	11,280
	JSC Ryazanefteprodukt	34,340.77	31,192.24	110%	11,280
Moscow Region	CJSC TZK Sheremetyevo	92,229.99	50,134.70	184%	14,200
Rostov Region	JSC RN-Rostovneftprodukt	31,412.55	30,646.70	102%	12,342
Krasnodar Territory	LLC RN-Krasnodarneftegaz	53,322.20	33,258.09	160%	11,280
	LLC RN-Tuapse Refinery	69,209.41	33,258.09	208%	11,280
	LLC RN-Morskoy Terminal Tuapse	50,717.69	33,258.09	152%	11,280
	PJSC Rosneft-Cubanneftprodukt	33,734.72	33,258.09	101%	11,280

## Annex 4.

# Abbreviations Used

NK Rosneft, Rosneft, and the Company refer to either PJSC NK Rosneft or PJSC NK Rosneft and its subsidiaries, depending on the context.

GRI standards are the reporting standards related to sustainable development prepared by Global Reporting Initiative, GRI Standards version.

APG	Associated petroleum gas
API	American Petroleum Institute
bcm	billion cubic meters
CIS	Commonwealth of Independent States
CO <sub>2</sub> -eq.	Total greenhouse gas emissions by category of sources and the organization as a whole calculated with regard to the global warming potential of greenhouse gases
CWRMS	Corporate-Wide Risk Management System
EIA	Environmental impact assessment
FAR	Fatal Accident Rate; Incidence rate of fatal injuries among Company employees, per 100 hours worked
GHG	Greenhouse gas
HSE	Health, Safety and Environment
IFRS	International Financial Reporting Standards
IPIECA	International Petroleum Industry Environmental Conservation Association
ISO	International Organization for Standardization
KPI	Key performance indicator
ktpa	kilo tonnes per annum
LTIF	Incidence rate of non-fatal injuries among Company employees, per million hours worked
mboe	million barrels of oil equivalent
mbpd	million barrels per day
mmt	million metric tonnes
mmtoe	million metric tonnes of oil equivalent
N/A	Not available
OHS	Occupational health and safety
R&D	Research and development
RM&ICS	Risk Management and Internal Control System
Rostekhnadzor	Federal Service for Environmental, Technological and Nuclear Supervision

RTAF	Road Traffic Accident Frequency; road traffic accidents that occurred when rendering services/carrying out operations in the interests of the Company / total number of kilometers driven by the vehicles ratio, rated per 1 million kilometers (road traffic accidents frequency)
RUIE	Russian Union of Industrialists and Entrepreneurs
SEC	Securities and Exchange Commission
tce	tonnes of coal equivalent
UN	United Nations
UNEPCOM	Russian National Committee for UNEP
VHI	Voluntary Health Insurance

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