



GAZPROM  
GROUP'S  
SUSTAINABILITY  
REPORT

2017

KEEPING THE BALANCE



**GAZPROM GROUP'S  
SUSTAINABILITY REPORT  
2017  
KEEPING THE BALANCE**

# TABLE OF CONTENTS

<b>Message from Gazprom CEO</b>	<b>4</b>
<b>About the Report</b>	<b>8</b>
Definition of Material Issues to Be Covered in the Report	9
Stakeholder Engagement	14
<b>About Gazprom Group</b>	<b>17</b>
Business Model	18
Gazprom Group's Strategy	27
Sustainability Management	29
Corporate Governance	31
Countering Corruption	35
Procurement Management	38
Risk Management	40
<b>1. Production: Gazprom's Contribution to National Development</b>	<b>49</b>
1.1. Gas Supplies to Russian and International Consumers	52
1.2. Petroleum Products Supplies	72
1.3. Taking Care of Future Generations: Hydrocarbon Reserve Replacement	80
1.4. Power and Heat Generation for the People	83
1.5. Support of Small and Medium-Sized Businesses by Gazprom Group	87
1.6. Gazprom's Production Innovations	90
1.7. Import Substitution	94

<b>2. Environment: Sustainable Use of Natural Resources</b>	<b>101</b>
2.1. The Year 2017 is a Year of Ecology at Gazprom	101
2.2. Environmental Sustainability Management	106
2.3. Mitigating Adverse Impact on the Environment	116
2.4. Mitigating Climate Impact	129
2.5. Energy Saving and Energy Efficiency: Saving Resources to Benefit the Planet	135
2.6. Gazprom Group's Stakeholder Engagement in Environmental Protection	141
<b>3. People: Decent Living and Work Standards</b>	<b>145</b>
3.1. Gazprom Group's Personnel	146
3.2. HR Management at Gazprom Group	151
3.3. Industrial Safety Culture: Occupational Health, Industrial and Fire Safety	166
3.4. Gazprom Group's Social Projects	176
<b>Appendix</b>	<b>190</b>
Appendix 1. GRI Table	190
Appendix 2. Additional Indicators of Gazprom Group's Activities	199
Appendix 3. Principles of Report Preparation	220
Appendix 4. Glossary of Abbreviations and Code Names Used in the Report	221
Appendix 5. Assurance of the Russian Union of Industrialists and Entrepreneurs	225
Appendix 6. Approval from FBK Grant Thornton	226
<b>Contacts and feedback</b>	<b>228</b>

## MESSAGE FROM GAZPROM CEO



Dear friends,

Production efficiency, environmental stewardship, and care for people are equally vital to achieving sustainability. We organize our work with the view to balance these priorities.

Gazprom's reliable energy supplies give a powerful impetus to regional development across Russia. Making a flexible response to mounting demand, we increased natural gas production to 472.1<sup>1</sup> billion cubic meters in 2017, up 12.4% from the previous year. It was the most impressive yearly production growth in the Company's history. Moreover, with 194.4 billion cubic meters of overseas gas exports, Gazprom set a new record. And we are determined to make sure that both current and future generations have access to those valuable resources. To that end, for 13 years running, through our exploration efforts, we have maintained incremental reserves which are consistently above production. In 2017, Gazprom's gas reserves added 852.9 billion cubic meters.

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<sup>1</sup> Including the Group's share in the production volumes of the entities in which Gazprom has made investments classified as joint operations.

Russian gas is increasingly in demand, which definitely proves the relevance of that environmentally benign energy source. Substituting natural gas for coal and fuel oil will benefit the environment and the climate.

Being aware of our responsibility for clean environment, we pursue an extensive environmental agenda. More than 19,000 activities were completed during 2017, which was the Year of Ecology in Gazprom Group. The Company's Environmental Management System (EMS) has been in operation for years and is upgraded annually. The Environmental Inspectorate is responsible for monitoring Gazprom subsidiaries' environmental footprint. We take a comprehensive approach to disturbed land reclamation, biodiversity restoration, water pollution prevention, and waste management. The Company makes a significant effort to consistently reduce greenhouse gas emissions.

Gazprom relies on its highly skilled personnel as its main driving force. With promising career growth opportunities and comfortable working conditions, our employees face the future with confidence. The Company is taking steps to make its comprehensive occupational safety

management system more effective: over the last few years, Group sites and facilities have significantly reduced the injury rate.

As part of its corporate social responsibility agenda, the Company builds sports and healthcare facilities throughout the country, restores historic and architectural landmarks, works closely with local communities, including indigenous peoples of the North, supports vulnerable social groups, and sponsors popular and professional sports. The year 2017 marked a decade since the launch of the large-scale Gazprom for Children social program. Within its framework, Gazprom Group has built or renovated over 1,600 sports facilities, which are currently available to more than 100,000 people.

Gazprom makes its contribution to sustainable development by achieving its production targets, protecting the environment and caring for people. As we keep this balance, we work for the benefit of society and the whole planet.

**Alexey Miller,**  
**Gazprom CEO**

# GAZPROM'S POSITION IN NATIONAL AND GLOBAL ENERGY INDUSTRY



**12%**  
OF GLOBAL NATURAL GAS  
PRODUCTION – GLOBAL  
LEADER



**17%**  
OF GLOBAL NATURAL GAS  
RESERVES – GLOBAL  
LEADER



**68%**  
OF RUSSIA'S  
NATURAL GAS  
OUTPUT

First among local peers to  
commence underwater  
gas extraction



World's largest  
natural gas exporter



Owner of the world's  
largest underground  
natural gas  
storage capacity



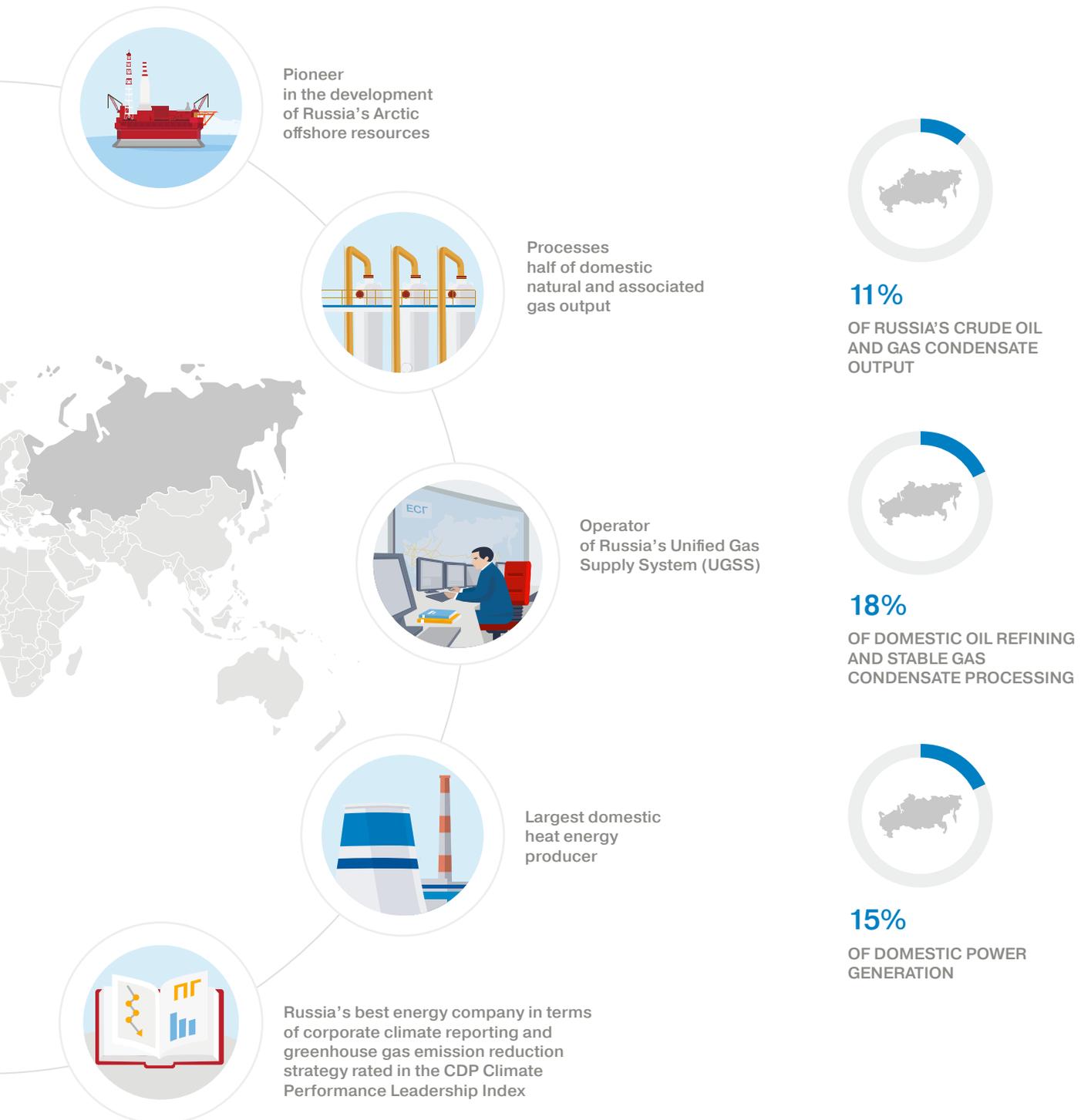
Owner of the world's  
largest network  
of high-pressure  
natural gas  
trunk pipelines



Key natural  
gas supplier  
in Russia  
and the FSU



# Gazprom leads the S&P Global Platts Top 250 Global Energy Company Rankings for 2017



## ABOUT THE REPORT

Gazprom Group's 2017 Sustainability Report (the "Report") is the sixth in a series of similar publications highlighting the Group's economic, social, and environmental performance.

The previous Report covering 2016 and released in December 2017 was the first one prepared on an annual basis. Earlier Sustainability Reports were biennial.

Within Gazprom, 2017 was proclaimed the Year of Ecology. Special emphasis is thus placed on environmental issues throughout the Report.

Gazprom deems it important to keep stakeholders updated on any operations which affect them in one way or another.

In 2017, stakeholders' interest was focused on the following aspects of Gazprom's activities: Gazprom Group's economic performance, its presence in the global and domestic markets, compliance with social, economic and environmental requirements of the law, the Environmental Management System and the Environmental Policy of PJSC Gazprom, occupational health and safety situation at the Group's production units, and antitrust compliance. This Report provides details on these issues, among others. The Report was prepared in accordance with the GRI Sustainability Reporting Guidelines, Core option.

The list of companies within Gazprom Group whose performance is covered by this Report was built on the basis of consolidation principles under IFRS 10, Consolidated

Financial Statements, unless otherwise specified.

The Report covers the Group's sustainable development activities for the period from January 1, 2017 through December 31, 2017. For the sake of comparison, most of the key performance indicators are shown in evolution over the four years from 2014 through 2017. Disaggregated data provided throughout this Report may not add up precisely to the indicator totals presented in consolidated financial statements and management accounts due to rounding. This Report also includes the Group's plans and forecasts. Subsequent actuals may differ from such information because they are determined by certain objective factors.

The Report is issued in Russian and English.

The electronic version of this Report is available online at [www.gazprom.com](http://www.gazprom.com). The printed version is circulated to the key stakeholders by direct mail.

In order to enhance credibility of the information featured in the Report, the Company has subjected this Report to auditing and conformity check against the GRI disclosure guidelines. Auditor selection is based on the competitive bidding process. The 2017 Report was audited by Financial and Accounting Consultants LLC, an independent professional auditor, and, with respect to nonfinancial reporting, it was endorsed by the Russian Union of Industrialists and Entrepreneurs acting on behalf of the public.

## DEFINITION OF MATERIAL ISSUES TO BE COVERED IN THE REPORT

Gazprom Group interprets material issues as such areas of activity that significantly affect, or may significantly affect, stakeholders' judgments and decisions or otherwise reflect Gazprom's significant economic, environmental and social impacts. Material issues were ranked by importance to stakeholders and by the extent of the Group's impact. Report contents were derived from materiality assessment with due account of stakeholder views, and were informed by a questionnaire survey and regular stakeholder contacts. Reports and statements of Russian and international companies, as well as national and foreign media coverage, were reviewed. Additionally,

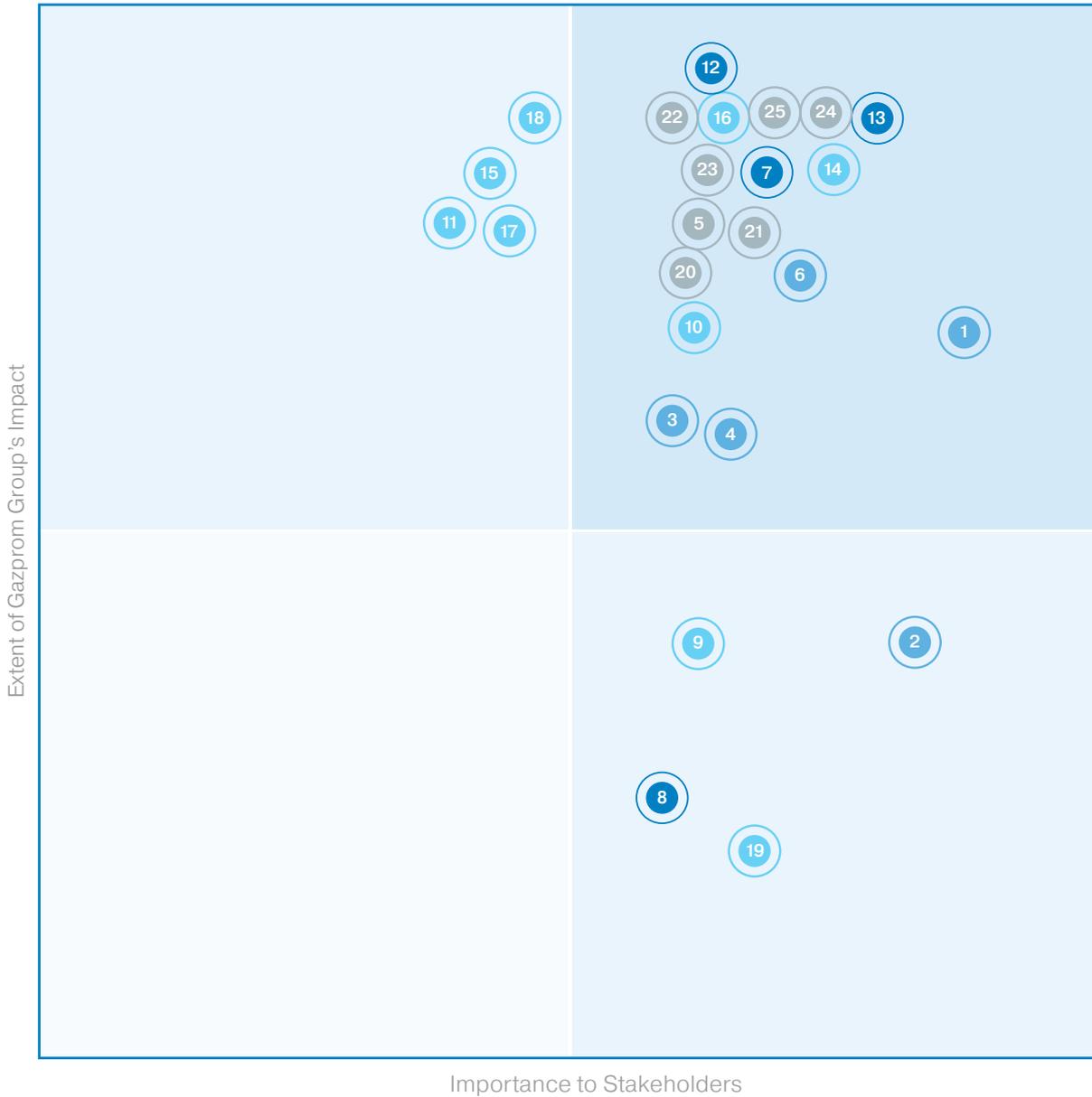
material issues were identified taking into consideration expert recommendations and comments based on analysis of Gazprom Group's 2016 Sustainability Report.

The process of defining the top material issues to be disclosed in the Report involved the following key steps: identifying potential material issues, working with experts and stakeholders, and building a materiality matrix.

### Materiality Definition Process

Stage	Methods Used	Outcome
<b>Compiling a list of potential material issues</b>	The list of issues in the GRI Standards was analyzed in terms of the nature of the industry.	A list of 25 issues.
<b>Defining material issues of the highest importance to stakeholders</b>	Materiality assessment with respect to stakeholders relied on a questionnaire survey and other sources of information.	A list of material issues ranked by importance to stakeholders.
<b>Estimating the extent of Gazprom's impact on the issues</b>	The Company's in-house experts specified, and agreed upon, the extent of Gazprom's impact on each issue.	A list of material issues ranked by the extent of Gazprom's impact.
<b>Building a materiality matrix</b>	The vertical axis is Gazprom Group's impact on the material issues, and the horizontal axis is importance to stakeholders.	A matrix of material issues. The issues in the upper right-hand corner of the materiality matrix are those of the highest priority and subject to disclosure.

Materiality Matrix



GOVERNANCE  
ISSUES



ECONOMIC  
ISSUES



SOCIAL  
ISSUES



ENVIRONMENTAL  
ISSUES

### Importance to Stakeholders

No.	Issue	Stakeholder groups mostly concerned with the issue
1	Gazprom Group's economic performance	1, 2, 5
2	Gazprom Group's presence in global and domestic markets	1, 5, 7
3	Gazprom Group's procurement system and procurement localization	3, 5
4	Gazprom Group's effort in replenishment of hydrocarbon reserves	8, 10
5	Energy saving and energy efficiency at Gazprom Group	8, 10
6	Innovations and R&D at Gazprom Group	1, 2, 3
7	Anti-corruption practices of Gazprom Group	5, 7, 9
8	Gazprom Group's participation in public policy-making	5, 9
9	Gazprom Group's contribution to employment	4, 6
10	Interaction with local communities in Gazprom Group's areas of operations	3, 6
11	Rights of indigenous and small-numbered peoples in Gazprom Group's areas of operations	5, 6
12	Antitrust law compliance	3, 5, 7
13	Compliance with social, economic and environmental requirements of the law	4, 5, 7
14	Occupational health and industrial safety at Gazprom Group	3, 5
15	Freedom of association and collective bargaining	4, 8
16	Training and education for employees and prospective employees	4, 8
17	Non-financial motivation of employees at Gazprom Group	4
18	Equal opportunities for all Company employees	4
19	Indirect economic impacts of Gazprom Group	5, 6
20	Emission management at Gazprom Group	5, 6, 8
21	Waste handling at Gazprom Group	5, 6, 8
22	Gazprom Group's efforts to preserve biodiversity within its areas of operations	5, 6, 8
23	Gazprom Group's efforts to maintain acceptable water quality within its areas of operations	5, 6, 8
24	PJSC Gazprom's Environmental Management System and Environmental Policy	3, 8
25	Disturbed land reclamation by Gazprom Group	5, 6

#### Index of stakeholder groups:

- |  |  |
|--|--|
| 1 – Shareholders   | 6 – Local communities                    |
| 2 – Investors  | 7 – Foreign regulators of energy markets |
| 3 – Business partners  | 8 – NGOs and educational institutions    |
| 4 – Employees  | 9 – Media                                |
| 5 – Public and municipal authorities of the Russian Federation | 10 – Consumers                           |

Disclosure of Material Issues in Gazprom Group's 2017 Sustainability Report

Issue	Sections
<b>MANAGEMENT IMPACTS</b>	
(13) Compliance with social, economic and environmental requirements of the law (GRI 307, GRI 419)	Appendix 1, p. 197, 200
(12) Antitrust law compliance (GRI 206)	Appendix 1, p. 195
(7) Anti-corruption practices of Gazprom Group (GRI 205)	About Gazprom Group, p. 35
(8) Gazprom Group's participation in public policy-making (GRI 415)	Appendix 1, p. 200
<b>ECONOMIC IMPACTS</b>	
(2) Gazprom Group's presence in global and domestic markets (GRI 102-6)	About Gazprom Group, p. 17 Section 1. Production: Gazprom's Contribution to National Development, p. 49
(4) Gazprom Group's effort in replenishment of hydrocarbon reserves (GRI OG1)	About Gazprom Group, p. 17 Section 1. Production: Gazprom's Contribution to National Development / Caring About Future Generations: Replenishment of Hydrocarbon Reserves, p. 80
(1) Gazprom Group's economic performance (GRI 201)	Section 1. Production: Gazprom's Contribution to National Development / Gas Supplies to International Consumers, p. 60; Section 1. Production: Gazprom's Contribution to National Development / Gazprom's Production Innovations, p. 90; Section 2. Environment: Sustainable Use of Natural Resources / Mitigating the Climate Impact, p. 129; Section 3. People: Decent Living and Work Standards / Social Policy, p. 162; Appendix 1, p. 195
(3) Gazprom Group's procurement system and procurement localization (GRI 204)	About Gazprom Group, p. 38 Section 1. Production: Gazprom's Contribution to National Development / SME Support by Gazprom Group, p. 87; Section 1. Production: Gazprom's Contribution to National Development / Import Substitution, p. 94
(6) Innovations and R&D at Gazprom Group	Section 1. Production: Gazprom's Contribution to National Development / Gazprom's Production Innovations, p. 90
<b>SOCIAL IMPACTS</b>	
(9) Gazprom Group's contribution to employment (GRI 401)	Section 3. People: Decent Living and Work Standards / Gazprom Group Personnel, p. 146
(15) Freedom of association and collective bargaining (GRI 407)	Appendix 1, p. 198
(18) Equal opportunities for all Company employees (GRI 405)	Section 3. People: Decent Living and Work Standards / Gazprom Group Personnel, p. 146

Issue	Sections
(16) Training and education of employees and prospective employees (GRI 404)	Section 3. People: Decent Living and Work Standards / Personnel Training and Development, p. 155
(17) Non-financial motivation of employees at Gazprom Group (GRI 401)	Section 3. People: Decent Living and Work Standards / Incentives and Remuneration, p. 160
(14) Occupational health and industrial safety at Gazprom Group (GRI 403)	Section 3. People: Decent Living and Work Standards / Industrial Safety Culture: Occupational Health, Industrial and Fire Safety, p. 166
(11) Rights of indigenous and small-numbered peoples in Gazprom Group's areas of operations (GRI 411)	Appendix 1, p. 198
(10) Collaboration with local communities in Gazprom Group's areas of operations (GRI 413)	Section 1. Production: Gazprom's Contribution to National Development / SME Support by Gazprom Group, p. 87; Section 3. People: Decent Living and Work Standards / Interaction with Indigenous Small-Numbered Peoples of the North, p. 179
(19) Indirect economic impacts of Gazprom Group (GRI 203)	Section 1. Production: Gazprom's Contribution to National Development / Gas Infrastructure Development and Gas Supplies to Russian Regions, p. 59 Section 3. People: Decent Living and Work Standards / Gazprom Group Social Projects, p. 176
<b>ENVIRONMENTAL IMPACTS</b>	
(24) PJSC Gazprom Environmental Management System and Environmental Policy (GRI 307)	Section 2. Environment: Sustainable Use of Natural Resources / Environmental Sustainability Management, p. 106
(23) Effort taken by Gazprom Group to maintain acceptable water quality in the Company's areas of operations (GRI 303)	Section 2. Environment: Sustainable Use of Natural Resources / Water: Treatment and Scaling Back Consumption, p. 121
(20) Emission management at Gazprom Group (GRI 305)	About Gazprom Group, p. 17
(21) Waste handling at Gazprom Group (GRI 306)	Section 2. Environment: Sustainable Use of Natural Resources / Mitigating the Climate Impact, p. 129
(22) Effort taken by Gazprom Group to preserve biodiversity in the Company's areas of operations (GRI 304)	Section 2. Environment: Sustainable Use of Natural Resources / Waste Management, p. 127
(25) Disturbed land reclamation by Gazprom Group (GRI 304)	Section 2. Environment: Sustainable Use of Natural Resources / Land: Reclamation and Prevention of Negative Impact, p. 125
(5) Energy saving and energy efficiency at Gazprom Group (GRI 302)	Section 2. Environment: Sustainable Use of Natural Resources / Energy Saving and Energy Efficiency: Saving Resources to Benefit the Planet, p. 135

**STAKEHOLDER  
ENGAGEMENT**

In its relations with stakeholders, Gazprom Group is guided by the principles of AA1000 AP 2018.

<b>Materiality</b>	Gazprom defines top material issues that affect the Group and stakeholders' judgments, decisions and activities, ranks them by importance, and discloses them in the Report.
<b>Engagement</b>	Gazprom identifies its stakeholders and engages them in defining material issues of the Report.
<b>Impact</b>	That means the impact of the Group's activities and operations and/or their results on the economy, environment, stakeholders or the Group itself. Material issues produce a direct or indirect impact that may be positive or negative, expected or realized, targeted or unintended, short-term, mid-term or long-term.
<b>Response</b>	Gazprom's timely response to material issues and associated impacts. Response materializes in the leadership's decisions, Group operations, and stakeholder communications.

**STAKEHOLDERS**



## Stakeholder Engagement Framework

Stakeholder Category	Corporate Unit / Body Responsible for Engagement	Engagement Mechanisms	Detailed Information
<b>Shareholders</b>	<ul style="list-style-type: none"> <li>Coordinating Committee for Shareholder and Investor Relations</li> <li>Shareholder Relations Department</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of the Shareholder and Investor Relations Plan</li> <li>In-person events and teleconferences</li> <li>Information disclosure</li> <li>Responses to inquiries</li> </ul>	About Gazprom Group p. 17
<b>Investors</b>	<ul style="list-style-type: none"> <li>Coordinating Committee for Shareholder and Investor Relations</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of the Shareholder and Investor Relations Plan</li> <li>In-person events and teleconferences</li> <li>Information disclosure</li> <li>Responses to inquiries</li> </ul>	About Gazprom Group p. 17
<b>Business partners</b>	<ul style="list-style-type: none"> <li>Relevant units of PJSC Gazprom</li> <li>Relevant units of subsidiaries</li> </ul>	<ul style="list-style-type: none"> <li>Contractual relations</li> <li>Cooperation agreements</li> <li>Conferences</li> <li>Summit meetings</li> <li>Industry associations</li> </ul>	Production: Gazprom's Contribution to National Development p. 49
<b>Personnel</b>	<ul style="list-style-type: none"> <li>Human Resources Department</li> </ul>	<ul style="list-style-type: none"> <li>Internal communications</li> <li>Feedback</li> <li>Top management addresses to employees</li> <li>Employee satisfaction surveys</li> </ul>	People: Decent Living and Work Standards p. 145
<b>Public and municipal authorities of the Russian Federation</b>	<ul style="list-style-type: none"> <li>Regional Policy Commission</li> </ul>	<ul style="list-style-type: none"> <li>Agreements with regions of the Russian Federation</li> <li>Presentations on Gazprom Group's activities to senior government officials</li> <li>Cooperation under business contracts, agreements and partnership memoranda</li> </ul>	Production: Gazprom's Contribution to National Development p. 49
<b>Local communities</b>	<ul style="list-style-type: none"> <li>Environmental departments of subsidiaries</li> <li>PR departments of subsidiaries</li> <li>Regional Policy Commission</li> </ul>	<ul style="list-style-type: none"> <li>Open public hearings</li> <li>Information centers</li> <li>Information disclosure</li> <li>Charity and sponsorship projects</li> <li>Environmental education and awareness-building campaigns</li> <li>Group-wide and areas-of-operation opinion surveys</li> </ul>	Production: Gazprom's Contribution to National Development p. 49  Environment: Sustainable Use of Natural Resources p. 101

Stakeholder Category	Corporate Unit / Body Responsible for Engagement	Engagement Mechanisms	Detailed Information
<b>Foreign regulators of energy markets</b>	<ul style="list-style-type: none"> <li>• International Business Department</li> <li>• Prospective Development Department</li> </ul>	<ul style="list-style-type: none"> <li>• International energy conferences and participation in international organizations</li> <li>• Participation in the development of roadmaps</li> <li>• Drafting of the energy sector's regulatory documents</li> </ul>	Production: Gazprom's Contribution to National Development p. 49
<b>NGOs, educational institutions</b>	<ul style="list-style-type: none"> <li>• Environmental departments of subsidiaries</li> <li>• PR departments of subsidiaries</li> <li>• Social services and units</li> <li>• Human Resources Department</li> </ul>	<ul style="list-style-type: none"> <li>• Joint programs and research activities</li> <li>• Open public hearings</li> <li>• Information disclosure</li> <li>• Membership in NGOs and expert associations</li> <li>• Conferences, on-the-job training and internship programs</li> <li>• Joint programs and research activities</li> <li>• Development of training materials and learning aids</li> </ul>	Environment: Sustainable Use of Natural Resources p. 101  People: Decent Living and Work Standards p. 145
<b>Media</b>	<ul style="list-style-type: none"> <li>• Information and Communications Department</li> </ul>	<ul style="list-style-type: none"> <li>• Media conferences</li> <li>• Press tours and on-site visits to Gazprom Group facilities</li> <li>• Top managers' meetings with media representatives</li> <li>• Press releases</li> </ul>	Production: Gazprom's Contribution to National Development p. 49  Environment: Sustainable Use of Natural Resources p. 101
<b>Consumers</b>	Department in charge of marketing, natural gas conversion and liquid hydrocarbon processing Marketing units of subsidiaries	<ul style="list-style-type: none"> <li>• Contracts</li> <li>• Meetings, including retreats</li> <li>• Conferences, forums</li> <li>• Complaints management system</li> <li>• Reporting</li> </ul>	Production: Gazprom's Contribution to National Development p. 49

## ABOUT GAZPROM GROUP

*Gazprom leads the S&P Global Platts Top 250 Global Energy Company Rankings for 2017*

Gazprom Group (hereinafter also referred to as “Gazprom” and “the Group”) is a global vertically integrated energy company focused on exploration, production, transportation, storage, processing and marketing of gas, gas condensate, crude oil, and refined hydrocarbon products, as well as generation and marketing of heat and electric power. The parent company of the Group is PJSC Gazprom (hereinafter also referred

to as “the Company”). Type of ownership: mixed Russian ownership with the federal government’s stake.

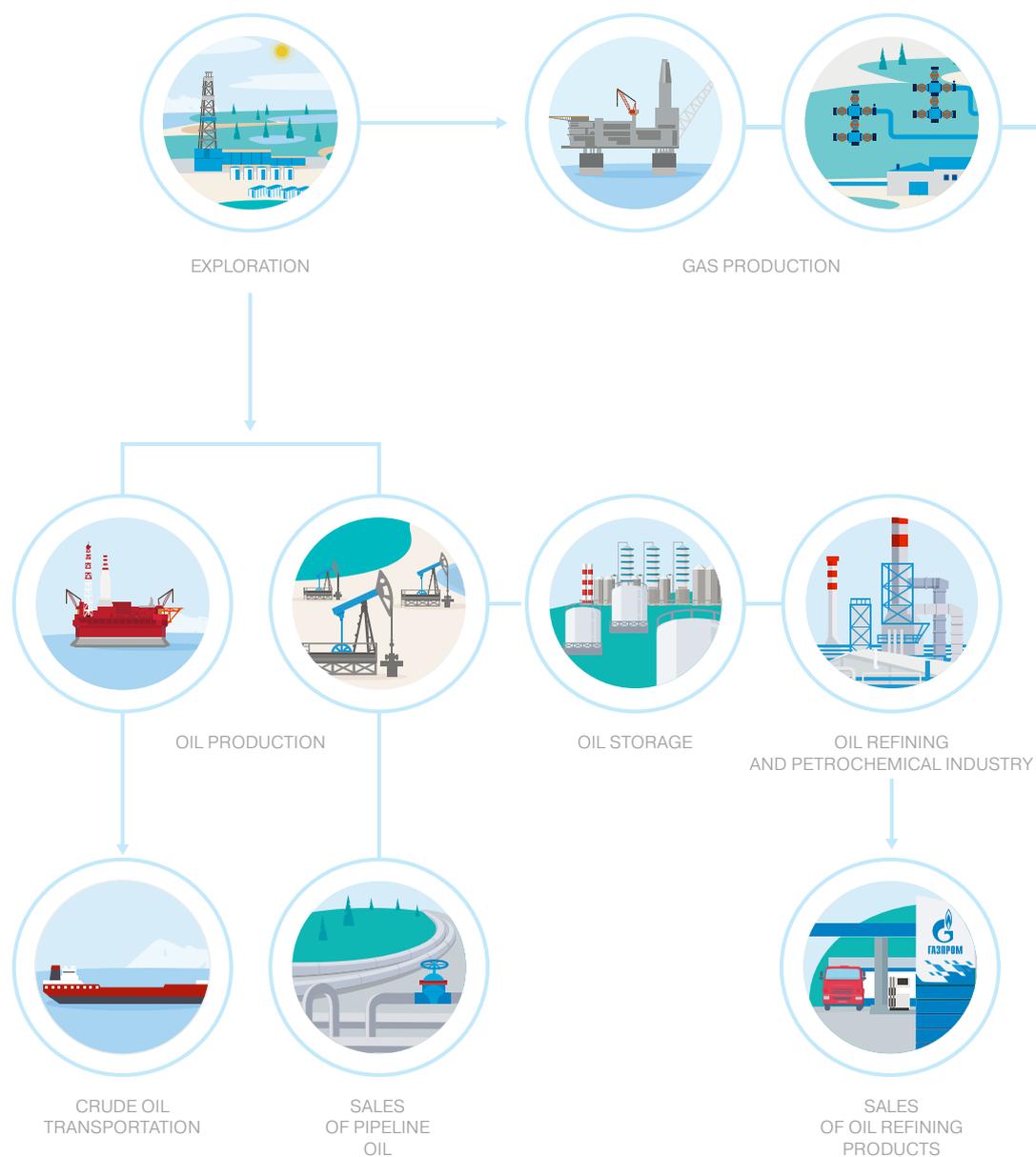
Gazprom Group was named as number one in the annual S&P Global Platts Top 250 Global Energy Company Rankings for 2017. The rankings are based on a number of financial performance indicators, including asset worth, revenue, profit and return on invested capital.

### PJSC GAZPROM’S COMPETITIVE EDGE

 <p>The Company’s extensive resource and asset base</p>	 <p>A unique Russian Unified Gas Supply System</p>	 <p>A vertically integrated company</p>
 <p>Strategic position between Europe and Asia</p>	 <p>Years of experience in doing business with international partners and a solid track record as a reliable supplier</p>	 <p>An established portfolio of long-term contracts to supply natural gas to European and Asian consumers</p>
 <p>Access to capital markets on the terms acceptable to the Company</p>	 <p>Substantial production, research and design capabilities</p>	 <p>Corporate social policy which makes the Company an attractive employer for highly skilled workforce</p>

## BUSINESS MODEL

Gazprom's principal activities are exploration, production, transportation, storage, processing and sales of gas, condensate and crude oil, sales of refined hydrocarbon products, sales of gas as a vehicle fuel, as well as generation and sales of heat and electric power. Gazprom Group concentrates all its efforts on ensuring reliable supplies of energy resources to consumers.







Countries		Operations										Marketing						
		Hydrocarbons prospecting and exploration	Gas and gas condensate production	Oil production	Gas transportation	Gas underground storage	Gas distribution	Gas processing	Oil refining	Production of electricity and heat	Oil and gas chemical production	Trunk pipeline gas sales	Sales of refined hydrocarbon products	Oil and gas condensate sales	LNG sales	Gas sales to end consumers	Electricity and heat sales	Product sales through gasoline, CNG filling, gas filling and multi-fuel filling stations
FSU	Russia	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Armenia	-	-	-	•	•	•	-	-	•	-	•	-	-	-	•	•	•
	Azerbaijan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Belarus	-	-	-	•	•	-	-	-	•	-	-	•	•	•	•	-	•
	Estonia	-	-	-	-	-	-	-	-	-	-	-	•	•	-	•	-	-
	Georgia	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	-
	Kazakhstan	-	-	-	-	-	-	-	-	-	-	•	•	-	•	-	-	•
	Kyrgyzstan	•	-	-	•	-	•	-	-	-	-	-	•	•	-	-	•	•
	Latvia	-	-	-	-	•	-	-	-	-	-	-	•	•	•	-	-	-
	Lithuania	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	-
	Moldova	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	-
	South Ossetia	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Tajikistan	•	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	•
	Turkmenistan	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	-	
Uzbekistan	•	•	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	
Europe	Austria	-	-	-	-	•	-	-	-	-	-	-	•	•	-	-	•	-
	Belgium	-	-	-	-	-	-	-	-	-	-	-	-	•	•	-	•	-
	Bosnia and Herzegovina	•	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	•
	Bulgaria	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	•
	Croatia	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	•	-
	Cyprus	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Czech Republic	-	-	-	-	•	-	-	-	-	-	-	•	•	-	•	-	•
	Denmark	-	-	•	-	-	-	-	-	-	-	-	•	•	•	-	-	-
	Finland	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	•	-
	France	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	•	-
	Germany	-	-	-	-	•	-	-	-	-	-	-	•	•	•	-	•	•
	Greece	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	-
	Hungary	•	-	-	-	-	-	-	-	-	-	-	•	•	-	-	•	-
	Iceland	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Ireland	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	•	-
	Italy	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	-	-
	Macedonia	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	-
	Malta	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Montenegro	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Netherlands	•	•	-	-	-	-	-	-	-	-	-	•	•	•	-	•	•
Norway	-	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	•	
Poland	-	-	-	-	-	-	-	-	-	-	-	•	•	-	•	-	•	
Portugal	-	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	

Countries		Operations										Marketing						
		Hydrocarbons prospecting and exploration	Gas and gas condensate production	Oil production	Gas transportation	Gas underground storage	Gas distribution	Gas processing	Oil refining	Production of electricity and heat	Oil and gas chemical production	Trunk pipeline gas sales	Sales of refined hydrocarbon products	Oil and gas condensate sales	LNG sales	Gas sales to end consumers	Electricity and heat sales	Product sales through gasoline, CNG filling, gas filling and multi-fuel filling stations
<b>Europe</b>	Romania	•	-	-	-	-	•	-	-	-	-	•	•	•	-	•	•	•
	Serbia	•	•	•	-	•	-	-	•	•	-	•	•	•	-	-	•	•
	Slovakia	-	-	-	-	-	-	-	-	-	-	•	•	-	-	•	-	-
	Slovenia	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	•	-
	Spain	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-	-
	Sweden	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	-
	Switzerland	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	-	-
	Turkey	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-	-	-
	United Kingdom	•	•	-	-	-	-	-	-	-	-	•	•	•	-	•	•	-
<b>Africa</b>	Algeria	•	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Angola	-	-	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benin	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Cameroon	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Djibouti	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	DRC	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Egypt	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Equatorial Guinea	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Ethiopia	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Ghana	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Guinea	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Guinea-Bissau	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Kenya	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Libya	•	•	•	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Mauritania	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Mauritius	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Morocco	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Mozambique	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Nigeria	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Senegal	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Seychelles	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
South Africa	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	
Tanzania	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	
Togo	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	
Tunisia	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	
Uganda	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	

Countries		Operations										Marketing						
		Hydrocarbons prospecting and exploration	Gas and gas condensate production	Oil production	Gas transportation	Gas underground storage	Gas distribution	Gas processing	Oil refining	Production of electricity and heat	Oil and gas chemical production	Trunk pipeline gas sales	Sales of refined hydrocarbon products	Oil and gas condensate sales	LNG sales	Gas sales to end consumers	Electricity and heat sales	Product sales through gasoline, CNG filling, gas filling and multi-fuel filling stations
<b>Near and Middle East</b>	Afghanistan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Iraq	•	•	•	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Israel	-	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-
	Jordan	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Kuwait	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-
	Lebanon	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Pakistan	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Qatar	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	UAE	-	-	-	-	-	-	-	-	-	-	-	-	•	-	•	-	-
	Yemen	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
<b>Asia-Pacific</b>	Australia	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Bangladesh	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Cambodia	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	China	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-
	India	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-
	Indonesia	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Japan	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-
	Malaysia	-	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-
	Marshall Islands	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Myanmar	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Philippines	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Republic of Korea	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-
	Singapore	-	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-	-
	Sri Lanka	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-
	Taiwan (China)	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-
	Thailand	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	-	-
	Vietnam	•	•	-	-	-	-	-	-	-	-	-	•	•	•	-	-	-

Countries		Operations										Marketing						
		Hydrocarbons prospecting and exploration	Gas and gas condensate production	Oil production	Gas transportation	Gas underground storage	Gas distribution	Gas processing	Oil refining	Production of electricity and heat	Oil and gas chemical production	Trunk pipeline gas sales	Sales of refined hydrocarbon products	Oil and gas condensate sales	LNG sales	Gas sales to end consumers	Electricity and heat sales	Product sales through gasoline, CNG filling, gas filling and multi-fuel filling stations
<b>North America</b>	Canada	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Mexico	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	United States	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
<b>Central and South America</b>	Argentina	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Bolivia	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Brazil	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Chile	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Colombia	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Costa Rica	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Ecuador	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	El Salvador	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Guatemala	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Guyana	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Nicaragua	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Panama	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Paraguay	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Peru	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
Uruguay	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	
Venezuela	•	-	•	-	-	-	-	-	-	-	-	•	-	-	-	-	-	
<b>Other countries</b>	Bahamas	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Dominica	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Dominican Republic	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Jamaica	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Maldives	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-
	Mongolia	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-

**GAZPROM  
GROUP'S KEY  
PERFORMANCE  
INDICATORS,  
2014–2017**

**Gazprom Group's Key Operating Indicators**

	2014	2015	2016	2017
<b>Hydrocarbon reserves according to PRMS standards<sup>(1)</sup></b>				
Proven and probable natural gas reserves, bcm	23,510.7	23,705.0	23,855.1	24,146.6
Proven and probable gas condensate reserves, mmt	848.6	933.3	1,018.9	1,105.7
Proven and probable oil reserves, mmt	1,374.4	1,355.4	1,378.7	1,360.0
<b>TOTAL proven and probable hydrocarbon reserves<sup>(2)</sup>, billion boe</b>	<b>169.6</b>	<b>171.4</b>	<b>173.3</b>	<b>175.7</b>
<b>Operating indicators</b>				
Natural and associated gas production <sup>(1)</sup> , bcm	444.9	419.5	420.1	472.1
Oil production <sup>(1)</sup> , mmt	43.5	44.0	47.2	48.6
Unstable gas condensate production <sup>(1)</sup> , mmt	14.5	15.3	15.9	15.9
Total hydrocarbon production <sup>(1), (2)</sup> , million boe	3,325.0	3,171.0	3,201.9	3,550.5
Natural and associated gas processing, bcm	30.5	31.2	31.0	30.8
Oil refining and gas condensate processing, mmt	68.0	66.8	65.9	64.1
Electricity generation <sup>(3)</sup> , billion kWh	155.4	148.0	157.5	156.6
Heat generation, million Gcal	125.2	118.6	129.5	127.3
<b>Hydrocarbon sales</b>				
<b>Natural gas sales, bcm</b>				
Russia	234.0	221.2	214.9	229.9
Non-FSU countries <sup>(4)</sup>	159.4	184.4	228.3	242.0
FSU countries <sup>(4)</sup>	48.1	40.3	33.2	35.0
<b>TOTAL</b>	<b>441.5</b>	<b>445.9</b>	<b>476.4</b>	<b>506.9</b>
<b>Oil and gas condensate sales<sup>(5)</sup>, mmt</b>				
Russia	4.7	5.3	5.9	4.3
Non-FSU countries	9.8	9.8	17.1	21.6
FSU countries	1.2	1.9	1.7	1.7
<b>TOTAL</b>	<b>15.7</b>	<b>17.0</b>	<b>24.7</b>	<b>27.6</b>

<sup>(1)</sup> Including the Group's share in the reserves and production of the entities in which Gazprom has investments classified as joint operations.

<sup>(2)</sup> For management accounting purposes, Gazprom Group measures hydrocarbon reserves and production in metric units. In this Report, gas, crude oil and gas condensate reserve and production figures are converted from metric units to barrels of oil equivalent as follows: 1,000 cubic meters of natural gas = 6.49 boe, 1 ton of oil = 7.33 boe, 1 ton of gas condensate = 8.18 boe.

<sup>(3)</sup> Including foreign assets.

<sup>(4)</sup> Sales in the FSU, Europe and other countries include natural gas exports from Russia, as well as sales of natural gas purchased by the Group outside Russia.

<sup>(5)</sup> Oil and gas condensate sales, excluding intragroup sales.

#### Gazprom Group's Key Financial Indicators

	2014	2015	2016	2017
PJSC Gazprom's market capitalization at year-end, RUB trillion	3.1	3.2	3.6	3.1
Sales, RUB million	5,589,811	6,073,318	6,111,051	6,546,143
Profit on sales, RUB million	1,310,424	1,228,301	725,580	870,623
Profit for the year, RUB million	157,192	805,199	997,104	766,879
Discounted EBITDA, RUB million	1,962,558	1,874,726	1,322,199	1,466,910

#### Gazprom Group's Key Social Indicators

	2014	2015	2016	2017
Personnel headcount at year-end, thousand people	459.6	462.4	467.4	469.6
Social spending, RUB million	46,429	32,485	35,516	34,461
Payroll, RUB million	516,778	590,981	641,036	682,060

#### Gazprom Group's Key Health, Safety and Environmental Performance Indicators

	2014	2015	2016	2017
Current environmental expenditure, RUB billion	31.66	32.17	34.10	34.47
Pollutant emissions, thousand tons	2,797.6	2,830.6	2,868.5	2,796.0
Greenhouse gas emissions, mmt of CO <sub>2</sub> equivalent	228.3	220.0	228.2	233.8
Contaminated area at year-end, hectares	140.2	35.1	4.8	3.0
Lost time injury frequency rate (LTIFR) <sup>(1)</sup>	0.181	0.175	0.155	0.114

<sup>(1)</sup> For entities covered by the Unified Occupational and Industrial Safety Management System (UO&ISMS). The indicator is calculated as the number of persons injured in accidents / total man-hours worked by all employees × 1,000,000.

## GAZPROM GROUP'S STRATEGY

*PJSC Gazprom's mission is to ensure reliable, efficient and balanced supply of natural gas, other energy resources and their derivatives to consumers.*

Gazprom's strategic goal is to establish itself as a leader among global energy companies by diversifying sales markets, ensuring reliable supplies, improving operating efficiency and fulfilling its research and technology potential.

The Company's strategy reflects the main principles and priorities of the Energy Strategy of Russia, as well as the General Framework for the Development of the Russian Gas Sector.

The Group's strategy is founded on the following principles:

- enhanced efficiency throughout the value chain, from production to sales of natural gas, oil and refined products;
- business expansion and diversification through the execution of projects aimed at creation of high value-added products;
- improvement of policies focused on sustainable use of natural resources, protection of the environment, and energy efficiency;
- acting in the interests of all Company shareholders;
- improvement of corporate governance, transparency of financial and business operations;

- executives' personal responsibility for managerial decisions.

The PJSC Gazprom strategic planning framework employs a two-tier system of Strategic Target Indicators (STI).

Tier 1 STIs (STI<sub>1</sub>) are set by the Company's Board of Directors for the end of a ten-year planning period and underlie the corporate Long-Term Development Program (LTDP), which is reviewed and updated annually and is subject to approval by the Board of Directors. The LTDP serves as the point of reference for mid-term (three-year) and short-term (one-year) planning of investment activities, financial and business operations, and for designing a system of performance benchmarks (PBs) for the budgeting period.

The purpose of the LTDP is to provide a comprehensive and integrated plan to ensure the Company's well-balanced and successful growth, to achieve STIs, and to maximize systemic economic benefits based on risk and opportunity analysis.

### STI<sub>1</sub> values for the end of the 10-year period (approved by Resolution No. 1528, of December 29, 2009, of the Board of Directors)

Indicator	Target Value
Economic profit growth	Positive
Return on equity (Return on capital employed)	Not less than 6%
Capital leverage	Debt to equity ratio not more than 40%
Gas production and sales volumes:	
Gross natural gas production	Not less than 550 bcm
Natural gas sales	Not less than 490 bcm
Total gas reserves	Not less than 29 tcm of natural gas
Reserve replacement ratio	Not less than 100%

Tier 2 STIs (STI<sub>2</sub>) disaggregate STI<sub>1</sub> by area of operations, setting more detailed objectives for production, marketing, finance, internal corporate processes, innovation and HR management.

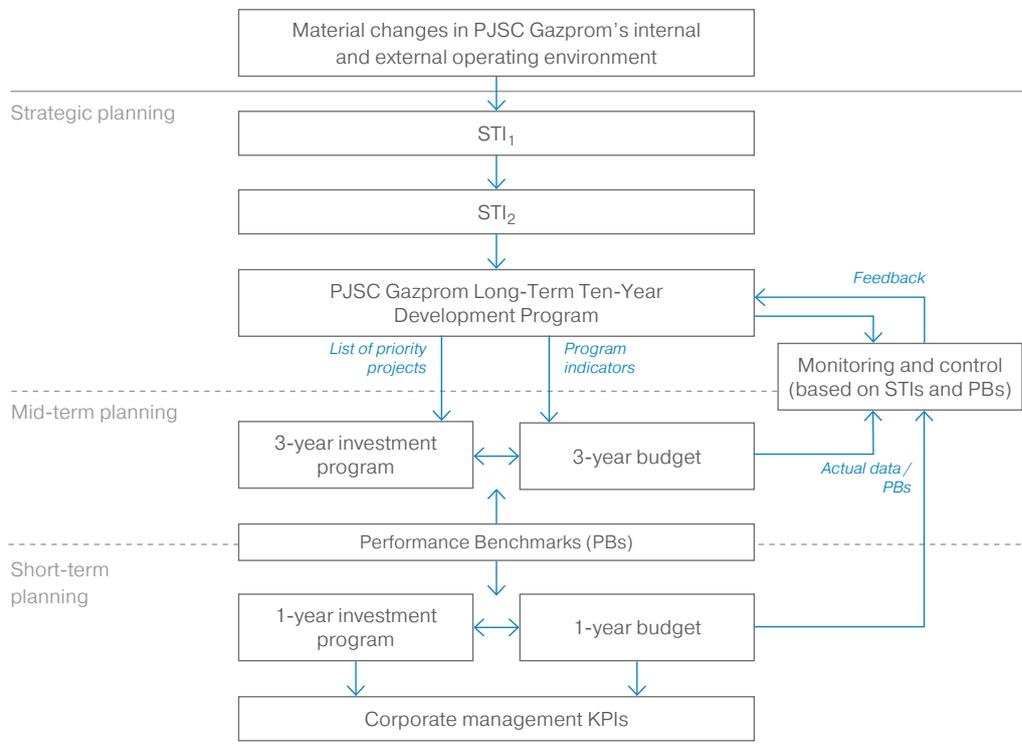
While the STI-based long-term planning framework applies to the gas business of the Company and its major subsidiaries, efforts are underway to roll it out in its overseas operations, as well as in its oil production and power generation businesses. This will ultimately make the Group-wide planning process more effective.

In 2017, Gazprom Group identified STIs for its oil and power generation businesses. The LTDP includes a section focused

on the development of the Group's overseas operations.

The PJSC Gazprom Long-Term Development Program (gas business, 2018–2027) was approved by a resolution of the Board of Directors in December 2017. It includes updated predictive scenarios of the nation's social and economic development designed by the Ministry of Economic Development of the Russian Federation, as well as the latest decisions on systemically important prospective projects, such as Power of Siberia, the Amur Gas Processing Plant, Nord Stream 2, Baltic LNG, the third train of the Sakhalin II LNG plant, TurkStream, and a liquefied natural gas (LNG) production facility near the Portovaya compressor station.

**Correlation between STI-based long-, mid- and short-term planning frameworks**



## SUSTAINABILITY MANAGEMENT

Gazprom sets itself the following sustainability goal: striving for a leading position among global energy companies, to contribute positively to the nation's social and economic development, while complying with the standards of environmental and industrial safety, corporate governance, and corporate social responsibility.

Gazprom's sustainability objectives:

- to continuously improve corporate governance;
- to build an effective and transparent stakeholder engagement framework;
- to encourage personal and professional growth of Group employees;
- to contribute to social and economic development of the Group's regions of operations and nationwide;
- to take care of the health and safety of Group employees, counterparties and the public at large in any Gazprom operations;
- to minimize adverse environmental impacts;
- to make efficient use of natural resources;

- to adopt innovative solutions in all phases of Gazprom operations.

Sustainability management is within the competence of Gazprom Group executives at different organizational levels. The Board of Directors of PJSC Gazprom performs strategic sustainability management, reviews and approves top-level documents.

Day-to-day sustainability management is in the purview of relevant departments of PJSC Gazprom and, at the level of Group subsidiaries, chief executives of respective companies. Group entities may develop their own sustainability documents, taking into consideration their industry-specific operations.

The Group's performance monitoring system records contributions to sustainable development in the reporting period. Current year performance monitoring is based on a system of key performance indicators applicable to each of sustainability areas.

### PJSC Gazprom key performance indicators in sustainability, broken down into blocks (economic and financial, environmental, and social)

#### ECONOMIC AND FINANCIAL



- Economic profit growth
- Return on capital
- Return on equity

#### ENVIRONMENTAL



- Reducing specific fuel and energy consumption for operating needs and losses
- Reducing specific greenhouse gas emissions in the CO<sub>2</sub> equivalent

#### SOCIAL



- Number of employees who have completed advanced training / annual average personnel roster
- Average number of hours spent by employees on continuing professional development during the year (by employee category)
- Reducing the accident rate

Gazprom's sustainable development priorities are consistent with the Sustainable Development Goals (SDGs) set by the UN General Assembly on September 25, 2015.<sup>2</sup> Eight out of 17 goals set by the UN are specifically relevant to Gazprom, given the nature of its business:

- SDG 3. Ensure healthy lives and promote well-being for all at all ages.
- SDG 7. Ensure access to affordable, reliable, sustainable and modern energy for all.
- SDG 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
- SDG 11. Make cities and human settlements inclusive, safe, resilient, and sustainable.
- SDG 12. Ensure sustainable consumption and production patterns.
- SDG 13. Take urgent action to combat climate change and its impacts.
- SDG 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.



### **Gazprom tops the Sustainable Development Vector Index and the Responsibility and Transparency Index**

In 2017, for a fourth straight year, Gazprom was ranked among the leaders of the Sustainable Development Vector Index and the Responsibility and Transparency Index maintained by the Russian Union of Industrialists and Entrepreneurs since 2014. The purpose of the indices is to provide independent assessment of businesses' performance in the area of sustainable development, corporate responsibility and reporting.

The Responsibility and Transparency Index reflects the situation with information disclosure in key areas of activity, by analyzing 70 indicators characterizing responsible business practices, including economic, environmental and social performance indicators as well as material aspects of management. The Sustainable Development Vector Index measures performance trends and is used to identify leaders among major companies that have the best transparency rankings, while also showing a generally positive trend in sustainability performance.

<sup>2</sup> On September 25, 2015, the UN General Assembly passed a resolution adopting the 2030 Development Agenda.

## CORPORATE GOVERNANCE



*In 2017, performance of the Company's Board of Directors and its committees was scored highly by independent experts — JSC KPMG and Gorizont-KF LLC.*

The corporate governance system of PJSC Gazprom supports sustainability efforts at every stage, from corporate strategy planning to day-to-day operations.

No significant changes took place in PJSC Gazprom's corporate governance in 2017.

The Company's corporate governance framework conforms with requirements of laws of the Russian Federation, as well as rules of Russian stock exchanges applicable to premium (primary) listing issuers.

PJSC Gazprom's corporate governance prioritizes observance of the rights and legitimate interests of the Company's shareholders and investors, information transparency, efficient operations of the Company, financial stability and profitability.

The Company's operating efficiency and investment appeal depend on trust-based relationships among all parties involved in corporate interaction.

The PJSC Gazprom corporate governance framework also stipulates creation and maintenance of effective risk management and internal control systems; clear delineation of authorities, definition of responsibilities for each managing body within the Company, and an established procedure for the assessment of the performance of their duties and functions.

In 2017, PJSC Gazprom completed a regular comprehensive independent audit of its corporate governance practices. The audit was performed by JSC KPMG and Gorizont-KF LLC experts. Their approach to corporate

governance audit and to the assessment of performance of members and committees of the Board of Directors is based on best national and international practices and complies with:

- recommendations of the Bank of Russia's Corporate Governance Code;
- listing requirements of Russian stock exchanges;
- instructional guidelines of federal executive bodies of the Russian Federation (Ministry of Economic Development, the Federal Agency for State Property Management);
- federal standards in the area of risk management and social responsibility.

Based on the audit results and analysis, the experts rated highly the progress made by the Board of Directors and its committees.

The fundamental principles of corporate governance at Gazprom are set out in the Corporate Governance Code of PJSC Gazprom approved by the Company's General Shareholders Meeting on June 30, 2017 (the previous version was approved on June 28, 2002). In particular, the Code defines the following principles: equitable treatment of shareholders in the exercise of their rights; establishment of an effective and professional Board of Directors responsible for strategic management of the Company's operations and supervision of executive bodies; establishment of executive bodies that manage the Company's day-to-day operations prudently and in good faith; workable and effective risk management and internal control systems; transparency of business operations; adherence to business conduct standards; following best practices of corporate social responsibility; engaging extensively with all stakeholders.

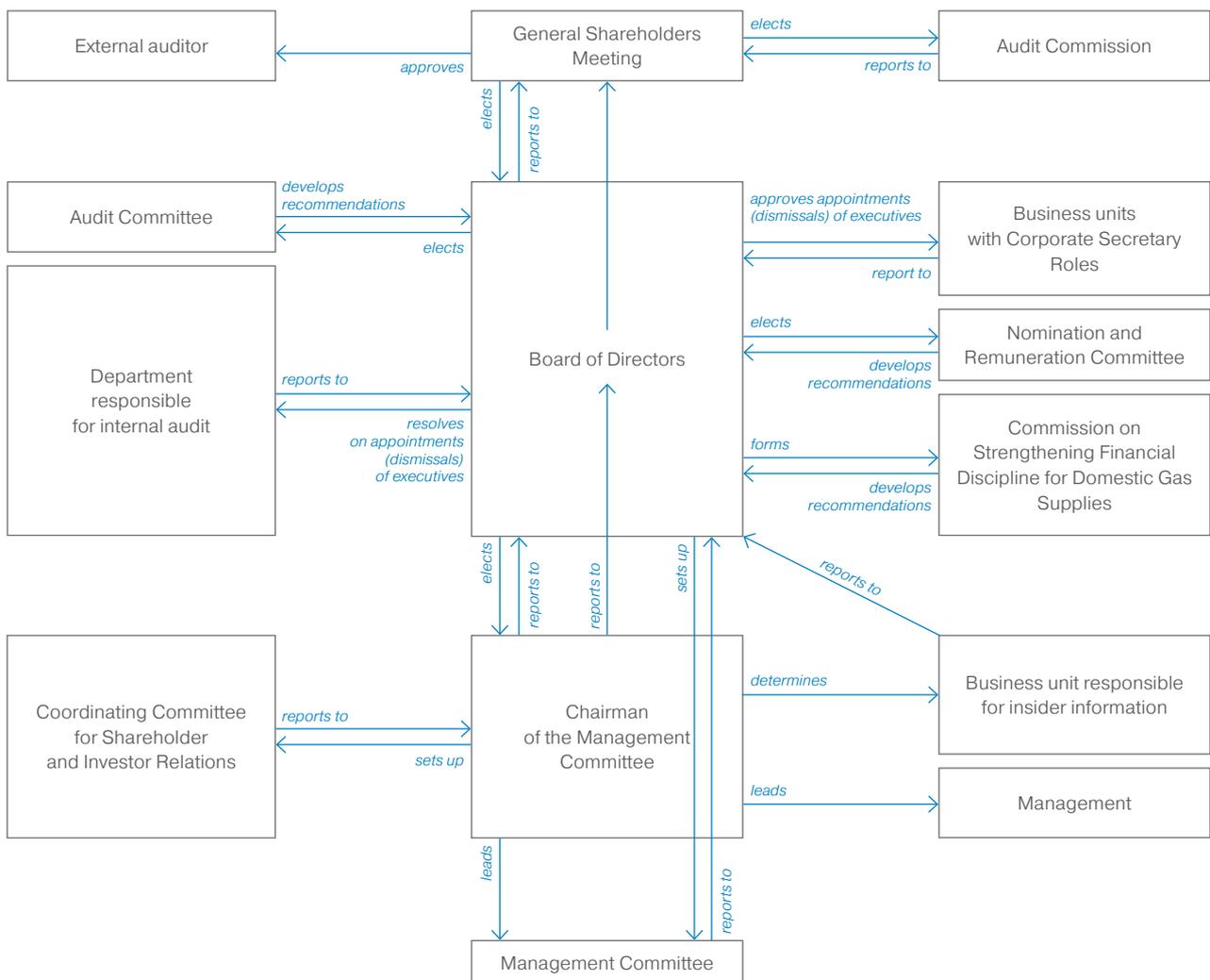
### CORPORATE GOVERNANCE STRUCTURE

The General Shareholders Meeting, the Board of Directors, the Management Committee, the Chairman of the Management Committee, and the Audit Commission are the key pillars of the PJSC Gazprom corporate governance structure. The most important decisions affecting PJSC Gazprom business are made by the General Shareholders Meeting, to the extent of its purview, and by the Board of Directors. Decisions related to management of

the Company's day-to-day operations are made by executive bodies.

Within the Management Committee Administration, the Internal Audit Department provides unbiased assessment of internal control effectiveness and recommends improvements. The Company's financial and business performance is independently reviewed by an external auditor.

PJSC Gazprom Corporate Governance Structure





In 2017, PJSC Moscow Exchange and PJSC St. Petersburg Exchange confirmed that PJSC Gazprom corporate governance conformed with their respective listing requirements. PJSC Gazprom continues to be a primary listing company.

The Company maintains an open and constructive dialogue with the investment community through its Coordinating Committee for Shareholder and Investor Relations.

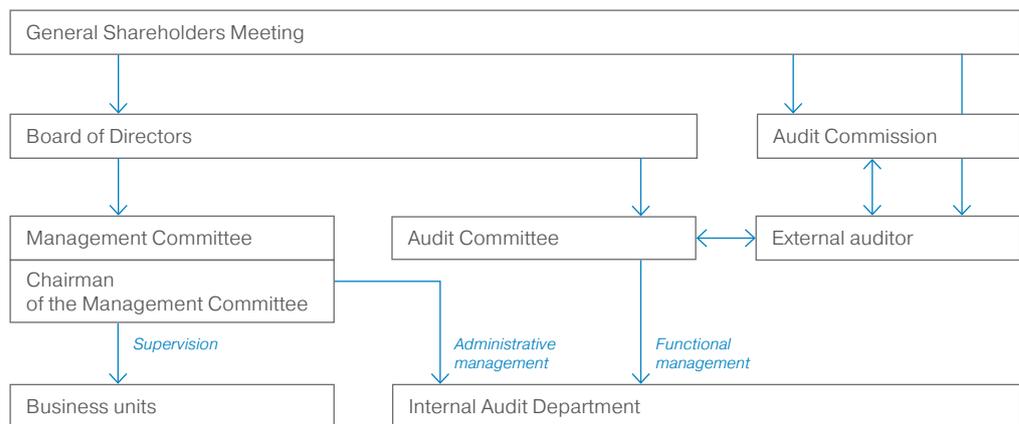
**The Internal Control System** is an important tool for protecting the interests of PJSC Gazprom's shareholders and investors. Its purpose is to provide reasonable assurance in addressing the following:

- operating efficiency;
- completeness, timeliness and accuracy of all types of the Company's accounts and reports;

- compliance with applicable law;
- preventing and countering corruption;
- asset protection (including information assets).

Internal control is exercised by the PJSC Gazprom Board of Directors, the Audit Committee of the PJSC Gazprom Board of Directors, the PJSC Gazprom Audit Commission, executive bodies (the Management Committee and the Chairman of the Management Committee), heads of business units and other Company employees.

**Internal Control Structure**

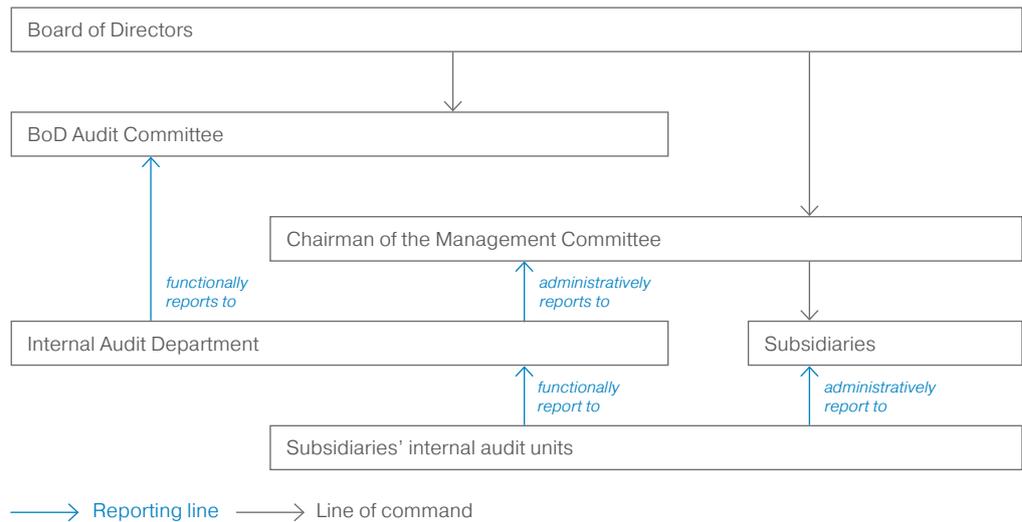


The PJSC Gazprom Internal Control System generally conforms to the corporate governance principles set out in the Corporate Governance Code (CGC) (guidelines 251 through 262) and international practices.

**Internal audit** assists in achieving the Company's objectives through a structured and consistent approach to assessment and improvement of risk management, control and corporate governance processes.

The Internal Audit Department provides the PJSC Gazprom Board of Directors (through the Audit Committee of the BoD) and top management with independent and objective assurances and advice aimed to improve the Company's performance. In addition, the department makes arrangements for and performs internal audits within PJSC Gazprom business units and subsidiaries on the basis of domestic and international best practices.

**Internal Audit Structure**



The scope of the audits completed in 2017 included the following:

- achievement by the auditees of their objectives;
- efficiency and effectiveness of operations;
- protection of assets;
- compliance with contractual terms, legal requirements and local regulations.

The department's Internal Audits Schedule for 2018 was approved by a PJSC Gazprom corporate order.

The Company's internal audit system conforms to the corporate governance principles set out in the Russian CGC (guidelines 263 through 273).

PJSC Gazprom subsidiaries organize and perform internal audits through their own internal audit units.

Find more details on PJSC Gazprom internal control and internal audit in the Company's 2017 Annual Report (pp. 205—207).

**CORPORATE  
CULTURE AND  
CORPORATE  
ETHICS**

Gazprom's corporate culture is a unique system of values, norms and behavioral patterns that hold the Company together. Its essential elements are embedded in the Company's Code of Corporate Ethics.

Code provisions are binding on employees of PJSC Gazprom (including all members of the Management Committee and the Board of Directors who are employed by PJSC Gazprom) and controlled corporate entities, and are recommended for application

by employees of the entities where Gazprom holds a non-controlling stake.

Members of the PJSC Gazprom Management Committee and members of the Board of Directors who are employed by PJSC Gazprom are required to sign a commitment to respect the Code of Corporate Ethics.

The core values underlying Gazprom's corporate culture are professionalism, personal initiative, care, mutual respect, openness for dialogue and continuity.

The PJSC Gazprom Code of Corporate Ethics was designed with reference to Russian and international best practices in corporate governance. It states corporate values and derives from them essential business conduct standards that rule out conflicts of interest and corruption.

The Company's subsidiaries have developed and adopted their internal codes on the basis of the Group code.

The Code prescribes employee conduct in conflict of interest situations, declares zero tolerance to corruption practices, and proclaims equal opportunities for all employees. It lays out principles of environmental awareness and non-discrimination, while also establishing the procedure for the implementation and enforcement of corporate ethics rules.

PJSC Gazprom has set up a permanent Corporate Ethics Commission to administer compliance with the code's requirements and provisions.

In 2017, the Company's Corporate Ethics Commission received no reports on conflicts of interest affecting members of the PJSC Gazprom Board of Directors, members of the Management Committee or the Chairman of the Management Committee.

## COUNTERING CORRUPTION

PJSC Gazprom and its subsidiaries conduct their business in strict compliance with the laws of the Russian Federation and other countries of operations. Since 2016, the PJSC Gazprom Anti-Corruption Policy has been the Company's framework document for preventing and countering corruption.

The purpose of the policy is to develop a consistent approach to the Company's performance of its duty to prevent and counter corruption in the interests of civil society, the Company's shareholders and employees.

The policy describes ethical standards for conducting legal, open and fair business, enhancing corporate culture, applying best corporate governance practices, and maintaining a good business reputation.

In addition, Gazprom has adopted the following procedures:

- the Procedure for a Conflict of Interest Disclosure and Conflict of Interest Resolution (Instruction No. 368 of November 25, 2016);
- the Procedure for Employee Reporting Known Offences Meeting Criteria of Corruption Committed by Other Employees, Counterparties or Other Persons, and for Reviewing Such Reports (Instruction No. 2 of January 12, 2017);
- the Procedure for Reporting Instances of Employee Incited to Corruptive Offences, and for Reviewing Such Reports (Order No. 3 of January 12, 2017);
- the Procedure for Protection of Employees Reporting Corruption Violations in the Company (Instruction No. 4 of January 12, 2017).

The Company monitors and analyzes amendments to anticorruption laws, studies international practices, and informs employees accordingly.

In order to prevent conflicts of interest, the Company has introduced a number of restrictions, namely:

- restrictions related to relatives working together;
- restrictions related to employee participation in competitor companies and elective state bodies;
- restrictions related to acceptance of gifts;
- restrictions related to employee use of the Company's resources for personal purposes.

The Company regards as unacceptable any form of illegal influence on decisions of government agencies and authorities, including bribery, unacceptable gifts, offering employment to family members of public officials, charity or sponsorship at the request of public officials authorized to make decisions beneficial to the Company.

Acting under the laws of the Russian Federation and Gazprom's internal regulations, the PJSC Gazprom Corporate Protection Service and corporate protection units of Gazprom subsidiaries make efforts to prevent and identify corrupt practices throughout Gazprom Group. The service works in cooperation with departments charged with internal audit, corporate cost management and corporate relations, and with law-enforcement agencies of the Russian Federation.

In 2014, Gazprom launched a Group-wide hotline to report incidents of fraud, corruption and theft. Every report received through it is thoroughly investigated and analyzed.



**The following arrangements help prevent and deter violations in procurement:**

- *Procurement rules, procedures, methods and practices are defined in the Regulation on Procurement of Goods, Works and Services of PJSC Gazprom and Gazprom Group Companies adopted by Resolution No. 1969, of April 19, 2012, of the PJSC Gazprom Board of Directors ("Procurement Regulation"), and must be applied in procurement operations of PJSC Gazprom and Gazprom Group companies.*
- *Procurement-related information is placed in the unified information system for the procurement of goods, works and services for public and municipal needs, and is made available to the general public.*
- *Competitive procurement takes place in electronic form with few exceptions; procedures are totally transparent, standardized, simple and public.*
- *In case of single source procurement (from a single contractor/provider), the procurement initiator (the customer's business unit) must justify the necessity of this method.*
- *For the purpose of tender evaluation, the Company sets up a commission as a collective body. Gazprom Group applies strict controls to commission membership in order to rule out conflicts of interest. According to the Procurement Regulation, the commission may not include individuals who are personally interested in a particular outcome of the procurement, including employees and members of management bodies of parties to the procurement. Such commission members must disqualify themselves and may not vote on the matter. The commission*

*makes decisions based on the principles of fair, equal and unbiased treatment of bidders, subject to the bid evaluation criteria specified in tender documents.*

- *In order to secure the procurement parties' right to appeal against actions of the customer (bidding process organizer), as required by Federal Law No. 223-FZ of July 18, 2011, "On Procurement of Goods, Works and Services by Certain Types of Legal Entities", the Procurement Regulation provides for a 10-day period that must expire before the procurement contract can be awarded.*
- *Procurement parties have the right and opportunity to submit to PJSC Gazprom (including on a no-name basis) proposals for the improvements that need to be made to the competitive bidding procedure; comments about and complaints against actions or omissions of customers, bidding process organizers and/or their officers; information about any unjustified requirements with regard to procurement items, supplier (contractor), delivery (work execution, service provision) terms and time frames put forward in the tender documentation, and concerning any other instances of unjustified restriction of competition in procurement. The feedback channel for potential bidders' communications has been set up on PJSC Gazprom's official website (in the "Procurement" section).*

The Company operates with maximum transparency to stakeholders. Anti-corruption policy details can be found here:



PJSC Gazprom's official website has a page describing the Company's information disclosure policy and anti-corruption policies: <http://www.gazprom.com/investors/corporate-governance/anti-corruption/>.

In 2017, Gazprom's system of anti-corruption prohibitions, restrictions and requirements

was subject to external assessment<sup>3</sup> performed by the Business Against Corruption Center of Public Procedures, an independent non-profit organization operating as an expertise platform under the Presidential Commissioner for Entrepreneurs' Rights. The organization issued a positive opinion on the current anti-corruption policies and efforts to promote a negative attitude towards corruption among the employees of PJSC Gazprom and its subsidiaries. Experts also found that Gazprom has in place sufficient incentives for countering corruption, preventing corruption offences and developing zero tolerance to corruptive behavior.

<sup>3</sup> In execution of paragraph 5 of the 2016—2017 National Anti-Corruption Plan approved by Decree No. 147, of April 1, 2016, of the President of the Russian Federation.

## PROCUREMENT MANAGEMENT

*In 2017, Gazprom Group awarded over 15,000 contracts totaling RUB **427.9** billion through its competitive procurement procedure.*

*In 2017, more than **98.7%** of all competitive procurement by PJSC Gazprom and its subsidiaries was done electronically.*

Procurement at PJSC Gazprom, its subsidiaries and sub-subsidiaries complies with laws of the Russian Federation, including Federal Law No. 223-FZ of July 18, 2011, "On Procurement of Goods, Works and Services by Certain Types of Legal Entities" ("Law No. 223-FZ") and the Regulation on Procurement of Goods, Works and Services by PJSC Gazprom and Gazprom Group Companies approved by Resolution No. 1969, of April 19, 2012, of the PJSC Gazprom Board of Directors ("Procurement Regulation").

The Procurement Regulation sets forth procurement principles, prescribing procurement methods and terms of their application, procedures to be followed in the preparation and execution of the procurement process, and other procurement facilitation procedures. The document is available in the Unified Information System in the area of public procurement ([www.zakupki.gov.ru](http://www.zakupki.gov.ru)) (UIS) and on the PJSC Gazprom website ([www.gazprom.ru](http://www.gazprom.ru)). The UIS publishes key procurement information, including procurement plans, notices, documentation, protocols, minutes, details on contracts previously awarded and completed, etc. All that information is available to the general public.

Procurement practices of PJSC Gazprom and its subsidiaries are based on the following principles:

- information availability, transparency, equity, fairness, non-discrimination, prevention of unjustified competition restrictions, promotion of fair competition, a broader and easier access to the procurement;
- targeted expenditure with maximum efficiency, implementation of cost reduction measures;
- addressing needs for products, works and services completely and in a timely manner, with price, quality and reliability parameters appropriate for safe operation of hazardous industrial facilities.

Procurement must be competitive, except as otherwise stipulated in the Procurement Regulation. Other procurement methods are also applicable, such as request for proposal, auction, tender, and procurement from a single supplier.

Competitive procurement is conducted electronically, with few exceptions, primarily via the Electronic Trading Platform (ETP-GPB), which is integrated with the UIS.

Gazprom Group has rolled out an Automated Electronic Procurement System (AEPS) (<https://zakupki.gazprom.ru/>) covering the entire procurement cycle, from planning to contract award.

For the purposes of implementing a common procurement policy throughout Gazprom Group, in accordance with the principles set out in the Procurement Regulation, Gazprom Group has established a Central Procurement Management Body (CPMB). An effective vertically integrated procurement system has thus been created.

The CPMB is responsible for planning, preparation and conduct of the competitive procurement process and pre-qualification, as well as Group-wide procurement control.

As of February 1, 2018, the register listed 451 entities qualified for the performance of relevant operations, including **179** (39.7%) SMEs.

At any procurement stage, the organizer is authorized to check the bidders and their joint contractors or subcontractors for conformity with the requirements, and to verify availability of declared production capacity, process equipment and labor. The findings are then communicated to the Procurement Evaluation Commission.

Based on reviews, evaluation and comparison of the bids, the commission makes decisions on the basis of principles of fair, equal and unbiased treatment of bidders, subject to bid evaluation criteria specified in procurement documentation.

In order to identify potential bidders capable of performing certain types of works or services or supply certain products in conformity with the requirements for product manufacturing process, quality and safety, and work/service performance, PJSC Gazprom conducts open pre-qualification.



As of February 1, 2018, PJSC Gazprom had 72 pre-qualifications for different types of activities announced and published on its website. The pre-qualification system has 2,056 participating organizations, of which 488 (or 23.7%) are small and medium-sized enterprises (SMEs).

Pre-qualification results are put into Gazprom Group register of prospective bidders categorized by types of products, works and services. Businesses listed in the registry are subject to quarterly monitoring to check the following:

- work currently performed (workload);
- available capacity to perform required work (capacity utilization);
- instances of missed deadline, price adjustments, inferior work quality, negative references or feedback;
- PJSC Gazprom competitive bidding track record and contracts awarded.

For the purposes of operational efficiency, cost reduction and target cash flow control, Gazprom Group solicits bids directly from relevant manufacturers, contractors and service providers. Under otherwise equal conditions, priority is given to Russian manufacturers, including those having a quality management system certified for conformity with PJSC Gazprom requirements, and holders of certificates of conformity of products, works and services with relevant PJSC Gazprom standards.

For many years, the Company has been working systematically with domestic suppliers to maximize the use of Russian manufacturers' capacity. By maintaining a strong demand for high technology products, PJSC Gazprom contributes to the development of local industries, as it encourages an ever-increasing number of Russian companies to master the production of equipment that serves technologies never before used in Russia. Specifically, the Company cooperates with voluntary groups and associations of Russia's major equipment suppliers in search of innovative engineering solutions for the gas industry.



In 2017, Gazprom Group awarded more than 15,000 contracts totaling RUB 427.9 billion through the competitive procurement process. The resulting price saving (measured as the difference between the aggregates of initial (maximum) and post-tender contract prices adjusted for the expert price assessment prior to the bidding announcement and the provisional costs of procurement arrangements) amounted to RUB 20.3 billion (4.5% of the initial aggregate price).

## RISK MANAGEMENT

PJSC Gazprom operates under uncertainties manifesting as risks. Gazprom has developed an effective Risk Management System (RMS) that allows for timely identification, analysis and prevention of potential threats and losses.

The RMS is a comprehensive framework of correlated organizational measures and processes, organizational structure, local regulations and other documents, methodologies and procedures (regulations, standing orders, corporate standards and guidelines), principles of corporate culture, as well as actions taken by the management and employees of PJSC Gazprom business units and Gazprom Group entities. The RMS is designed to provide reasonable assurance that the Company's goals and objectives will be achieved and to support decision-making of the management and employees of PJSC Gazprom business units and Gazprom Group entities amidst uncertainty.

The RMS applies across all management levels and business vectors within PJSC Gazprom, its subsidiaries and affiliates, and makes part of the Company's corporate governance framework.

The parties involved in the RMS are PJSC Gazprom's governing bodies, the risk management function in the Management Committee's Administration, Gazprom Group business units and entities. Risk owners are PJSC Gazprom business units, Gazprom Group entities or employees responsible for the development, implementation and monitoring of risk management activities.

There are also risk coordinators responsible for coordinating activities of risk owners within their respective domain.

The PJSC Gazprom risk management function is administratively accountable to the Deputy Chairman of the Management Committee who heads the Management Committee Administration; it is also functionally accountable to the Audit Committee. Its key role is to develop the Company-wide risk management policy and to provide methodology support to ensure it is consistently applied.

Gazprom Group business units, subsidiaries and entities identify and assess risks, develop and implement risk management activities, and monitor risks, as well as activities, on an ongoing basis.

Gazprom makes continuous efforts to improve its RMS, adopting corporate risk management best practices. The Company has developed and approved a PJSC Gazprom Risk Management Policy (approved by Resolution No. 2619, of October 30, 2015, of the PJSC Gazprom Board of Directors), a Regulation on Gazprom Group's Risk Management System (approved by Resolution No. 2628, of November 26, 2015, of the PJSC Gazprom Board of Directors), and a Regulation on the Credit Risk Management System of PJSC Gazprom, its subsidiaries and affiliates (approved by PJSC Gazprom Order No. 687, of November 3, 2016). Subsidiaries and affiliates are in the process of developing and approving their respective RMS documents.

### Key risk management processes implemented by PJSC Gazprom

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|---|--|
| <p>1. Creating the internal environment. The internal environment determines how the Company's senior executives and employees perceive risks and respond to them. The internal environment encompasses risk-conscious management culture and compliance with standards of corporate and business ethics.</p> <p>2. Goal-setting. Corporate goals are formulated at the strategic level, serving as the reference point for goal-setting with respect to business vectors, reporting and compliance, and for the definition of acceptable risk.</p> <p>3. Risk identification. Risks are identified as internal or external events that affect the attainment of goals and objectives; risks are classified and recorded at this stage.</p> <p>4. Risk assessment. Risks are analyzed in terms of probability and impact; qualitative as well as quantitative methods are used for risk assessment.</p> <p>5. Risk response. Response options are defined for the purposes of risk management: avoidance, acceptance, mitigation or transfer. Risk response also implies improvements to the internal</p> | <p>environment and integration of risk management into operation management processes.</p> <p>6. Development and implementation of risk management activities. Risk management activities are designed to provide reasonable assurance that the level of residual risk does not exceed the acceptable risk threshold.</p> <p>7. Monitoring risks and activities. Monitoring involves assessment of risk levels and verification of the progress in risk management and residual risk assessment activities.</p> <p>8. Reporting, information sharing and communications. Reporting and information sharing proceed in a manner and within timelines so as to enable identification of risks, and development and implementation of risk management activities.</p> <p>This section outlines those economic, social and environmental risks within the context of sustainability that affect Company-wide operations, and how identified risks are managed in order to maximize opportunities or minimize their impact.</p> |
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## Gazprom Group Risk Management within the Context of Sustainability

Type of Risk	Description	Risk Management / Mitigation
<b>ECONOMIC RISKS</b>		
<b>Risks related to the global economy</b>	Adverse economic conditions, deceleration of energy demand growth rates.	Seeking to boost revenue from energy sales, PJSC Gazprom diversifies markets and sales channels, and expands the scope of natural gas applications.
<b>Sanction-related risks</b>	Since 2014, Russia has been under sanctions imposed by the EU, the U.S. and other countries. There is a high probability that the restrictions will be expanded and will remain in effect for a long time.	PJSC Gazprom pursues the policy of technological self-sufficiency and import substitution to reduce the Company's exposure to economic restrictions imposed on or enacted against Russia.
<b>Natural gas transit risks</b>	Natural gas transit through the territory of a third country is subject to the risk of default on transit obligations, entailing the risk of Gazprom Group failing to properly perform its obligations under gas supply contracts.	In order to reduce dependence on transit countries, the Company is taking steps to diversify export routes, to broaden access to underground gas storage (UGS) facilities outside Russia, and to develop LNG trade.
<b>Government regulation risks</b>	There remains the risk of changes in currency regulations and tax laws in the Russian Federation and other countries of Gazprom Group's operations. New requirements may be imposed by customs authorities, resulting from changes in rules of customs control and export duty payment procedures.	The Company interacts on a regular basis with government authorities on improvements of the pricing and tariff policy, corporate taxation and customs law. Amendments to tax and currency legislation are monitored systematically, and strict compliance is ensured. The Company interacts with government authorities for the purpose of timely adjustment of its operations in compliance with legislative amendments in the Russian Federation and elsewhere.
<b>Financial risks</b>	PJSC Gazprom's operating results are exposed to significant exchange rate volatility along with the multicurrency structure of its revenue and expenditure. Delayed or incomplete performance of contractual obligations by individual counterparties is always a possibility.	To minimize losses due to exchange rate volatility, the Company applies hedging strategies to address the risk of market-driven shifts in exchange and interest rates. Transactions with credit institutions stay within credit risk limits, which are reviewed regularly, in particular with regard to the credit rating calculated by PJSC Gazprom, its subsidiaries and affiliates. Performance of contract obligations is monitored. PJSC Gazprom achieves financial stability by optimizing debt load.
<b>Market risk</b>	Possible oil price and mercantile exchange gas price decline and/or stagnation at low levels give rise to risks that, if materialized, could result in revenue loss.	The risk is managed by adjusting contract terms or entering into new contracts with terms and conditions corresponding to the current market environment, defining allowable transaction types and financial instruments, as well as counterparties qualified for such transactions.

Type of Risk	Description	Risk Management / Mitigation
<b>Production risks</b>	Key business operations involving hydrocarbon production, transportation, processing and storage are associated with technology, technical, natural and climate risks, as well as the risk of inappropriate actions by employees or third parties.	The UGSS ensures overall reliability of gas supplies. Its operational stability is achieved through implementation of up-to-date and innovative diagnostic methods, on-schedule general repair and maintenance operations, modification and upgrading. Subsidiaries are provided with a property and liability insurance coverage, which encompasses physical property (including offshore facilities), interruption of business at gas processing plants (GPP), and industrial construction, contractor's liability for repair and operation.
<b>Risks associated with the development of unconventional gas production</b>	Since the mid-2000s, increasingly large volumes of gas have been produced from unconventional sources, primarily U.S. shale formations. Globally, interest in shale gas has been largely displayed by countries with limited conventional gas reserves and resources; nevertheless, the risk of those countries becoming less dependent on gas imports in the mid-term continues to be rated as low.	PJSC Gazprom monitors, on a regular basis, the progress of the shale gas sector and other unconventional hydrocarbons industries throughout the world. The results of that monitoring, including economics of unconventional gas and its competitive potential in the Company's existing and prospective markets, are regularly reviewed by Gazprom's top management, allowing it to effectively build marketing policy in respective regions, using diverse sales mechanisms.
<b>ENVIRONMENTAL RISKS</b>		
<b>Risk of non-compliance with environmental legislation in the course of construction and operation of PJSC Gazprom facilities</b>	The main types of business operations involved in hydrocarbon production, transportation, processing and storage are associated with environmental pollution risk with legal, financial and reputational implications.	The Company implements its Environmental Policy, as well as programs and activities aimed to reduce the environmental footprint; engages in environmental protection activities; obtains environmental risk insurance; adopts green technologies. The majority of subsidiaries have in place and continuously improve their respective environmental management systems (EMS) certified for conformity with ISO 14001:2015.
<b>Environmental damage risk resulting from accidents/incidents associated with PJSC Gazprom's business operations</b>	Accidental exposure resulting from PJSC Gazprom's business operations may have an adverse impact on stakeholder, investor and government relations and may entail administrative or criminal liability that involves payment of applicable indemnities for environmental damage.	The Company performs the following activities: <ul style="list-style-type: none"> <li>• analyzes possible adverse environmental impacts and their fallout resulting from identified accidents and other emergencies affecting PJSC Gazprom subsidiaries;</li> <li>• proposes initiatives to prevent, localize and mitigate impacts and control damage;</li> <li>• approves relevant documentation;</li> <li>• evaluates environmental damage that may result from accidents and other emergencies;</li> <li>• develops environmental damage control operations.</li> </ul>

Type of Risk	Description	Risk Management / Mitigation
<b>NATURAL AND CLIMATE-RELATED RISKS</b>		
<b>Risks associated with climate change and greenhouse gas (GHG) emissions</b>	The Company is exposed to risks stemming from temperature changes, high sensitivity of frozen soil, and adverse weather causing deformation of buildings and structures, pipeline transportation systems and service lines.	Cutting GHG emissions is part of PJSC Gazprom's corporate strategy. The Company is executing an action plan aimed to minimize the adverse impact of climate change on the Company's operations. It takes steps to reduce (cease) flaring of associated petroleum gas, while also developing and implementing energy efficiency and energy saving programs.
<b>Risks associated with climate conditions</b>	Prevailing climate conditions in Gazprom Group's key regions of operation affect its business performance in a significant way. A major part of the natural gas volume produced by Gazprom comes from Western Siberia, where production is difficult and relatively costly because of harsh climate.	The Company has designed and implemented effective operating procedures adapted to severe climatic conditions. Programs are underway to boost efficiency of production and transportation systems, as well as of the gas transmission network.
<b>Risks associated with adverse impacts on natural ecosystems</b>	Industry-specific operations give rise to the risks of land and water pollution, deterioration of soil and vegetation, and erosion. This may lead to degradation of natural ecosystems and loss of habitat for rare and endangered plant, animal and fungi species.	Gazprom is implementing a Biodiversity Preservation Program based on a list of plant and animal species that indicate sustainability of marine ecosystems within the Arctic zone of the Russian Federation. The program sets out a strategy for biodiversity preservation and Action Plans linked to Gazprom Group projects within Russia's Arctic shelf, inland and territorial sea waters, and the contiguous zone of the Russian Federation. Coordinated activities are underway, including those related to the enhancement of reliability of pipeline systems, landscape stabilization, soil reclamation and vegetation rehabilitation.

Type of Risk	Description	Risk Management / Mitigation
<b>SOCIAL RISKS</b>		
<b>Occupational health and industrial safety risks</b>	<p>Gazprom’s business operations are exposed to risks of adverse impacts on employees’ health and safety, and the risk of inappropriate (incompetent) actions on the part of employees and third parties.</p> <p>Possible sources of such risks are equipment failures/breakdowns, natural disasters, acts of terrorism, and employees’ actions or omissions. Any of those risk factors may have a material adverse effect on the Company’s financial condition, operating performance and reputation.</p>	<p>The Company has implemented a Unified Occupational and Industrial Safety Management System (UO&amp;ISMS), which is part of the PJSC Gazprom’s integrated management system. It is designed to manage occupational health and industrial safety risks, achieve targets and fulfill obligations in the area of occupational health, industrial and fire safety.</p>
<b>HR risks</b>	<p>The Company relies on efforts and capabilities of its employees to achieve its goals. Failure to recruit and retain personnel with required skills and experience can make Gazprom less attractive as an employer. Increasing shortage of skilled labor and mounting competition in the domestic and international labor markets are among the factors contributing to HR risks.</p>	<p>The Company has adopted and effectively implements PJSC Gazprom’s Code of Corporate Ethics. It also implements an HR Management Policy by putting in place career planning, training and development programs to meet its demand for skilled labor. Through its social policy the Group takes care of the social needs of its employees and their families.</p> <p>The Company offers a competitive remuneration package, which includes a salary, a performance-based bonus and employee fringe benefits.</p> <p>Gazprom is improving recruitment procedures and takes steps to reduce turnover and to encourage employee development.</p>

# KEEPING THE BALANCE

**PRODUCTION  
ENVIRONMENT  
PEOPLE**

As a global energy company, Gazprom sees its mission in ensuring reliable supplies of natural gas, crude oil and their derivatives to consumers and in providing heat and electric power to households and industries.

Gazprom Group's operations are unique in scale and have economic, environmental and social implications. Efforts made in any one area affect the others.

By supplying energy resources to Russian and international consumers, Gazprom Group earns revenue and pays taxes to the national budget, thereby supporting the national economy.

**As it expands into regions, Gazprom builds roads, residential housing, and power plants, creates new jobs, generates business for SMEs, and sponsors sports, cultural and charity events. As a major employer, Gazprom Group offers a comfortable working environment with a transparent remuneration system, helping individuals to prosper and securing a stable future for them. Executing its projects, Gazprom takes care of the environment and seeks to reduce its environmental impacts and climate footprint.**

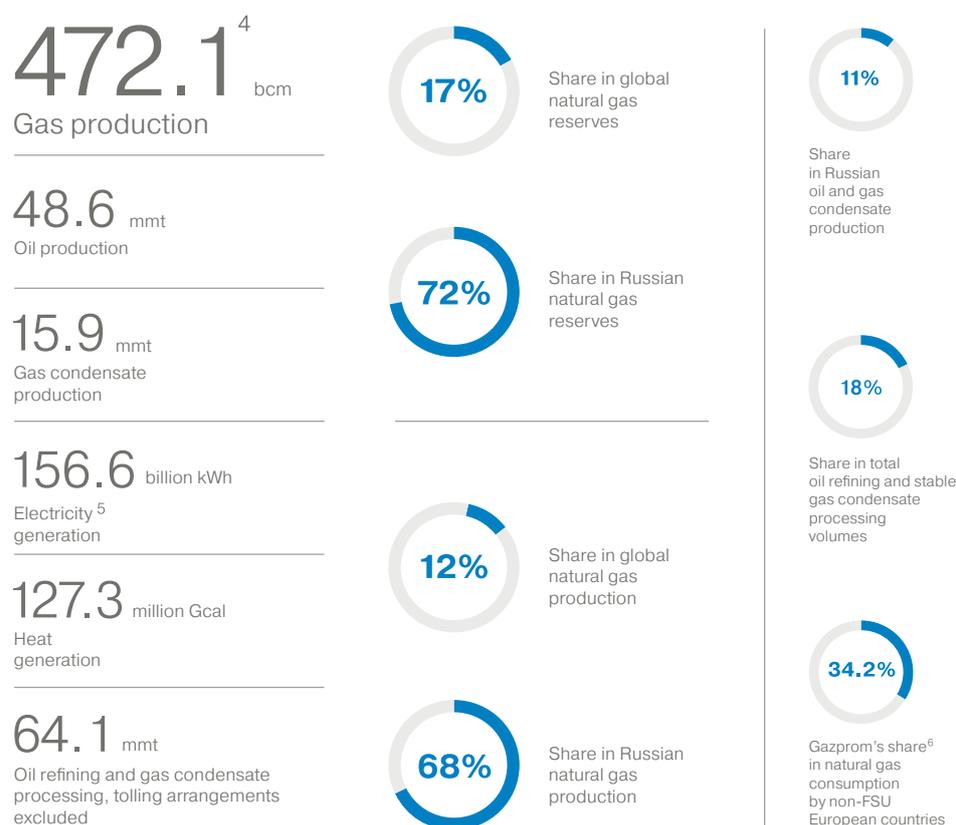
**Operating efficiency, environmental safety, and human well-being are the three essential aspects of sustainable development, which are equally important for Gazprom Group.**

**By keeping that balance, Gazprom Group makes its contribution to national development.**



# 1. PRODUCTION: GAZPROM'S CONTRIBUTION TO NATIONAL DEVELOPMENT

Gazprom Group produces and processes hydrocarbons, supplies consumers with natural gas and oil and gas derivative products used for different purposes. The Group's generating companies provide electricity and heat for household and industrial use. In 2017, Gazprom reported the following production results:



<sup>4</sup> Including the Group's share in the production of entities in which Gazprom has investments classified as joint operations.

<sup>5</sup> Including assets outside Russia.

<sup>6</sup> Based on PJSC Gazprom gas sales to non-FSU countries under Gazprom Export LLC contracts, including volumes sold through gas auctions, and under direct contracts of GAZPROM Schweiz AG.

Gazprom Group operates producing fields and brings online new ones within its strategic gas production areas: the Nadym-Pur-Taz Region, the Yamal Peninsula, Eastern Siberia, the Far East, and the Russian continental shelf.

The Zapolyarnoye field is Russia's largest center of gas production in Russia, its initial recoverable reserves exceeding 3.5 tcm of gas and hovering around 80 mmt of gas condensate and oil, with estimated annual capacity of 130 bcm of gas.

The Yamal megaproject encompasses the Bovanenkovo, Tambey and Southern industrial areas, the Bovanenkovo – Ukhta gas trunk pipeline system, operation support facilities and essential amenities. Large gas production centers are emerging in the Eastern part of Russia, namely, Sakhalin, Yakutsk (on the basis of the Chayandinskoye gas field, around 1.24 tcm), Irkutsk (on the basis of the Kovyktinskoye gas field, over 2.7 tcm), and Kamchatka (the Kshukskoye and Nizhne-Kvakchikskoye fields).

Gazprom Group is also involved in hydrocarbon production projects in fields situated in Serbia, Libya, Bolivia, Vietnam, Uzbekistan, Iraq, Venezuela, and the North Sea.

Gas processing plants operate to extract valuable components from crude hydrocarbons. Gazprom is building new processing facilities, while upgrading those currently in operation. Upgrading programs have been completed at the Astrakhan GPP and Gazprom Neftekhim Salavat LLC. Construction is underway for the Amur GPP, to become Russia's largest gas processing plant and the world's second largest in terms of output.

Gazprom places strong emphasis on the development of the natural gas vehicle (NGV) fuel market. Thanks to a lower environmental footprint and other advantages over gasoline, NGV fuel has great prospects. With the number of gas engine vehicles in Russia steadily growing, Gazprom sells increasing amounts of natural gas through its automobile gas-filling compressor stations (CNG filling stations).

Gazprom Group is developing its oil production, oil refining and petroleum product sales businesses run by PJSC Gazprom Neft, which operates in Russia's major oil- and gas-producing regions: the Khanty-Mansi Autonomous Area – Yugra (KhMAA – Yugra), the Yamal-Nenets Autonomous Area (YaNAA), and the Tomsk, Omsk and Orenburg Regions.

Gazprom operates the world's largest gas transmission system (GTS). Most of it is located in the European part of Russia and in Western Siberia and makes an integral part of the country's UGSS. The Company diversifies gas supply routes to consumers outside Russia, in particular, by building pipeline interconnectors. Gazprom Group is putting in place new gas transmission capacity while also retrofitting and upgrading existing gas transmission facilities.

To enhance reliability of gas supplies to Russian and international consumers, Gazprom maintains an extensive UGS network in Russia with access to UGS capacities in other countries, such as Austria, Germany, the Czech Republic, the Netherlands, Serbia and the FSU (in particular, the Republic of Belarus and Armenia). UGS provides a way to address gas consumption seasonality and reduce peak loads within the GTS.

Gazprom Group is also a heat and electricity producer. Its generating capacity is consolidated within Gazprom Energoholding LLC, a Gazprom subsidiary, which holds a controlling interest in PJSC Mosenergo, PJSC MOEK, PJSC OGC-2 and PJSC TGC-1. Gazprom's power plants are located in 18 regions around the country. Gazprom invests in the electric power sector both in Russia

and abroad, and continuously monitors markets prospective for electric power business.

Gazprom Energoholding LLC is the country's largest owner of electric power assets (controlling over 80 power plants), ranking among Europe's ten leading power producers.

#### Gazprom Group operations in Russia, 2017

<b>Gas supply and access to gas services</b>	Gas trunklines and branches, total length	172,100 km
	Gazprom investment in regional gas services	RUB 29.45 billion
	Supplies to Russian consumers via Gazprom's GTS (excluding GTS process needs)	351.3 bcm
<b>Vehicle fuel supplies <sup>(1)</sup></b>	Number of filling stations	1,255
	Gasoline and diesel fuel sold at filling stations	8.84 mmt
	Daily average sales per filling station	20.1 tons per day
	Jet fuel sales	3.04 mmt
	Bunker fuel sales	2.26 mmt
<b>NGV fuel supplies</b>	Number of CNG filling stations completed and operational at year-end 2017	271
	NGV fuel sales	526 mcm
	Investment in NGV fuel infrastructure	RUB 4,057 million
<b>Electricity and heat supplies</b>	Power plants, installed capacity <sup>(2)</sup>	40.2 GW
	Electricity generated	155.5 billion kWh
	Heat produced	127.3 million Gcal
	Share in domestic electricity generation	15%

<sup>(1)</sup> Gazprom Neft Group data.

<sup>(2)</sup> Including the 5<sup>th</sup> power generating unit of the Hrazdan Thermal Power Plant.



**In 2017, Gazprom Group was working on the following key projects:**

- construction of the Bovanenkovo – Ukhta 2 gas trunk pipeline system;
- construction of the Ukhta – Torzhok 2 gas trunk pipeline system;
- pre-development operations at Cenomanian-Aptian deposits of the Bovanenkovskoye oil and gas condensate field (OGCF), and at the Achimov blocks within the Urengoyevskoye OGCF;
- pre-development operations at the Yakutsk gas production center: construction of the Power of Siberia gas trunk pipeline and pre-development operations at the Chayandinskoye OGCF;
- pre-development operations at the Kovyktinskoye gas-and-condensate field (GCF), Irkutsk gas production center;
- pre-development operations at the Kirinskoye field, Sakhalin gas production center;
- construction of a liquefied natural gas (LNG) import, storage and regasification terminal in the Kaliningrad Region;
- construction of an LNG production, storage and shipment facility at the Portovaya compressor station (CS).

The projects of the Eastern Gas Program are essential to ensure pipeline gas availability in Russia's eastern regions and to enable gas supplies to China. Priorities for 2017 also included projects that will enable UGSS expansion to feed gas to the Nord Stream 2 pipeline, pre-development of and gas transmission from the Bovanenkovskoye OGCF, projects to secure gas deliveries to feed the TurkStream pipeline, and those boosting gas supplies to southwestern districts of the Krasnodar Territory. Construction and upgrading of Russia-based UGS facilities (including geological prospecting and exploration (GPE) activities to investigate the possibility of natural gas and helium concentrate storage in the Far East) and the GTS were underway.

**1.1.  
GAS SUPPLIES  
TO RUSSIAN AND  
INTERNATIONAL  
CONSUMERS**

Natural gas is a pollution-free fuel, which is essential for comfortable living, efficient and eco-friendly production and transportation with a moderate climate footprint. Gazprom Group is a reliable supplier of gas with years of track record. Russian gas is a guarantee of energy security for Russia, the FSU and non-FSU countries. Natural gas is pumped through pipelines to residential buildings and industrial facilities of 35 countries; Gazprom Group delivers LNG to countries in Europe, Africa, Latin America, Middle East, and the Asia-Pacific Region (APR).

In 2017, Gazprom Group made steps to facilitate consumer access to pipeline gas in 68 regions across Russia, while increasing gas production volumes and surpassing its own record in delivering gas to international consumers. This proves relevance of natural gas throughout the world as an environmentally benign fuel and the status of Gazprom Group as a reliable supplier.

**GAS PRODUCTION,  
PROCESSING,  
STORAGE AND  
TRANSPORTATION**

**24,146.6** bcm –  
proven and probable natural gas reserves held  
by Gazprom Group within the Russian Federation

**640.2** km  
of gas trunklines and branches brought online  
by Gazprom Group in 2017

**472.1** bcm of gas  
produced by Gazprom Group in 2017

**RUB 739** billion  
of investments disbursed under  
the PJSC Gazprom Investment Program in 2017

**RESERVES**

In 2017, gas reserves measured under PRMS standards grew by 635.9 bcm against 2014, to reach 24,146.6 bcm. This growth was brought about by audit extension to new assets (Srednetyungskoye and Severo-Parusovoye fields, the Khandinskaya area of the Kovyktinskoye field, the Yuzhno-Lunskoye

field), consideration of GPE results obtained at Kruzenshternskoye, Semakovskoye, Kovyktinskoye, Chayandinskoye, Astrakhanskoye, Tambeyskoye, Malyginskoye and other fields. Growth in reserves also resulted from improved gas recovery achieved with new technologies.

**Gazprom Group gas reserves within the Russian Federation, 2014–2017, bcm**

Indicator	As of December 31			
	2014	2015	2016	2017
Total A+B <sub>1</sub> +C <sub>1</sub> <sup>(1)</sup>	36,101.4	36,147.3	36,443.9	35,355.4
including A+B <sub>1</sub> +C <sub>1</sub> <sup>(1)</sup> post-evaluation	94.4	94.2	95.4	94.1
Proven	18,894.7	18,791.2	18,596.5	18,253.4
Probable	4,616.0	4,913.8	5,258.4	5,893.2
Proven and Probable	23,510.7	23,705.0	23,855.1	24,146.6

<sup>(1)</sup> In accordance with the new Classification of Reserves and Resources of Oil and Flammable Gases (approved by the Order No. 477, of November 1, 2013, of the Russian Ministry of Natural Resources and Environment), in effect from January 1, 2016, corporate reporting procedures must record reserves of the A+B<sub>1</sub>+C<sub>1</sub> category, which comprise explored reserves with a high degree of geological certainty and correspond to the previously applicable categories of A+B+C<sub>1</sub>.

Adjustment of natural gas reserves under the new Russian Classification of Hydrocarbon Reserves is attributed to GPE, licensing activity and the application of the gas recovery factor (GRF). Booking of additional reserves in 2017 was the result of GPE operations in the Yamal-Nenets Autonomous Area (YaNAA), Eastern Siberia and in the Sea of Okhotsk, as well as licensing activity, including acquisition of licenses for field development in the Nenets Autonomous Area. Recoverable reserves declined, as the Yamburgskoye (Cenomanian),

Bovanenkovskoye, Yuzhno-Russkoye, Chayandinskoye, Yen-Yakhinskoye and Kirinskoye gas reserves were recalculated in 2017 subject to the actual GRF specified in the approved field development projects.

#### Plans

In 2018, the Company plans to pursue exploration activities to have gas reserves replenished at the minimum rate of 100%. It will also continue recording in the State Balance recoverable gas reserves with officially confirmed GRF values.

## PRODUCTION

In 2017, Gazprom Group gas production increased by 12.4% from 2016, to 471.0 bcm (472.1 bcm, when accounting for the Group's share in the production volumes of entities in which Gazprom has investments classified as joint operations), which was a record high growth in the Company's history. In absolute figures, production grew by 51.9 bcm.

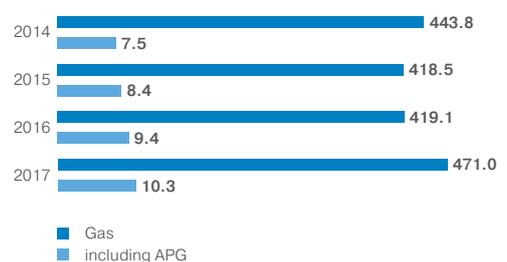
Gas production volume is the function of demand for gas. Production growth was impacted by average yearly temperature fluctuations and variations in gas export volumes.

**Plans.** One of Gazprom Group's priorities now and looking forward is meeting its production targets to secure gas supplies. In 2018, Gazprom Group expects to produce 475.8 bcm of gas.

## NATURAL AND ASSOCIATED GAS PROCESSING

Volumes of natural and associated gas processing by Gazprom Group varied only

Gazprom Group gas production in Russia, 2014–2017, bcm



slightly over the four-year period. In 2017, the Astrakhan, Orenburg and Sosnogorsk GPPs together processed 28 bcm of gas (tolling arrangements excluded). Group-wide processing volume was 31 bcm.

**Natural and associated gas processing volumes in real terms, 2014–2017, bcm**

	2014	2015	2016	2017
<b>TOTAL</b>	<b>30.45</b>	<b>31.18</b>	<b>30.99</b>	<b>30.82</b>
PJSC Gazprom and major subsidiaries	30.00	30.64	30.06	29.94
Gazprom Neftekhim Salavat	0.45	0.44	0.49	0.43
Gazprom Neft Group	–	0.1	0.44	0.45

**GAS STORAGE IN RUSSIA**

Within the Russian Federation, Gazprom Group operates 22 UGS facilities (26 storage reservoirs) in 26 geological structures: 17 in depleted gas fields, 8 in aquifers, and one in salt bed caverns. Those storage facilities are located in 19 regions.

UGS operations are supported by 19 compressor stations (CS's) with cumulative power of 948.5 MW. There are in total 2,694 operational wells.

In 2017, Gazprom commissioned storage capacity at the Punginskoye, Kaliningradskoye and Sovkhoznoye UGS facilities, thus adding 1.3 bcm to the overall working gas capacity (which amounted to 74.9 bcm at year-end).

**Plans.** Taking into account newly commissioned UGS capacity, in 2018, Gazprom will increase the overall working gas capacity of UGS facilities located in Russia to 75.008 bcm (+0.080) and the maximum daily deliverability to 812.5 mcm (by 7.2 mcm per day). By the 2018/2019 withdrawal season, the working gas inventories in Russian UGS facilities will have reached 72.264 bcm (+0.08), as the Volgogradskoye UGS capacity will be commissioned.



**Some facts about Russian UGS**

In 2017, gas withdrawals from Russian UGS totaled **45.48 bcm**, and **44.18 bcm** was pumped in. A record high daily deliverability of **590.5 mcm** occurred on February 8, 2017.

Potential maximum daily deliverability at the beginning of the 2017/2018 withdrawal season rose by **4.0 mcm** from 2016, to reach **805.3 mcm**.

By the 2017/2018 withdrawal season, the working gas inventories in Russian UGS facilities had amounted to **72.184 bcm**, going up by **0.086 bcm** from the previous season.

### GAS STORAGE ABROAD

Gazprom extensively utilizes UGS capacities outside Russia, namely, in Austria (Haidach), Germany (Rehden, Katharina), Serbia (Banatski Dvor), the Netherlands (Bergermeer), Czech Republic (Damborice), to enhance reliability and flexibility of gas supplies to European countries.

By the beginning of the 2017/2018 withdrawal season, Gazprom Export LLC had contracted European storage capacities totaling 8.7 bcm.

Gazprom operates the following gas storage facilities in FSU countries: Pribugskoye, Osipovichskoye and Mozyrskoye UGS facilities in Belarus, the Abovyanskoye underground storage station in Armenia, and the Inčukalns UGS facility in Latvia.

### GAS TRANSMISSION

Gazprom runs the world's largest GTS extending 172,100 km across the Russian territory as of end-2017. A total of 257 compressor stations are

used in gas transmission, the capacity of gas compressor units (GCUs) totaling 46,500 MW.

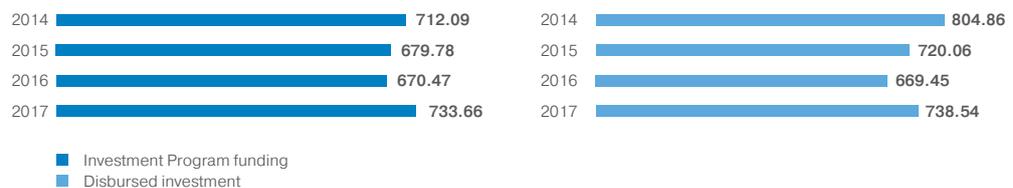
In 2017, 640,200 km of new gas trunklines and branches were put into operation throughout Russia.

### PRIORITY FOCUS: GAS PRODUCTION, TRANSMISSION AND PROCESSING PROJECTS

To ensure timely and reliable supply of environmentally clean fuel to consumers, Gazprom continues to implement its priority

gas production, transmission and processing projects. In 2017, its capital investments totaled RUB 739 billion.

**RJSC Gazprom Investment Program funding (capital construction), 2014–2017, RUB billion**





*For the first time in Russia, subsea hydrocarbon production technology was used in Kirinskoye field pre-development. Drilling was completed in 2017. The Polyarnaya Zvezda (Polar Star) and Severnoye Siyaniye (Northern Lights) semi-submersible floating drilling rigs owned by PJSC Gazprom were used in well construction.*

In 2017, Gazprom was developing the following projects.

#### **Sakhalin gas production center**

- Operational drilling at the fields within the Kirinskoye GCF and at the Yuzhno-Kirinskoye field. Kirinskoye field facilities expansion work (including a second line of the offshore gas gathering line header, and five wells to be hooked up and put into production) will be completed by the end of 2020.

Implementation of those projects will enable gas infrastructure expansion in the Far East, providing more opportunities for power generation and petrochemical industry. As the major CHP plants in the city of Yuzhno-Sakhalinsk and the Primorye Territory are converted to natural gas, the region will enjoy cleaner environment. The projects will increase the potential for LNG exports to APR countries.

*Daily production volumes at the Kirinskoye field are close to 4.5 mcm of gas and 0.750 tmt of gas condensate. Cumulative gas and condensate production from 2013 to 2017 amounted to 2,028.58 mcm and 345,700 mt, respectively. Commercial gas is fed into the Sakhalin – Khabarovsk – Vladivostok gas trunkline, and gas condensate into the Sakhalin Energy oil pipeline. Consumers of Kirinskoye GCF gas are mainly located in northern parts of the Sakhalin Region and in the Primorye Territory. When running at full capacity, the project will produce 5.5 bcm of gas per year with seven production wells.*

#### **Building-up gas production, transmission and processing capacities using gas from the Yakutsk and Irkutsk gas production centers**

- Yakutsk gas production center: construction of the Power of Siberia trunk pipeline and Chayandinskoye OGCF pre-development.

*Gazprom decided to put into operation the Chayandinskoye OGCF and the Power of Siberia trunk pipeline as a priority. It is thus expected that Power of Siberia will start receiving gas from the field towards the end of 2019. The field will reach its design capacity after four years of development. Maximum annual non-associated gas production will be 25 bcm with 335 producing wells and 20 years of stable production.*

- Irkutsk gas production center: pre-development of the Kovyktinskoye GCF (for the pilot operation period).

*The Kovyktinskoye GCF is expected to enter the commercial development phase and start feeding gas into the gas trunkline in 2022. The field is scheduled to reach its design capacity in the third year of development. The design capacity is 25 bcm of gas per year (according to the approved field development plan), with a production well stock of 514 over the development period. Anticipated annual production is 25 bcm of gas and 1.4 mmt of condensate.*

**RUB 798.43**  
billion is the amount  
of PJSC Gazprom's  
investments to be  
allocated to capital  
construction in 2018.

**UGSS expansion to feed gas into the Nord Stream 2 pipeline:** Upon completion, this group of gas transmission projects will enable feeding of gas into the Nord Stream 2 pipeline by the end of 2019. Those include projects to increase capacity of the Bovanenkovo – Ukhta and Ukhta – Torzhok gas trunk pipelines, and projects focused on GTS extension and construction of new GTS facilities along the Gryazovets – CS Slavyanskaya section.

**Construction of the Amur GPP**

- The plant will be processing gas received from the Yakutsk and Irkutsk gas production centers to isolate valuable components to be used in gas chemical and other industries. It will serve both domestic and export markets.

**Looking Forward:**

**Ob and Taz Bays fields**

*According to Gazprom Group plans, the Kamennomysskoye-Sea gas field with the largest hydrocarbon reserves in the cluster will be put into operation as the first step in developing gas fields in the Ob and Taz Bays, followed by development of the Severo-Kamennomysskoye field. Process design packages have been completed for both fields and approved by government authorities.*

*Gazprom is currently preparing a field construction project design for the Kamennomysskoye-Sea field. Its development will require construction and installation of offshore structures, such as an ice-resistant platform and an ice-resistant conductor platform, to be supplied by Russian vendors.*

**Plans.** Gazprom Group will continue to develop its long-term projects designed to facilitate gas infrastructure expansion in Russian regions and to supply environmentally benign fuel to countries in Europe and in the APR. Gazprom will scale up production of gas-derived chemicals while emphasizing extraction of valuable components to boost the output of deep conversion products. In doing so, the Group strongly believes in observing high safety standards in operating UGSS to maintain the balance between high operating efficiency and limited environmental footprint. Based on its priority goals, PJSC Gazprom has put together its 2018 Investment Program with the budget of RUB 798.43 billion. In 2018, RUB 338.23 billion will be spent on the ongoing projects in the Far East and Eastern Siberia, including RUB 115.88 billion on Chayandinskoye field drilling and pre-development and RUB 218.08 billion on construction of the Power of Siberia trunk pipeline.

RUB 163.89 billion will be allocated to GTS development in the North-Western region, in particular:

- RUB 98.88 billion for the development of UGSS gas transit capacity along the Gryazovets – CS Slavyanskaya section to enable feeding of gas into the Nord Stream 2 pipeline in 2020.
- RUB 48.12 billion will be invested in building the Ukhta – Torzhok 2 system of gas trunk pipelines, to bring on stream 383 km of the linear section of the pipeline.
- RUB 16.89 billion will be invested in a project to build Gryazovets – Vyborg gas pipeline loopings for the second leg within the Gryazovets – Volkhov section, to bring on stream 107.2 km of pipeline.



Observing high safety standards in operating UGSS to maintain the balance between high operating efficiency and limited environmental footprint is among Gazprom's priorities.

**GAS  
INFRASTRUCTURE  
EXPANSION AND  
GAS SUPPLIES  
TO RUSSIAN  
REGIONS**

**68.1%**

Russia's gas service penetration in 2017

**172,100** km

overall length of trunklines and branches in Russia in 2017

RUB **29.45** billion

investments in regional gas infrastructure expansion in 2017

Every year, Gazprom connects more communities to gas distribution networks, contributing to the quality of life, economic growth and investor appeal of the regions.

In 2017, the Gas Infrastructure Expansion Program encompassed 68 regions of the country. The Company increased the amount to be invested over the year in gas distribution penetration to RUB 29.45 billion, from the previously budgeted RUB 25.7 billion. The adjustment is due to project activities in the East of Russia.

**Gas distribution and access to gas supply in Russia, 2014–2017**

	As of December 31			
	2014	2015	2016	2017
Length of gas distribution grid pipelines serviced by Gazprom's subsidiary and affiliated gas distribution organizations (GDOs), thousand km	734.0	746.3	760.1	773.4
Natural gas transmitted through gas distribution systems serviced by Gazprom's subsidiary and affiliated GDOs, bcm	246.7	231.3	208.0	239.0
Consumers served by Gazprom's subsidiary and affiliated GDOs:				
apartments and private households, million units	27.0	26.8	27.0	28.5
industrial facilities connected to gas grids, thousand units	31.5	32.8	32.9	31.6
agricultural facilities connected to gas grids, thousand units	6.5	6.9	7.2	7.6

In 2017, the share of consumers with access to gas supply services increased to 68.1%.

Significant progress in implementation of Gazprom's Eastern Gas Program, which

involves building of new gas production centers and construction of gas trunk pipelines, means that more consumers in Eastern Siberia and the Far East will have access to gas distribution services.

## REGIONAL GAS INFRASTRUCTURE EXPANSION PROGRAM – IMPLEMENTATION ISSUES

Key issues with implementation of the Regional Gas Infrastructure Expansion Program are the failure of regional administrations to meet consumer readiness deadlines (building distribution grids, connecting private homes and boilers), and significant consumer arrears. Out of 66 regions participating in the Gas Infrastructure Expansion Program in 2018, 46 regions are performing consumer readiness activities according to their yearly schedules with full synchronization or with a slight delay.

However, 14 regions are falling significantly behind the schedule, and six regions repeatedly fail to meet their commitments.

Given consistently high overdue receivables and failure to meet consumer readiness deadlines, allocations to 11 regions under the Regional Gas Infrastructure Expansion Program were set at the minimum level for 2018, i.e. less than RUB 35 million. For another 16 regions, investment allocations were reduced in 2018 compared to the 2017 budget.

## GAS SUPPLIES TO CONSUMERS ABROAD

*Gazprom  
exported a record*

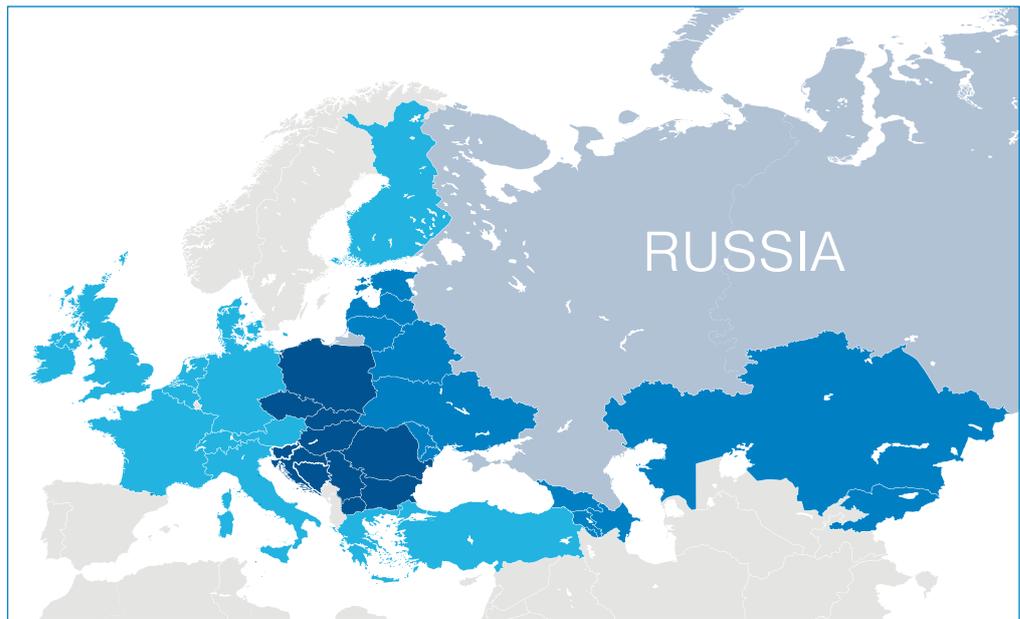
**194.4** bcm  
*of gas to non-FSU  
countries*

For many years, Gazprom has been a reliable supplier of natural gas to international consumers. Supply volumes depend on the Company's contractual obligations, prevailing weather conditions in importing countries, as well shifts in their respective energy mixes. European countries' demand for Russian gas tends to be higher during cold winters and in periods of reduced renewable energy output. Reliability of gas supplies by Gazprom Group helps those countries enhance their energy security.

The year 2017 saw an increase in gas consumption by the European market, attributable to a number of factors. A major

part of the incremental gas demand came from power generation: gas-burning power plants in non-FSU European countries consumed 7.6% more gas than in the previous year, compared to just a 3.7% increase in other sectors. Early in the year, Germany's renewable power sector experienced a significant drop in output due to heavy snowfalls and low wind, while in Southern Europe (Spain, Italy, Portugal, Turkey) an unusually dry summer was responsible for reduced output in the hydropower sector. On top of that, Germany and France reduced their nuclear power generation. Gas-burning power generation also benefitted from a continuous global coal price growth in 2016 and 2017.

Who receives pipeline gas from Gazprom Group?



<p>■ Western Europe</p>	<p>Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Switzerland, Turkey, the UK</p>
<p>■ Central and Eastern Europe</p>	<p>Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, Macedonia, Poland, Romania, Serbia, Slovakia, Slovenia</p>
<p>■ CIS and FSU countries</p>	<p>Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, South Ossetia, Ukraine</p>

**2017 was a year of Gazprom's record high export volumes:** gas exports to non-FSU countries amounted to 194.4 bcm<sup>7</sup>, or 15.1 bcm (8.4%) more than the previous peak reached in 2016 (179.3 bcm).

This record-setting trend proves that Russian gas is increasingly in demand in European countries and it can be reliably supplied in any quantities requested.

<sup>7</sup> Based on PJSC Gazprom gas sales to non-FSU countries under Gazprom Export LLC contracts, including volumes sold through gas auctions, and under direct contracts of GAZPROM Schweiz AG.

Exports to Central and North-Western Europe were also on the rise. In 2017, Germany received a record volume of 53.4 bcm, or 3.6 bcm (7%) more than in 2016, when the volume peaked at 49.8 bcm.

Exports of Russian gas to Austria were historically high at 9.1 bcm (a 50% growth from 2016). There was more demand from France, which bought 12.3 bcm (a 7% growth). Supplies to Slovakia amounted to 4.6 bcm (a 24% growth).

In 2017, Turkey, the second largest importer of Russian gas, received a record volume of 29.0 bcm supplied by Gazprom Group. That was 1.7 bcm (6%) more than in 2014, when the previous record (27.3 bcm) was set, and 4.3 bcm (17%) more than in 2016.

*PJSC Gazprom is implementing the Nord Stream 2 pipeline project to build two lines with a combined capacity of 55 bcm per year. According to the project schedule, both lines will be laid in parallel, to be put into operation in Q4 2019.*

The reporting year saw a remarkable 15% growth in China's gas consumption compared to 2016, brought about by the Chinese government's policy to reduce air pollution, including by transition from coal to gas in power generation. In 2017, Gazprom and CNPC (China National Petroleum Corporation) signed a Supplementary Agreement to begin Russian gas supplies to China via the Power of Siberia pipeline from December 2019.



*December 2019 – Russia will start gas supplies to China.*

*On December 21, 2017, PJSC Gazprom and CNPC signed Heads of Agreement for natural gas to be supplied from Russia's Far East to China. The document outlines the basic parameters of future gas supplies.*



### TurkStream Construction Gets a Kickstart

The launch of the TurkStream gas pipeline construction project was a landmark event in 2017. TurkStream is a natural gas pipeline under construction. It runs from Russia across the Black Sea to Turkey, and further up to Turkey's border with neighboring countries. One line will deliver gas to the Turkish market, and the other will serve markets of Southern and South-Eastern Europe. The capacity of each line is 15.75 bcm per year. The contractor for the offshore section is South Stream Transport B.V.

**Gazprom gas exports to non-FSU countries<sup>(1)</sup> as a share of global traded volumes, 2014–2017<sup>(2)</sup>**

	2014	2015	2016	2017
Global gas trade volume, bcm	1,065.9	1,096.2	1,187.9	1,292.4
including pipeline gas	727.7	751.5	813.5	882.4
Gazprom's export gas supplies, bcm	147.6	159.4	179.3	194.4
<i>Gazprom's share in global gas trade, %</i>	13.8	14.5	15.1	15.0
<i>Gazprom's share in global pipeline gas trade, %</i>	20.3	21.2	22.0	22.0

<sup>(1)</sup> Based on PJSC Gazprom gas sales to non-FSU countries under Gazprom Export LLC contracts, including volumes sold through gas auctions, and under direct contracts of GAZPROM Schweiz AG.

<sup>(2)</sup> Natural gas volumes are given in accordance with Russian accounting standards (gross calorific value of 8,850 kcal per 1 cubic meter at 20 °C).

Sources: Cedigaz, Gazprom Export LLC

**LNG:  
SOLUTION FOR  
REMOTE AREAS**



*Natural gas cooled after cleaning from admixtures to the condensation temperature (-161.5 °C) turns into liquid known as LNG. Being liquefied, it takes up about 1/600 of the original volume and can be delivered to faraway destinations trapped in cryogenic tanks on board specially designed tankers, or in cryogenic railway tanks when delivered by land.*

Gazprom Group views LNG production and sales as its strategic business. With an optimal balance between pipeline gas and LNG, gas can be made available to the largest possible number of consumers in different countries. Gas liquefaction technology helps meet the demand for natural gas in areas far away from a trunk pipeline.

Design capacity of the LNG plant operating on the Sakhalin Island (the Sakhalin II project) is 9.6 mmt per year, while the actual 2017 output was 11.5 mmt. The project operator is Sakhalin Energy.

Gazprom Group currently supplies LNG from its portfolio to countries of the APR, South Asia, Middle East and Europe. LNG sales come under the responsibility of Gazprom Marketing & Trading.

Gazprom Group LNG trading portfolio in 2017 amounted to 3.34 mmt (4.46 bcm). Gazprom sales account for 1.1% of the global

LNG market. The share of Russian LNG (from the Sakhalin II project) in Gazprom Group trade portfolio was 46%.

Japan retained its status as the Group's key target market for LNG, absorbing around 36% of total sales. 2017 saw an increase in LNG supplies to China (by 0.52 mmt, to 0.62 mmt) and the Republic of Korea (by 0.21 mmt, to 0.28 mmt).

In 2017, Gazprom Group made its first LNG shipment to Spain.

Since its first delivery in 2005, Gazprom has supplied LNG to 15 countries. The Company remains alert to opportunities to expand the geographic coverage of its supplies and secure itself a position in new and rapidly growing LNG markets. Attractive markets in Asia, Latin America, and the Middle East are considered by Gazprom Group as promising LNG export destinations. Gazprom Marketing & Trading Group companies regularly take

part in international LNG supply tenders and arrange LNG acquisition and deliveries within its portfolio under spot and term contracts.

In 2017, Gazprom Group was operating six LNG carriers to serve its shipments. In November 2016, Gazprom Marketing & Trading signed

a contract with Dynagas to charter Clean Energy, an LNG carrier. The contract comes into effect in 2018.

### SMALL-SCALE LNG SUPPLIES

Gazprom Group companies are supplying increasingly rising volumes of exportable small-scale LNG, which is produced at Gazprom Group plants in the Kaliningrad Region, city of Peterhof and the Sverdlovsk Region. Exportable LNG also comes from plants located in the cities of Kingisepp and Pskov owned by companies of Kriogaz Group. Between 2014 and 2017, the geography of supply destinations was expanded to include,

apart from Poland, the markets of Estonia, Lithuania, the Czech Republic, the Republic of Belarus, and Kazakhstan. Shipments of small-scale LNG produced by Gazprom Group increased from 1.2 tmt in 2014 to 21.9 tmt in 2017, while shipments of Kriogaz Group's LNG grew from 0.4 tmt in 2007 to 12.9 tmt in 2017.

### PRIORITY FOCUS: GAZPROM GROUP'S LNG PROJECTS

Gazprom Group continues to develop its own LNG projects within the Russian Federation.

- **Construction project for Sakhalin II 3rd LNG train**

With a view to boost LNG production, the Company is working on a project to build a third train to the LNG plant currently operated under the Sakhalin II project (up to 5.4 mmt per year). As part of the implementation process, a positive opinion was received from Glavgosexpertiza of Russia (a federal autonomous institution), a federal expert assessment authority, with respect to project design documentation which is compliant with standards of the Russian Federation and covers the project's GTS expansion scheme, LNG loading jetty construction, and LNG plant expansion.

- **Baltic LNG**

In June 2017, PJSC Gazprom and Shell signed Heads of Agreement to set up a joint venture, defining its operating procedures. The joint venture will be responsible for project design, funding, construction and operation of the Baltic LNG plant. The parties also signed a Joint Study Framework Agreement to cooperate in performing feasibility studies on the project.

*The Baltic LNG project involves construction of an LNG plant, with the annual capacity of 10 mmt and potential expansion to 15 mmt, near the commercial seaport of Ust-Luga, Leningrad Region.*

- **Facility at the CS Portovaya**

In 2017, Gazprom Group continued construction of an integrated LNG production, storage and shipment facility at the Portovaya compressor station near Vyborg, Leningrad Region. In 2017, the project received RUB 39.4 billion in capital investment.

*The facility located near the Portovaya compressor station will produce around 1.5 mmt of LNG annually. The product is expected to be sold to commercial customers as the main option. If required, the LNG output can also be delivered to the Kaliningrad Region regasification terminal to be distributed to local consumers.*

- **LNG regasification terminal in the Kaliningrad Region**

The LNG regasification terminal in the Kaliningrad Region will enhance energy security of the region by enabling gas delivery by sea in the liquefied form. Construction proceeded throughout 2017.

*The regasification terminal on the Baltic seashore has a minimum daily capacity of 9 mcm of gas, with the potential to deliver up to 2.7 bcm of gas per year to local consumers.*

- **Vladivostok LNG near the city of Vladivostok**

In 2017, Gazprom Group's leadership made a statement on the continuation and reformatting of the LNG project near the city of Vladivostok. The rationale includes bunkering opportunities, APR market growth, and sizeable demand for NGV fuel. The annual capacity of the Vladivostok LNG plant will be 1.5 mmt of LNG.

☞ *Most importantly, we see that international companies in the region are interested, they are willing to participate in the project with the understanding that it will target the NGV fuel segment in the APR and, in particular, bunkering. That's why we are now reanimating the project.*

*Alexey Miller,  
Chairman of the PJSC Gazprom  
Management Committee*

In 2017, PJSC Gazprom decided to launch a pre-investment feasibility study for an export-oriented LNG plant near Vladivostok in Russia's Far East, with annual capacity approaching 1.5 mmt. PJSC Gazprom and Japan's Mitsui signed a Framework Agreement for cooperation on small- and medium-scale LNG in Russia's Far East and in the APR. The documents were signed with a view to spur up activities supporting small- and medium-scale LNG supplies, including the volumes expected from the would-be LNG plant near Vladivostok.

Gazprom is also considering implementation of infrastructure development projects for small- and medium-scale LNG in cooperation with its international partners.

## ENGAGING WITH STAKEHOLDERS ON GAS SUPPLY ISSUES

In 2017, Gazprom Group continued dialogues with stakeholders concerning various aspects of gas supplies to Russian and European consumers. Such dialogues took place as Gazprom representatives were attending the following meetings and events:

- negotiation on matters of natural gas supply, reliable and safe transportation and transmission, construction and regulation of new cross-border energy infrastructure;
- 10<sup>th</sup> European Annual Gas Conference (January 2017);
- Russia and CIS Oil and Gas Executive Summit (February 2017);
- Gastech Conference (April 2017);
- St. Petersburg International Economic Forum (June 2017);
- International conference "Energy Dialogue: Russia – EU. Gas Aspect" (June 2017);
- 13<sup>th</sup> International Conference and Exhibition for Oil and Gas Resources Development of the Russian Arctic and CIS Continental

Shelf (RAO/CIS Offshore) (September 2017);

- Eastern Economic Forum (September 2017);
- Russian Investment Forum (September 2017);
- St. Petersburg International Gas Forum (October 2017);
- Gas Summit of heads of states and governments of the Gas Exporting Countries Forum (November 2017);
- Annual general meeting of the International Business Congress and IBC working groups (2017).

Gazprom Group participates on a permanent basis in activities of international organizations, such as the International Gas Union (IGU), Russian-German Chamber of Commerce, International Business Congress (IBC), Global Gas Center (GGC) and European Association for the Streamlining of Energy Exchange (EASEE-gas), among others.

## NGV MARKET DEVELOPMENT IN RUSSIA AND ABROAD

The type and quality of fuel are two major factors of environmental well-being. Given its low pollution characteristics, Gazprom Group believes NGV fuel is the energy of the future and views NGV fuel supply as a promising business that will support the Company's development and contribute to overall sustainability. Gazprom Gazomotornoye Toplivo LLC, an affiliated company of Gazprom, makes a systematic effort to develop NGV fuel markets.

The following are the key advantages of natural gas as a vehicle fuel:

- average domestic price in Russia is RUB 14 per 1 cubic meter, or half to one-third of the price normally paid for conventional fuels;
- being a pure fuel free of any admixtures, natural gas may extend engine lifetime by 75% or even double it;

- natural gas toxic emissions are reduced to 1/10 of the emissions associated with gasoline fuels.

*Overall, during the last five years, NGV fuel consumption in our country has increased by 145 mcm (37%), to reach 535 mcm, and the number of such vehicles<sup>8</sup> in Russia has grown by 31,500 (27%) and is now estimated at around 150,000. We expect NGV fuel consumption to reach 1.26 bcm by 2020; there will be 743 gas filling stations, and up to 370,000 gas-powered vehicles.*

*Kirill Molodtsov,  
Deputy Energy Minister  
of the Russian Federation*

<sup>8</sup> Vehicles running on natural gas.

The Company makes a consistent effort to expand NGV fuel markets in Russia and abroad by investing in infrastructure projects

and campaigning for the environmentally benign and inexpensive fuel.

### NGV FUEL IN RUSSIA

**271** stations was the number of CNG filling stations operated by Gazprom Group in Russia in 2017

**63** regions have Gazprom gas filling facilities

Gazprom Group is developing the domestic NGV fuel market in conformity with Instruction No. 767-r, of May 13, 2013, of the Government of the Russian Federation; list of Instructions No. Pr-1298, of June 11, 2013, of the President of the Russian Federation; Instruction No. Pr-2227, of October 29, 2015, of the President of the Russian Federation; and list of Instructions No. Pr-2699,

of December 8, 2017, of the President of the Russian Federation. Those documents address priority steps that must be made to encourage growth of the natural gas-fueled vehicle fleet, expansion of gas filling infrastructure and improvement of industry-specific regulations concerning NGV fuel production, transportation, storage and consumption.

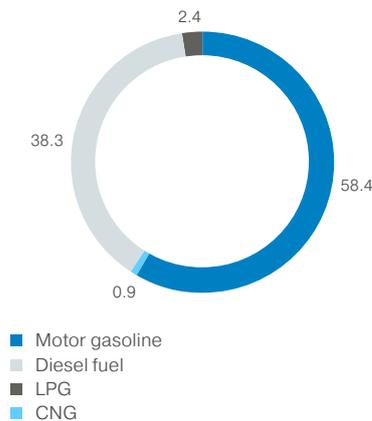
#### Gazprom Gazomotornoye Toplivo LLC activities in the Russian NGV fuel market, 2014–2017

	2014	2015	2016	2017
Investments in NGV fuel infrastructure: CNG filling stations, multi-fuel filling stations, NGV maintenance centers, RUB million	1,000.56	2,938.08	3,748.13	4,057.11
NGV fuel sales, including:				
CNG, mcm	1.5	5.8	92.9	145.3
CNG, RUB million	17.2	57.1	975.7	1,557.1
LNG, tmt	0.9	14.3	13.4	19.7
LNG, RUB million	14.7	248.3	229.3	383.4
CNG filling stations in operation or newly built, count	1	1	49	55
Regions where a CNG filling station network is available, count	1	1	22	27

NGV fuel sales continuously grow across Gazprom Group's gas filling network at an average rate of 9.2% per year, while in 2017 sales were up 9.5% against 2016. In 2017, actual CNG sales, including sales through CNG filling stations operated by Gazprom Group and Gazprom Gazomotornoye Topливо LLC, amounted to 526 mcm.

In physical terms, motor fuel consumption by motor vehicles totaled 61.6 mmt in 2017, of which motor gasoline accounted for 58.4%, diesel fuel for 38.3%, liquefied petroleum gas (LPG) for 2.4%, and compressed natural gas (CNG) for 0.9%.

**Motor fuel consumption by motor vehicles in 2017, %**



*Gazprom Group's network of natural gas filling stations is the largest in Russia.*

At year-end 2017, the Group was operating 271 CNG filling stations throughout the country, or 17 more than in 2016. Seventeen of the Russian Federation regions are making tangible progress in developing the NGV fuel market. Ambitious sales targets have been set for the Republic of Tatarstan and the Stavropol Territory, where the number of retail facilities is sufficiently high. In 15 other

regions, retail networks are in the development phase: Krasnodar Territory, Volgograd Region, city of St. Petersburg, Leningrad Region, city of Moscow, Moscow Region, Nizhny Novgorod Region, Samara Region, Republic of Bashkortostan, Sverdlovsk Region, Perm Territory, Omsk Region, Tomsk Region, Novosibirsk Region, and Altai Territory. All those regions are covered by federal programs and projects, and in Phase 1 will develop local markets served by gas filling infrastructure. In Phase 2, their gas filling stations will be integrated into a federal network connecting all the participating regions via NGV corridors.

In 2017, the average utilization rate of the Gazprom Group gas filling network was 26%, having seen a 5% growth over the last four years. The retail network utilization has been the function of a rapid increase in the overall annual capacity of NGV fuel infrastructure – from 1.7 bcm to 2.2 bcm. Between 2015 and 2017, Gazprom Group built 59 gas filling facilities.

**Plans.** In line with its 2018 investment program, Gazprom Gazomotornoye Topливо LLC is planning to build 26 new gas filling stations and renovate four currently in operation; nine CNG filling stations are targeted for purchase (private investment). This will enable Gazprom Group to expand its gas filling network to 306 facilities (including sites for the deployment of mobile gas filling stations and CNG modules). In 2018, investments in own-account construction of NGV infrastructure facilities will total RUB 6.86 billion.

According to judgmental forecasts, NGV fuel will be increasingly in demand in the long run as a cheaper fuel, which is also much safer for the vehicle as well as the environment.

**Long-Term Determinants of Russia’s LNG Fuel Market Development, 2020–2035**

Indicator	2020	2025	2030	2035
CNG demand, mcm	1,426	1,725	2,065	2,444
LNG demand, tmt	153	2,676	4,473	7,022
including the target segment of long-haul trucks, tmt	75	1,304	1,635	1,945
Gas filling facilities (CNG filling stations, cryogenic filling stations, multi-fuel filling stations), count	348	607	782	845

**GAZPROM’S INTERACTION WITH GOVERNMENT AUTHORITIES ON NGV FUEL MARKET DEVELOPMENT**

Gazprom Group consistently works with government authorities to create favorable conditions conducive for NGV fuel market development.

Federal Law No. 22-FZ dated February 22, 2017, amending Federal Law “On Industrial Safety of Hazardous Production Facilities”, came into effect in 2017. The amendment reclassifies CNG filling stations to a lower grade, Category IV, of hazardous facilities.

One of key areas of government relations was drafting the government program “Promotion of the Use of Natural Gas as a Motor Fuel in Transport and by Specialized Equipment” in cooperation with the Ministry of Transport of the Russian Federation.

**Status of Gazprom Group’s GR activities to promote the use of NGV fuel at year-end 2017**

- Gazprom works with constituent territories of the Russian Federation to implement cooperation agreements aimed at development of their respective NGV fuel markets. Such agreements have been signed with 53 regions.
- The authorities of 36 regions have approved regional government programs (sub-programs) for NGV fuel market development setting targets for the number of vehicles to be acquired and converted to CNG.
- In 14 regions, specially designed activities are underway to promote the use of natural gas as a motor fuel.
- In 19 regions, transportation tax rates have been reduced or set at zero for natural gas-powered vehicles.
- In eight regions, projects to build CNG filling stations were given the status of a “Large-Scale/Strategic Regional Project”.

### PROMOTING THE USE OF NGV FUEL

A large-scale outreach and awareness-building campaign aimed to win public acceptance of natural gas as an alternative motor fuel has been underway since 2013.

In 2017, over 100 information messages were issued providing details on activities to develop the NGV fuel market. Some 5,000 media stories addressed the use of natural gas as a motor fuel. A number of federal and regional events attended by PJSC Gazprom

top executives took place at various NGV fuel infrastructure sites. A series of activities were implemented to enhance EcoGas fuel brand awareness and value perception. In particular, the EcoGas fuel brand was featured at the 2017 FIFA Confederations Cup and international marathon races in the cities of Kazan and St. Petersburg.

Gazprom Gazomotornoye Toplivo LLC has designed and is successfully running a coordinated series of incentive programs to attract new customers and promote conversion of vehicles to NGV fuel.

### NGV FUEL IN FSU COUNTRIES

Gazprom Group continuously works to enhance the use of natural gas as motor fuel across FSU markets. Gazprom Group companies operate a total of 39 NGV fuel infrastructure facilities in the Republic of Armenia, the Republic of Belarus and Kyrgyzstan.

In 2017, those facilities collectively sold 35 mcm of NGV fuel, or 10.5% more than in 2016, while their total annual design capacity exceeds 260 mcm. The average utilization rate was thus 13.3%.

## NGV FUEL ABROAD

Gazprom Group works consistently to develop a market for NGV fuel in Europe.

In the NGV fuel segment, the Group maintains its presence in the European market through its 100%-owned subsidiary, Gazprom NGV Europe GmbH (in the markets in Germany, the Czech Republic and Poland), and through NIS, a Gazprom Neft Group company that sells CNG in the Serbian market.

In 2017, Gazprom Group operated 60 CNG filling stations in European countries – no change from 2016. In addition, there are two permanent cryogenic filling stations in operation in Poland.

The companies' CNG and LNG sales through Gazprom Group-owned filling stations outside Russia (60 CNG filling stations and 2 cryogenic filling stations) amounted to 12.3 mcm (against 12.2 mcm in 2016).

With the purpose to facilitate NGV fuel business in the European market, PJSC Gazprom and Volkswagen AG signed a cooperation agreement and a Road Map for the NGV segment in Europe. These documents provide for coordinated activities of PJSC Gazprom and Volkswagen AG to increase market penetration of natural gas as motor fuel.

Gazprom Group, represented by Gazprom Export LLC, is an active participant in international and domestic organizations that promote small-scale LNG as fuel for heavy-duty trucks and urban transit vehicles and as bunker fuel for sea- and river-going vessels.



### Blue Corridor Motor Race

The Blue Corridor motor race organized by Gazprom Export LLC in cooperation with Uniper SE (Germany) dates back to 2008. Every year, a convoy of natural gas-fueled vehicles travels thousands of kilometers around Europe to prove that intense traffic flows can cause less damage to the environment when automobiles run on natural gas.

Over the nine years since the project launch, more than 200 cars and trucks have traveled 14,700 km through 122 cities. In 2017, the Blue Corridor route ran across 12 European countries, from Portugal to Russia. The theme of the year was LNG use for heavy-duty vehicles.

The 2017 Blue Corridor race, of which PJSC Gazprom and Gazprom Gazomotornoye Toplivo LLC were key organizers, brought together 10 LNG-powered trucks made by Iveco, Scania, Ural, KAMAZ, and the Minsk Automobile Plant (MAZ) plus 7 passenger cars fueled by compressed natural gas (CNG) from Volkswagen, Seat and PJSC AvtoVAZ. During demonstrations, the participating vehicles were joined by other NGV fuel-powered automobile brands owned by local partners.

## 1.2. PETROLEUM PRODUCTS SUPPLIES



*Fishbone technology is a method of well construction, which involves drilling multiple horizontal branches leading to individual oil zones while bypassing gas and water strata. The benefits are a 40% increase in initial well productivity and a more than 20% gain in cumulative production compared to conventional horizontal wells.*

Gazprom Group is developing its capacity in oil production, refining and petroleum product marketing, supplying gasoline, diesel fuel, jet fuel, marine bunker fuel and NGV fuel to Russia, the CIS and Europe. Within Gazprom, it is predominantly Gazprom Neft Group that is responsible for oil production, refining and petroleum products marketing.

Gazprom Neft Group's activities are guided by the PJSC Gazprom 2025 Development Strategy approved by the Board of Directors in 2013 and updated in 2017. Implementation of activities planned over the period through to 2025 will maximize shareholder value added to equity capital in Russia's oil and gas sector.

The Group strives to enhance production safety and minimize environmental risks. With respect to innovative infrastructure, the priority is to achieve multifold increase in efficiency through digitalization and application of new technologies enabling tight oil extraction.

**Growth factors.** The reporting year was marked with events that impacted the growth of Gazprom Neft's liquid hydrocarbon reserves and production.

- For the first time in Russia, Gazprom Neft successfully implemented a project to build a multilateral fishbone well with five cased holes at the TAML-3 complexity level at the Vostochno-Messoyakhskiye field.<sup>9</sup>
- The Kuyumba – Taishet pipeline started to receive Gazprom Neft oil from the Kuyumba field. New reserves became available to Gazprom Neft upon acquisition of development rights for the Tazovskoye and Severo-Samburgskoye fields in the YaNAA in 2017.
- Overall production also grew as a result of Gazprom Neft operations at its greenfields, Prirazlomnoye and Novoportovskoye, where it produced 9.6 mmt of oil equivalent of hydrocarbons (including 8.6 mmt of oil).
- At its brownfields, Gazprom Neft maintains consistent production rates by applying technology solutions, thereby contributing to the overall increase in production of liquid hydrocarbons.
- With new technologies in place, Gazprom Neft can drill efficiently, maximizing results with the least possible environmental impact.
- Gazprom Neft has a pipeline of projects to support the next stage of oil production ramp-up.

<sup>9</sup> Reserves/production volumes of this field correspond to the reserves/production volumes of associated entities and joint ventures proportionately to Gazprom Group's share.

## OIL PRODUCTION BY GAZPROM GROUP

In 2017, Gazprom's proven and probable oil reserves in Russia totaled 1,360.0 mmt.

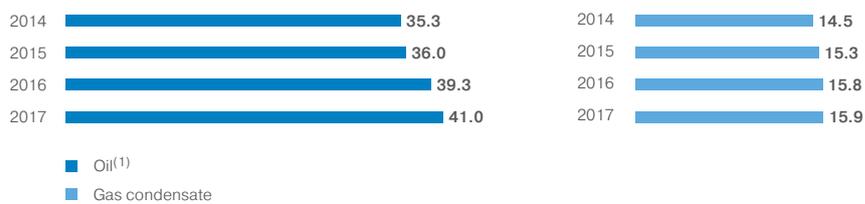
The Group produced 40.9 mmt of oil and 15.9 mmt of gas condensate, slightly above 2016 figures.

### Gazprom Group's oil reserves within the Russian Federation, 2014–2017, mmt

Indicator	As of December 31			
	2014	2015	2016	2017
Total A+B <sub>1</sub> +C <sub>1</sub> <sup>(1)</sup>	2,053.1	2,082.0	2,078.5	2,045.3
including A+B <sub>1</sub> +C <sub>1</sub> <sup>(1)</sup> , post-evaluation, %	91.0	92.4	93.3	93.5
Proven	830.5	792.7	789.5	736.8
Probable	543.9	562.7	589.2	623.2
Proven and probable	1,374.4	1,355.4	1,378.7	1,360.0

<sup>(1)</sup> In accordance with the new Classification of Reserves and Resources of Oil and Flammable Gases (approved by Order No. 477, of November 1, 2013, of the Russian Ministry of Natural Resources and Environment), in effect from January 1, 2016, corporate reporting procedures must record reserves of the A+B<sub>1</sub>+C<sub>1</sub> category, which comprises explored reserves with a high degree of geological certainty and corresponds to the previously applicable categories of A + B + C<sub>1</sub>.

### Gazprom Group's liquid hydrocarbon production in Russia, 2014–2017, mmt



<sup>(1)</sup> Excluding the Group's share in production volumes of entities in which Gazprom has investments classified as joint operations.

**PRIORITY FOCUS:  
FIELD  
DEVELOPMENT**

- **The Prirazlomnoye project** constitutes a producing offshore asset of Gazprom Neft. The project's recoverable reserves<sup>10</sup> amount to 79 mmt. Annual production rate was 2.6 mmt at year-end 2017, with planned production rate at 4.9 mmt. The project is in the active development phase, with the active well stock of 14 and the target well stock of 32.

Under the project, a number of optimization activities are underway – they are aimed to ensure uninterrupted drilling, oil production and shipment, and to enhance personnel safety. The following will be implemented in the near future:

- Phase two of the retrofit program. Phase one completed in 2017 included adoption of inverted emulsion drilling mud, flare tip replacement and other activities;
- Poseidon program encompassing a series of projects aimed at achieving operating efficiency gains through digital solutions;
- Infrastructure construction and expansion, including a corporate heliport and full-scale support facilities.

Possible extension of the project is being considered which involves exploitation of prospective upside Silurian and Devonian formations (the Silur-Devonian project) located under the main formation of the Prirazlomnoye field. This will increase reserves and extend the life cycle of the field facilities.

- **The Sakhalin project (Ayashskoye licensed block in the Sea of Okhotsk):**

In line with the project, construction of Well No. 1 was completed at the Ayashskoye block of the Neptune hydrocarbon field, with initial in-place reserves estimated at 255 mmt of oil equivalent.

- **The Dolginskoye field (Pechora Sea):**

Substantial in-office processing of geology data, which started in 2015, has been completed. The results have given rise to the contemplated option of field development in synergy with the Prirazlomnoye project. 3D seismic exploration was completed in 2017. Plans for 2018 include large-scale data interpretation, updating of geologic and hydrodynamic models, and a feasibility study for field development options.

- **The Pechora project (the North-Western licensed block in the Pechora Sea):**

3D seismic exploration started during the 2017 field season. Completion of the work in 2018 will be followed by in-office data processing and interpretation.

Exploration work performed at the North-Western licensed block in synergy with the Dolginskoye field led to significant cost optimization through saving on vessel mobilization and demobilization.

<sup>10</sup> Based on the national classification of reserves and resources of oil, gas, condensate and commercially valuable components.

**PROCESSING  
OF HYDROCARBON  
LIQUIDS**



Implementation of refining capacity upgrading programs and operating efficiency improvement remain strategic priorities for Gazprom Neft as it develops its oil refining business in Russia.

In 2015, Gazprom Neft completed Phase one of an extensive refinery upgrade program, with a view to improve the quality of refined products. All types of produced motor fuel meet Euro 5 requirements. In 2016, the upgrade program moved into Phase two which focuses on conversion depth.

The company is implementing key projects to achieve deeper conversion and increase the yield of light fractions. Projects aimed at increasing operating efficiency and reducing environmental footprint are underway.

In 2017, the Moscow Oil Refinery completed reconstruction of a catalytic cracking unit. The Omsk Oil Refinery upgraded its bitumen unit and completed construction work on the modular hydrogen generating unit. A Group III base oil production unit was put into operation at Slavneft-

Yaroslavnefteorgsintez. The Pancevo Refinery in Serbia launched construction of deep conversion plants.

Key targets for 2025: refining volumes in Russia – 40 mmt, conversion depth in Russia – 95%, yield of light fractions in Russia – 80%.

**Liquid hydrocarbon refining by Gazprom Group, 2014–2017, mmt<sup>(1)</sup>**



<sup>(1)</sup> Tolling arrangements excluded.

In 2017, liquid hydrocarbon (oil and gas condensate) refining and processing volumes dwindled by 2.7%, to 64.1 mmt, primarily due to lower refining and processing volumes generated by Gazprom Neft Group during renovations and scheduled overhauls.

**PETROLEUM  
PRODUCT SALES  
BY GAZPROM  
GROUP**

**Sales of gas processing derivatives and refined petroleum products<sup>(1)</sup> by Gazprom Group, 2015–2017, mmt**

	2015	2016	2017
Russia	41.3	41.2	41.0
Non-FSU countries	23.8	23.3	21.5
FSU countries	4.3	3.6	3.6
<b>TOTAL</b>	<b>69.4</b>	<b>68.1</b>	<b>66.1</b>

<sup>(1)</sup> Excluding helium sales.

In 2017, Gazprom Neft sold 43.48 mmt of petroleum products, which is 0.3% below the 2016 figure. The shortfall was primarily due to the fact that the Group's Russian refineries produced lower volumes of heavy products, which manifested itself in mazut (black mineral oil) sales dropping by 21% in 2017 against 2016, from 6.6 mmt to 5.2 mmt. However, the Group sold more light products, such as motor fuel (+0.5%) and jet fuel (+4.5%), and higher volumes of bunker fuel (+14.6%) and bituminous materials (+22.1%).

The overall sales decline in 2017 was the result of lower exports outside FSU countries.

Domestic sales of Gazprom Neft's petroleum products increased by 3.1%. This affected the whole product chain, except petrochemicals (down by 16.7%) and bunker fuel (down by 12.9%), with a notable sales growth recorded for bitumen (+24.8%) and diesel fuel (+7.9%).

Gazprom Neft exports outside FSU countries plunged by 11.4%, to 9.5 mmt. The decline was most pronounced in the supplies of black mineral oil (–28.9%) and diesel fuel (–23.3%). At the same time, exports of bunker fuel to non-FSU countries doubled and jet fuel exports grew by 62.5%, which is explained by an increasing demand for international transport services and the company's geographic expansion.

**Petroleum products sales by Gazprom Neft Group, 2014–2017, mmt**

	2014	2015	2016	2017
Automotive gasoline	10.43	10.83	11.08	11.09
Diesel fuel	13.87	12.81	13.27	13.37
Jet fuel	3.82	3.62	3.36	3.51
Bunker fuel	4.42	2.98	2.87	3.29
Fuel oil	9.31	7.42	6.62	5.23
Bitumen	2.02	2.05	2.17	2.65
Oils and lubricants	0.39	0.43	0.45	0.41
Petrochemical products	1.26	1.45	1.35	1.25
Others	2.78	2.25	2.42	2.68
<b>TOTAL</b>	<b>48.30</b>	<b>43.84</b>	<b>43.59</b>	<b>43.48</b>

Production targets for 2018 are set at 15.2 mmt of condensate and **40.9** mmt of oil, subject to PJSC Gazprom Neft performance indicators.

**Plans.** Gazprom Neft Group will increase annual hydrocarbon production<sup>11</sup> to 100 mmt of oil equivalent by 2020, and intends to maintain it at that level till 2025. The reserves-to-production ratio will be maintained for at least 15 years. To this end, Gazprom Neft will:

- maximize efficiency of ROIP (remaining oil in place) recovery with the existing license portfolio, by optimizing development,

reducing the cost of proven technologies, adoption and industrial implementation of new technologies;

- pursue the plan to set up a new production center in the northern part of YaNAA;
- consider unconventional reserves as a potential growth factor and develop them as an important class of assets in its portfolio.

**MOTOR  
GASOLINE  
AND  
DIESEL FUEL**

**1,736** filling stations were operated by Gazprom Group in Russia at year-end 2017, including 1,255 within the Gazprom Neft network (franchise arrangements included)

**14.9%** is Gazprom Neft's share of the Russian motor gasoline retail market

**19.1%** is Gazprom Neft's share of the Russian diesel fuel market

**6%** is the increase in motor fuel retail sales by Gazprom Neft in Russia and across the CIS



Gazprom Neft increased its share of the Russian motor fuel retail market. Its gasoline and diesel fuel retail market shares were 14.9% and 19.1%, respectively.

Gazprom Neft Group operates one of the largest and geographically diversified motor fuel retail networks. At year-end 2017, its Russian network had

1,255 filling stations, including 1,193 stations operated by the company itself and 62 stations managed by franchising partners. During 2017, the network of filling stations operated by the company added 11 points of sale. Franchising included, the Gazprom Neft retail network is present in 40 regions of the Russian Federation.

<sup>11</sup> Including gas filling stations.

#### Gazprom Neft Group's domestic retail sales of motor gasoline and diesel fuel, 2014–2017

	2014	2015	2016	2017
Share in gasoline and diesel fuel sales in the Russian market, within the operating regions, %	23.9	24.7	24.1	23.2
Gasoline and diesel fuel sales in the Russian market, mmt	7.97	8.08	8.25	8.84
Gasoline and diesel fuel sales in the Russian market, RUB million	262,787	279,059	298,736	344,654
Investments in filling station network development, RUB million	4,244	3,444	3,005	2,204
Filling stations, <sup>(1)</sup> count	1,150	1,189	1,244	1,255

<sup>(1)</sup> Including filling stations operating under franchise arrangements.



100% of produced motor fuel is Euro-5 compliant.

Over the year, total retail sales of motor fuel in Russia grew by 7.2% against 2016, to 8.8 mmt, as a result of higher average daily throughput per filling station.

In 2017, the average daily throughput per filling station in Russia grew by 4.1%, to 20.1 tons. In CIS countries, owing to optimization and efficiency improvement across the Gazprom Neft-operated retail fueling network, daily sales grew 24.8% from the 2016 level, to reach 18.6 tons. Average daily sales in European countries increased to 6.1 tons in 2017 (+3.4% from 2016).

At year-end 2017, Gazprom Neft was operating 611 filling stations outside Russia, including:

- 39 in Kyrgyzstan;
- 33 in Tajikistan;
- 45 in the Republic of Belarus;
- 71 in Kazakhstan;
- 333 in Serbia;
- 35 in Bulgaria;
- 37 in Bosnia and Herzegovina;
- 18 in Romania.

The anticipated drop in the filling station count in Europe will result from retail network optimization in Bosnia and Herzegovina and Bulgaria through the sale of unprofitable assets.

#### Gazprom Neft-operated filling stations in other countries, 2014–2017, 2020 (plan), count

	2014	2015	2016	2017	2020 (plan)
CIS	239	243	200	188	217
Europe	421	420	424	423	407
<b>TOTAL</b>	<b>660</b>	<b>663</b>	<b>624</b>	<b>611</b>	<b>624</b>

**Gazprom Neft communicates with its retail consumers**

through the Integrated Customer Support Center, a 24/7 omnichannel service designed to provide quick response to customer calls/inquiries. The service encompasses call center capability, Intellectual Voice Response (IVR), e-mail, a feedback form and online consultants available on the [www.gpnbonus.ru](http://www.gpnbonus.ru) website. Viber chats and the retail network's mobile application are also used. All customer calls/inquiries are recorded (as tickets) in the centralized storage and processing system, sorted by subject, type and the issue involved. The system has capability for quick processing of non-standard inquiries and complaints, redirecting them for response

to relevant units within the company, and storing the complete history of calls/inquiries. Customer service quality is regularly monitored on a monthly basis, involving all communication channels. Communication with corporate customers is maintained by collecting and analyzing feedback, such as inquiries, complaints, recommendations, evaluation comments, conducting surveys (focus groups), setting up working groups with different consumer categories, and joint product quality tests. In 2017, the prevailing themes of Gazprom Neft's retail customer comments were the terms of service of regular and automated filling stations, expansion of services, and loyalty programs.

**JET FUEL**

Jet fuel marketing is the business of JSC Gazpromneft-Aero, a subsidiary of Gazprom Neft.

In 2017, its own operated distribution network consisted of 50 bulk fuel installations in Russia and one in Kyrgyzstan. Apart from that, the

company supplies its customers with aviation kerosene at 9 off-network airports in Russia plus 189 airports in 64 countries.

Into-plane fueling was introduced at the Kadala (Chita) and Khrabrovo (Kaliningrad) Airports in 2017.

**Gazprom Neft performance in the Russian jet fuel market, 2014–2017**

	2014	2015	2016	2017
Share of the Russian jet fuel market, %	32.6	34.0	34.5	31.6
Jet fuel sales, mmt	3.34	3.08	3.05	3.04
Investments in jet fuel business expansion, RUB million	7,229	2,323	3,059	2,109
Number of own retail facilities within the Russian Federation, count	40	41	46	50

## BUNKER FUEL

Bunker fuel sales were down within the Russian Federation in 2017 due to dwindling premium sales in the Far East, as adverse market influences made bunker fuel supplies unprofitable. Supplies

were reallocated to European markets, as more profitable, including the North-West and Black Sea areas. The decline was also partially offset by recovering sales in inland waterways.

Gazprom Neft performance in the Russian bunker fuel market, 2014–2017

	2014	2015	2016	2017
Share of the Russian bunker fuel market, %	18.6	21.0	19.1	16.6
Bunker fuel sales, mmt	4.42	3.98	2.46	2.26

### 1.3. TAKING CARE OF FUTURE GENERATIONS: HYDROCARBON RESERVE REPLACEMENT

Gazprom Group respects future generations' right to energy resources. Operations aimed at replenishment of natural gas, oil and gas condensate reserves take place on a continuous basis. In 2017, Gazprom Group exploration work added hydrocarbon reserves to A+B<sub>1</sub>+C<sub>1</sub>, namely:

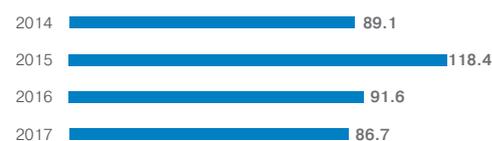
- 852.9 bcm of natural gas;
- 95.6 mmt of gas condensate;
- 3.3 mmt of oil, including incremental reserves of entities in which Gazprom has investments classified as joint operations, which equal 0.6 mmt.

Significant incremental gas reserves were recorded at the Tambeyskoye and Malyginskoye fields (Yamal Peninsula) – 596.6 bcm, Achimovsky deposit within the Urengoyenskoye field (YaNAA) – 194.9 bcm, Yuzhno-Lunskoye field (Sea of Okhotsk shelf) – 48.9 bcm.

GPE led to four field discoveries: Yuzhno-Lunskoye in the Sea of Okhotsk, Salairskoye in the Krasnoyarsk Territory, Alexander Zhagrin in KhMAA, Novozarinskoye in the Orenburg Region, and 47 new deposits within previously discovered fields in the YaNAA, Khanty-Mansi Autonomous Area – Yugra (KhMAA – Yugra), Tomsk and Orenburg Regions. In addition, the Melimovskoye field in the Tomsk Region and five deposits in KhMAA – Yugra and in the Tomsk Region were discovered by companies investments in which are classified as joint operations. Reserve replacement ratio was 1.82 for natural gas and 1.64 for gas condensate and oil.

In the short run, declining hydrocarbon production from operating wells will be offset by the development of reserves of the Bovanenkovskoye and Zapolyarnoye fields.

GPE expenses<sup>(1)</sup> (excl. UGS), 2014–2017, RUB billion



<sup>(1)</sup> Cost structure is given in Appendix 2.



*Initial recoverable gas reserves at the Bovanenkovskoye OGCF (categories  $B_1+B_2$ ) amount to 4.1 tcm. Annual design capacity at Bovanenkovskoye is 115 bcm, with the potential to ramp up gas extraction in the future to 140 bcm per year through the development of Neocomian-Jurassic deposits.*

*The Zapolyarnoye OGCF is among Russia's largest and most productive, with initial  $B_1+B_2$  reserves including more than 3.5 tcm of gas and around 80 mmt of (recoverable) gas condensate and oil. Annual design capacity is 130 bcm of gas.*

## UNCONVENTIONAL GAS RESOURCES

Accumulation of the hydrocarbon resource base is vital both for the current and future generations. As unique gas fields in Western Siberia are steadily depleting, hard-to-recover and unconventional gas resources become more relevant. Russia commands enormous potential resources of unconventional gas. Gazprom Group has started systematic studies of unconventional gas sources and is making an effort to develop and test technologies that will facilitate tight gas search, exploration and commercial development.

At the end of 2017, Alexey Miller, Chairman of the PJSC Gazprom Management Committee, approved the Program for Development of Unconventional and Hard-to-Recover Gas Resources.

The program is aimed to bring in technology innovations and enhance PJSC Gazprom's competencies in developing hard-to-recover gas reserves, provide a geological and geophysical framework for their efficient recovery with prospects to offset declining production at the main gas producing centers.

The program covers short-term (2018–2020), mid-term (up to 2028), long-term (up to 2041) and strategic (from 2041 onward) planning horizons. Short- and mid-term activities are focused on accumulation of geological and geophysical data, and selection

of technologies for the development of tight and unconventional gas resources. They involve research, prospecting, evaluation and exploration, and pilot commercial development of blocks and areas for the purpose of technology validation and assessment of production capacity and economic efficiency.

Russia's potentially recoverable tight and unconventional resources have been estimated as follows:

- tight gas – 99.4 tcm;
- coalbed methane – 83.4 tcm;
- shale gas – 62.4 tcm;
- gas hydrate accumulations – 471.3 tcm.

Gazprom Group is currently implementing a number of tight gas projects:

- commercial development of Achimov tight gas formations of the Urengoyevskoye OGCF (blocks 1A, 2A);
- pilot commercial development of Turonian low permeability formations of the Yuzhno-Russkoye field;
- coalbed methane recovery in the Kemerovo Region (in pilot operation);
- prospecting and exploration of hydrocarbon deposits in Senonian, Achimov and Jurassic low permeability deposits in the West-Siberian oil and gas province, low- and mid-Carboniferous deposits in the Stavropol Territory, low Permian flyschoid units in the Orenburg Region.



*The very size of tight gas resources points to their increasingly important role in ensuring Russia's energy security in the long run. However, those resources are characterized by varying exploration maturity and development readiness. Gas resources and reserves in low permeability terrigenous rock and coal bed methane are in the most advanced stage of preparation and are already in pilot development. Russian shale gas deposits are still at an early stage of regional evaluation, so actual development may be possible in the mid-term. As no efficient technology for gas hydrate extraction is yet available, those huge resources may only become recoverable in the strategic planning period.*

Gas resources and reserves in tight formations (Senonian, Turonian, Achimov and Jurassic deposits) within the licensed blocks held by PJSC Gazprom in the Nadym-Pur-Taz gas-producing region have significant potential to offset declining gas production volumes from Cenomanian deposits and are thus among the program's top priority projects.

In the short- and mid-term, Gazprom Group plans to:

- continue commercial development and ramp up production from the Achimov deposit of the Urengoykoye OGCF;
- put into commercial operation the Turonian deposit of the Yuzhno-Russkoye OGCF;
- put into pilot commercial operation the Turonian deposits of the Zapolyarnoye OGCF;
- perform production tests at the Senonian deposit of the Medvezhye field;
- perform prospecting and exploration, reserve preparation and evaluation in Senonian, Achimov and mid-Jurassic deposits within the licensed blocks held by PJSC Gazprom and its subsidiaries in the YaNAA, and Paleozoic deposits in the Stavropol Territory and the Orenburg Region.

## 1.4. POWER AND HEAT GENERATION FOR THE PEOPLE

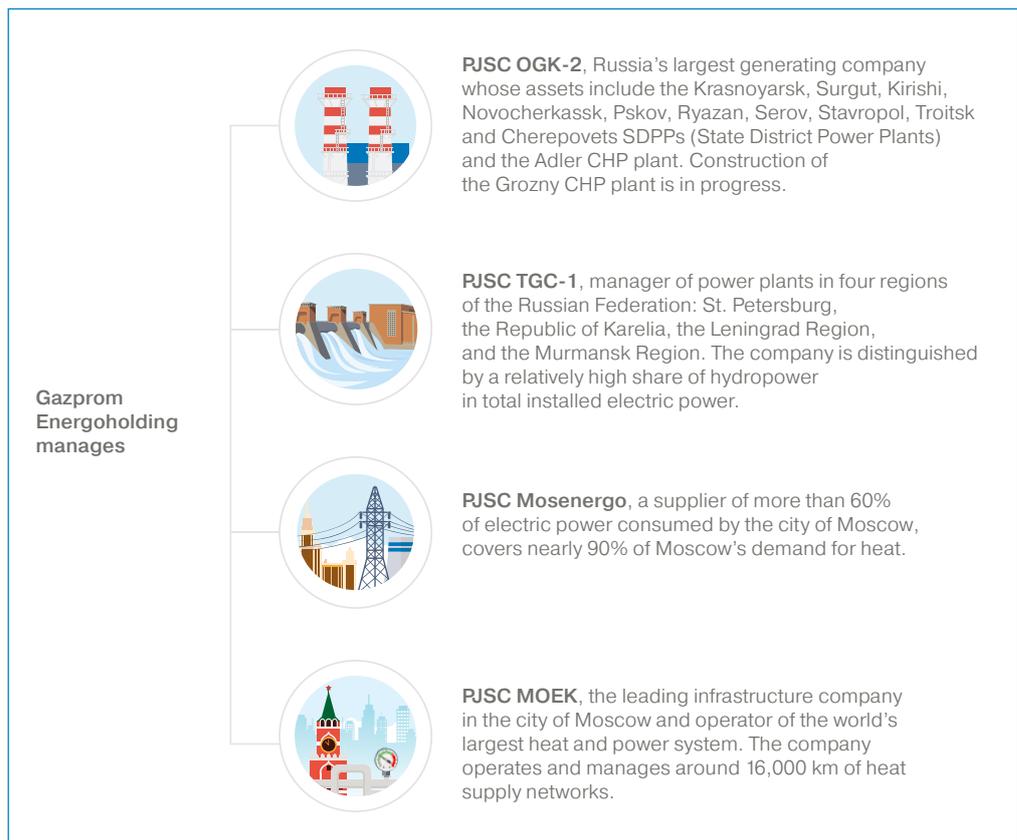
RUB **569** billion – total sales revenue<sup>12</sup>  
of Gazprom Energoholding companies in 2017

**156.6** billion kWh – power generation  
volume in 2017

**127.3** million Gcal – heat generation  
volume in 2017

Gazprom Energoholding LLC is Russia's largest heat and electricity supplier. Gazprom Energoholding pursues its activities in conformity with the Power Energy Strategy of PJSC Gazprom for 2018–2027, which evolved from the successfully implemented 2007 strategy.

Gazprom Energoholding LLC manages generating entities of Gazprom Group according to uniform corporate standards.



<sup>12</sup> According to financial statements prepared under IFRS.

Gazprom Energoholding LLC is among top ten European power producers and Russia's largest holder of power generation assets with 38.8 GW of installed electric power (at year-end 2017). Gazprom Energoholding assets account for around 16% of the total installed electric power of the Russian power sector.

In 2017, Gazprom Energoholding companies earned consolidated revenue in excess of RUB 569 billion, while EBITDA<sup>13</sup> exceeded RUB 114 billion (as per statements prepared according to IFRS).

## HEAT AND ELECTRIC POWER GENERATION

The main consumers of heat and electric power supplied by Gazprom Group are residents of the Russian Federation. Taking advantage of the unique geographic position of some of its power plants, PJSC TGC-1 exports part of generated power to Finland and Norway via PJCS InterRAO, the single export agent.

By 2017, Gazprom Group had built a complete value chain, from exploration and natural gas production to heat and power distribution.

Gazprom Group has achieved the main goals that constituted the Company's rationale for entering power business. The goals were set out in Gazprom's Power Generation Strategy approved by Resolution No. 990, of April 25, 2007, of the Board of Directors:

- target generating assets have been acquired;
- the acquired assets demonstrated positive financial performance: between 2007 and 2017, annual revenue was growing by around 15% on average;

- investment commitments have been fulfilled: 8.6 GW of new capacity has been commissioned under the Capacity Sharing Agreement program, while 3.7 GW of low-performing generating capacities were retired;
- Gazprom Energoholding companies have reached financial resilience both individually and as a group: debt-to-EBITDA ratio at year-end 2017 was recorded at 1.2 (IFRS);
- synergy has been achieved with PJSC Gazprom's core business: there is a mechanism to release natural gas at peak load.

<sup>13</sup> For Gazprom Group generating companies, EBITDA = Operating Profit + Amortization.

Heat and electric power generation by Gazprom Energoholding LLC in Russia, 2014–2017

	2014	2015	2016	2017
<b>Power generation, billion kWh</b>	<b>152.2</b>	<b>145.0</b>	<b>153.8</b>	<b>150.8</b>
PJSC Mosenergo	56.7	54.7	59.1	57.9
PJSC OGK-2	68.7	64.4	67.1	63.4
PJSC TGC-1	26.4	25.8	27.7	29.5
PJSC MOEK	0.4	0.1	–	–
<b>Heat generation, million Gcal</b>	<b>120.2</b>	<b>113.5</b>	<b>123.4</b>	<b>120.8</b>
PJSC Mosenergo	70.3	71.7	81.8	79.4
PJSC OGK-2	7.1	6.5	6.9	6.8
PJSC TGC-1	24.3	23.0	24.4	24.7
PJSC MOEK	18.4	10.7	6.1	5.8
TSK Novaya Moskva LLC	–	0.6	1.0	1.0
TSK Mosenergo LLC	–	1.0	3.1	3.0

**POWER  
GENERATION  
ABROAD**

Gazprom Energoholding also develops business outside Russia.

Construction of a CHP plant is underway in Pancevo, Serbia, as anticipated by a Shareholder Agreement between PJSC Centrenergoholding (Gazprom Energoholding) and NIS a.d. Novi Sad (Gazprom Neft Group). The project guarantees heat and power consumption by the Pancevo Refinery (asset owned by NIS a.d. Novi Sad) and provides the option to sell electric power in the Serbian domestic market and through power exchanges in other European countries.

At the end of 2017, Shanghai Electric Group Co. Ltd. was selected through a tender procedure as contractor for turnkey construction of a 200-MW CHP plant with two Ansaldo Energia 64.3A gas turbines. The facility is scheduled to be put into operation in 2020.

PJSC Gazprom and CNPC signed a Memorandum of Understanding on underground gas storage and gas-fired generation in China. After that, the parties took steps to identify and implement power generation projects in China that will provide incentives for pipeline gas supplies from Russia. In 2017, Songyuan CHP with 960 MW of installed power was selected as a pilot project for joint implementation. PJSC Gazprom will be involved in the project through Gazprom Energoholding LLC. The project is expected to generate a positive return supported by tariff guarantees and power purchase quotas.

In addition, PJSC Gazprom is analyzing relevance of a number of power generation projects to facilitate marketing of LNG from Gazprom Group's portfolio, in particular in Brazil, Morocco, Indonesia, Vietnam, Cuba and other new gas markets.

PJSC Gazprom joins efforts with Gazprom Energoholding LLC to continuously monitor global energy markets in order to find and implement new and efficient projects that can be developed in synergy with Gazprom Group's gas business.

**Plans.** The key strategic goal in power generation for 2018–2027 is to ensure a steady profit growth while making sure that electric power supply to consumers remains reliable. PJSC Gazprom's approach to developing power generation business consists in:

- maintaining its position as the largest company in the Russian power generation market, with presence in adjacent and international markets;
- being customer-focused and ensuring uninterrupted power supplies to consumers;
- financial sustainability: steady profit growth, debt burden reduction;
- promoting import substitution, giving preference to Russian-made equipment.

These strategic goals require solutions to:

- maintain adequate cash flow;
- improve operating efficiency and perform cost optimization;
- identify new sources of income;
- implement highly efficient investment projects.



*Efficiency gains achieved through reduction in operating costs correspond to shareholder interests in terms of profit increase and dividend yield.*

Searching for new income-generating opportunities is in the Company's interest as it will help maintain adequate cash flow. That can be achieved through Gazprom Energoholding development in core markets while also targeting adjacent segments.

**Electric power consumers, regional governments, regulators and shareholders**

are all interested in having a reliable power supply system. Responding to demands of these stakeholders, Gazprom Energoholding companies are planning to implement a series of investment projects with a view to replace obsolete equipment; introduce more efficient technological solutions; build power plants at the sites of Gazprom Group companies; employ Russian-made equipment and new technologies; cancel or discontinue projects which are not efficient from economic and/or social perspectives.

**CONSUMER  
RELATIONS:  
RESPONDING  
TO DEMAND**

**Gazprom Group's electric power buyers** in the wholesale power and capacity market are utility companies that sell power to consumers, as well as large industrial consumers.

**Gazprom Group heat consumers** are industrial companies and companies with a similar status, wholesale buyers, government-funded consumers, housing and utilities entities (including property management companies, property owners' associations/housing associations), and other consumers.

Gazprom Energoholding companies pursue a customer-focused heat supply policy as they adjust business processes of resource providers on the basis of identified key consumer requests and expectations with respect to their activities.

Gazprom Energoholding companies are making steps to improve quality and speed of customer service by upgrading their

customer service centers, introducing electronic document exchange with consumers, setting up consumer accounts and a call center. New versions of customer websites are being developed for consumers to receive all relevant information.

## 1.5. SUPPORT OF SMALL AND MEDIUM- SIZED BUSINESSES BY GAZPROM GROUP

Gazprom Group supports small and medium-sized enterprises (SMEs) by placing orders with them and providing simple and transparent access to procurement.

The aggregate value of goods, works and services contracted by Gazprom Group in 2017 from SMEs included in the Unified Register of Small and Medium-Sized Entities (<https://ofd.nalog.ru>) was RUB 193 billion,

including RUB 92 billion worth of contracts awarded in a competitive bidding process only open for SMEs.

In 2017, Gazprom Group had over 12,600 SME counterparties, which is more than half (59%) of the total number of Gazprom Group contractual counterparties providing goods, works and services.

### SME RELATIONS MANAGEMENT

*The Pilot Program for OJSC Gazprom Partnerships with Small and Medium-Sized Enterprises<sup>14</sup>*



In their relations with SMEs, Group companies are governed by laws of the Russian Federation, resolutions of the Government of the Russian Federation and those of PJSC Gazprom governing bodies, in particular:

- Federal Law No. 223-FZ, of July 18, 2011, "On Procurement of Goods, Works and Services by Certain Types of Legal Entities";
- Resolution No. 1352, of December 11, 2014, of the Government of the Russian Federation, adopted in the execution of the above, "On Special Conditions for Participation of Small and Medium-Sized Enterprises in Procurement of Goods, Works, Services by Certain Types of Legal Entities";

- Resolutions of the PJSC Gazprom Board of Directors passed in the execution of directives of the Government of the Russian Federation requiring broader SME access to procurement;
- Regulation on Procurement of Goods, Works and Services by PJSC Gazprom and Gazprom Group Companies.

Since 2010, Gazprom Group has been cooperating with SMEs on innovations under PJSC Gazprom's Innovative Development Program until 2025.

Gazprom's cooperation with SMEs is also regulated by the Pilot Program for OJSC Gazprom Partnerships with Small and Medium-Sized Enterprises, adopted in 2015.

<sup>14</sup> <http://www.gazprom.com/f/posts/13/997133/gazprom-business-partnership-program.pdf>.

## ORGANIZATIONAL ARRANGEMENTS FOR SME RELATIONS

Gazprom strives to make its cooperation with SMEs as effective as possible. To this end, all relevant processes have been designed in a way to ensure transparency and accessibility to the general business community.

Procurement procedures which are open for SME participation have been simplified to a maximum degree:

- procurement is an electronic process which takes place on the centralized Electronic Trading Platform (ETP-GPB) (<https://etpgpb.ru/en/>), which is integrated with the Unified Information System (UIS);
- bidders are requested to provide only minimal documentation;
- bidders are not required to provide financial security to participate in the competitive bidding process.

The List of Goods, Works and Services Procured by PJSC Gazprom from SMEs has been developed, approved and posted in the UIS.

In accordance with Resolution No. 1169<sup>15</sup>, of October 29, 2015, of the Government of the Russian Federation, draft procurement plans for goods, works and services adopted by PJSC Gazprom and Gazprom Group

companies, as defined in the resolution of the Russian Government, must be agreed with JSC "Federal Corporation for Development of Small- and Medium-Sized Enterprises" (JSC SME Corporation) via the UIS for the purpose of identification of the portion of procurement which will be open to SME bids.

Small procurement items (worth up to RUB 500,000) are sourced through a special electronic service within ETP-GPB ("Trading Portal for Low-Volume Procurement"), <https://etpgpb.ru/catalog/>. As of December 31, 2017, over 6,000 vendors had posted their price lists covering 240,000 stock items of goods (works, services); out of those vendors, there were over 5,400 SMEs.

On its official website, PJSC Gazprom maintains a register of participants in the SME Partnership Program.

Annual 2017 reports released by PJSC Gazprom and Gazprom Group companies on goods, works and service procured from SMEs are posted in the UIS ([www.zakupki.gov.ru](http://www.zakupki.gov.ru)), as prescribed by law, and on the official websites of PJSC Gazprom and respective Group companies.

<sup>15</sup> Resolution No. 1169, of October 29, 2015, of the Government of the Russian Federation, "On the Procedure for Performing Compliance Monitoring of Procurement Plans for Goods, Works, Services, Procurement Plans for Innovative Products, High-Technology Products, Pharmaceutical Products, Changes Introduced to Such Plans; Evaluation of Compliance of Drafts of Such Plans and Draft Amendments to Such Plans with the Requirements of Legislation of the Russian Federation Stipulating Participation of Small and Medium-Sized Enterprises in Procurement, on Procedures and Terms of Suspension of Such Plans Based on the Results of Such Monitoring and Evaluation."

## SME RELATIONS IN THE AREA OF INNOVATION

In 2015, Gazprom developed<sup>16</sup> and approved the Regulation on the One-Stop System for the introduction of innovative products of SMEs, and examination of innovative proposals by private individuals and legal entities.

The regulation applies to innovative and high-technology goods, works and services, R&D results (complete innovative products created by SMEs and offered to Gazprom Group) as well as innovative proposals received by PJSC Gazprom from individuals and legal entities (including SMEs) which have not advanced to the stage of a finished product (technology).

Proposals received from individuals and legal entities, including SMEs, are processed by a specially designed web portal of the One-Stop System ([www.oknogazprom.ru](http://www.oknogazprom.ru)), which serves the whole process of submission, from receipt of the proposal to the release of the final opinion.

The One-Stop System was designed to facilitate SME communications with the Company's departments and subsidiaries on product and service innovations, to reduce decision-making time, and to make the Company's innovation-related business processes more transparent and predictable.

The system is administered by the department in charge of innovative development and operated by Gazprom VNIIGAZ LLC. The administrator is responsible for the system set up, and provides technical support, while the operator keeps it running, processes bids, keeps bidders informed,

offers them advice, and refers them to relevant PJSC Gazprom departments and Group companies.

In 2017, the One-Stop System processed 67 entries by SMEs and individuals. The entries were related to potential application of innovative products or innovative proposals at PJSC Gazprom facilities.



*In October 2017, PJSC Gazprom and the Foundation for Assistance to Small Innovative Enterprises (FASIE) signed a Research and Technology Cooperation and Partnership Agreement.*

*PJSC Gazprom and FASIE will cooperate to support small businesses that develop innovative products, which meet the Company's technology priorities, specifically in the areas of hydrocarbon field prospecting and exploration, natural gas production, processing, marketing and consumption, and technology solutions for more efficient gas storage and transportation.*

*Pursuant to the agreement, the Company will provide consultancy support for research and development activities, will participate in the implementation of current FASIE programs and will help identify new ones. FASIE, in turn, will assist in the implementation of innovation projects prioritized by PJSC Gazprom and will help integrate small innovative hi-tech companies into the competitive world of Company suppliers.*

<sup>16</sup> Pursuant to directives of the Government of the Russian Federation and relevant resolutions of the OJSC Gazprom Board of Directors: No. 2324 of April 8, 2014, and No. 2481 of February 4, 2015, "On Broadening Access to Procurement for Small and Medium-Sized Enterprises."

## 1.6. GAZPROM'S PRODUCTION INNOVATIONS

RUB **8.2** billion  
is Gazprom's expenses on research and development and pre-investment studies in 2017

RUB **12.3** billion  
is the economic benefit from R&D application by subsidiaries in 2017

Innovation constitutes one of the priorities for Gazprom Group: Innovative solutions enable Group companies to efficiently produce, transport and process hydrocarbons while saving energy and protecting the environment.

Innovation and R&D activities at PJSC Gazprom are managed by the department responsible for long-term development. The department reports directly to the Chairman of the PJSC Gazprom Management Committee, who also chairs the Research and Technology Board.

### Innovation Management Organizational Chart



Long-term planning and management of innovation activities of PJSC Gazprom and its subsidiaries are regulated by the Innovative Development Program of PJSC Gazprom extending to 2025. The main purpose of the program is to support continuous technological and organizational improvement

of PJSC Gazprom for the purpose of maintaining its position as a global energy company and reliable energy supplier. The program defines priority areas of technology improvement, namely technology priorities, main R&D areas, key innovation projects, and R&D funding guidelines.

**Efficiency indicators of the PJSC Gazprom Innovative Development Program, 2014–2017**

Efficiency indicator	2014	2015	2016	2017
Operating cost reduction (recorded as saving) from innovative technology (% to the baseline year 2015) <sup>(1)</sup>	–	*	31	42
Reduction in specific auxiliary fuel and energy consumption and loss (% to the baseline year 2014)	*	14.7	19.9	8.3
Reduction in specific greenhouse gas emissions in CO <sub>2</sub> equivalent (% to the baseline year 2014)	*	9.6	14.0	8.7

\* Baseline year for the indicator calculation.

<sup>(1)</sup> This indicator is included in the 2016 Innovative Development Program and was not calculated for the previous period.

Comprehensive R&D programs combine organizational and technologic activities, which come under the same focus area across Gazprom Group. Implementation of those programs produces the most tangible benefits for Gazprom. Such programs include, in particular:

- energy saving and energy efficiency improvement programs of PJSC Gazprom;
- comprehensive programs for reconstruction and retrofit of gas-producing facilities;

- comprehensive programs for reconstruction and retrofit of gas transmission and UGS facilities;
- comprehensive programs for reconstruction and retrofit of gas and liquid hydrocarbon processing.

Gazprom attaches great importance to completion of R&D activities and pre-investment feasibility studies, and provides significant funding for these purposes, which amounted to RUB 8.2 billion in 2017.

**R&D investments by PJSC Gazprom, 2014–2017, RUB million**



- Yearly R&D investments
- Yearly economic benefit from the application of R&D results by subsidiaries

### Selected innovative solutions applied by Gazprom in 2017

<b>Geologic Exploration</b>	<ul style="list-style-type: none"> <li>• Structural and material modeling of the main types of terrigenous reservoir rock to refine hydrodynamic models of production horizons at the Chayandinskoye OGCF.</li> <li>• Digital 3D geomechanical models of Sakhalin II fields.</li> <li>• Technology for integrated interpretation of geophysical well data in structurally complex reservoirs of different oil and gas plays within the territory of Yamal, accounting for a new generation of logging tools, lithofacies analysis and updated petrophysical data.</li> </ul>
<b>Field Development</b>	<ul style="list-style-type: none"> <li>• With a view to achieve more efficient development of helium-containing fields in Eastern Siberia and the Far East, a multi-year experimental effort was started to create a membrane technology to recover helium from natural gas. The project has been completed successfully. The technology will be used in the development of Chayandinskoye OGCF resources for isolation of helium concentrate, to be stored for the long term in the productive reservoir. In 2017, PJSC Gazprom launched a project to build a membrane helium concentrate recovery unit at the Chayandinskoye OGCF, with the annual design capacity of 32 bcm. Technical and process design details were elaborated for the construction of production wells at the Kovyktinskoye field.</li> <li>• A next-generation separator has been developed for the treatment of gas from Neocomian-Jurassic formations in Yamal Peninsula fields. As the equipment is put into operation, it will help reduce costs associated with the manufacturing, transportation and installation of process equipment, procurement and delivery of consumables.</li> </ul>
<b>Field Operation</b>	<ul style="list-style-type: none"> <li>• A project to develop domestic process liquids was completed in 2017. Its purpose was to enhance hydrocarbon recovery from the Urengoykoye field's gas condensate and oil wells using hydraulic fracturing.</li> <li>• A unique, small-size multifinger imaging tool was designed in 2017 in response to PJSC Gazprom's commission in order to enhance condition monitoring of operational casing and piping installed at production fields and UGS facilities, and to prevent accidents.</li> </ul>
<b>Transmission</b>	<ul style="list-style-type: none"> <li>• An innovative project is underway to retrofit standard GCUs for higher productivity and energy efficiency, to be achieved with the technology for adiabatic hydrogen production from methane with water vapor injection.</li> <li>• A multistage physical model designed to observe stress-corrosion cracking affecting gas trunklines has been designed. The model uses established stress-corrosion development or termination patterns, depending on steel properties, operating parameters and environment factors. By applying the model, one can build more accurate projections of the speed of stress-corrosion defect development and produce a more reliable estimate of the hazard degree.</li> <li>• An all-Russian high-capacity modular mobile compressor driven by a gas turbine with productivity of 60,000 cubic meters per hour has been made. The use of mobile compressors will prevent outgassing when a gas trunk pipeline is under repair. These innovations are aimed to ensure reliable, uninterrupted and efficient operation of the UGSS.</li> </ul>

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**Oil Business**

- In 2017, the project aimed to create local technologies and equipment for the development of the Bazhenov suite was given a national status, which confirms its significance for the national economy and for the oil and gas sector. Successful implementation will provide more opportunity for developing new reserves, thereby enhancing the tax base, creating up to 10,000 jobs in the machine-building industry and up to 6,000 jobs in the oilfield service segment, while also meeting import substitution targets for technology and equipment. Importantly, the resulting technology solutions and knowledge will be applicable to developing other hard-to-recover reserves discovered in Russia. Within the framework of the national project, a research, a field trial and a production program will be implemented by the Bazhenov Technology Center, a specialized Gazprom Neft subsidiary, in the Palyanovskaya test area. A total of 111 horizontal wells will be drilled at Palyanovskaya to perform an operational test of a multistage hydraulic fracturing technology. During the 2017 field trial, the following technologies and equipment were put to test, among others:
    - Russian equivalent of elastic grout;
    - Technology for smart cluster perforation and composite shut-off plug installation;
    - Hydrocarbon-based drilling mud with flat rheology;
    - Russian-made remote measuring equipment with advanced LWD (Logging While Drilling) tools used for unconventional reservoir operations.
- 

On April 20, 2017, the Company put into effect the new R&D Organizational Procedure Applicable at PJSC Gazprom and Its Subsidiaries, introducing the most drastic change to R&D arrangements over the past decade. The new procedure will inherit the best features of the previous system but will also address more recent challenges.

Since 2017, Gazprom Group has been implementing its Research and Development Program, which is based upon a standard set of rules and principles applying to the parent company as well as its subsidiaries.

R&D requests from PJSC Gazprom departments and subsidiaries are collected

by the standing R&D Commission whose mission is to review each request and determine its relevance. In 2017, the commission was augmented by a pool of R&D experts mobilized to make independent reviews of R&D requests. The expert team includes some of the best specialists and scientists with extensive research, technology and production experience in the gas sector and applied science disciplines.

As another improvement in effect from 2017, R&D customers may now submit their requests at any time, rather than during a deadline-limited annual campaign, as was the practice before.

In addition, a Unified System for Subsidiaries' Innovation Management was established and put into operation in 2017. Its purpose is to establish uniform corporate standards for managing innovation activities at subsidiary level.

Application of innovative solutions at Gazprom is also regulated by the Program signed by PJSC Gazprom and RUSNANO with the purpose of stimulating demand for innovative products, including nanotech ones, in the gas industry. Russian manufacturers active in the gas industry have also joined the Program. Now their mission is to launch batch production of specialized nanotechnology-based products that can be used for a variety of purposes, including construction of gas pipelines, CS's and extraction units, pipeline repair and auxiliary power supply for Gazprom facilities.

Gazprom is improving its corporate intellectual property management system. In particular, PJSC Gazprom's Patent Strategy extending through to 2025 is currently being drafted. With the new strategy in place, the Company will optimize its legal efforts to protect its own

engineering and technological solutions.

Starting from 2017, the Company has been implementing another program of research and development activities executed by research institutes of the Russian Academy of Sciences for the benefit of PJSC Gazprom.

Working closely with Russian universities is another important aspect of the Innovative Development Program. PJSC Gazprom and its subsidiaries have access to one of the largest networks of Anchor Universities and Local Partner Universities. Collaboration with the academia is based upon the principles of continuity, consistency and innovative focus. These principles were written into the Conceptual Framework for Collaboration with Universities and the Regulation on Collaboration with Anchor Universities. The latter are given assistance on a systematic basis in drafting their programs.

The Anchor University status enables an institution to put together a targeted R&D program for the benefit of Gazprom, and then enter into contracts with the Company outside the regular competitive bidding procedure.

As of  
December 31, 2017,  
**12** higher  
education institutions  
had the Anchor  
University status.

## 1.7. IMPORT SUBSTITUTION

**99.4%**

is the share of domestic products in centralized supplies to Gazprom in 2017

Gazprom Group makes its contribution to Russia's economic development by encouraging production by domestic companies. Gazprom's import substitution policy gives rise not only to new production facilities in Russia but also to new industries. Industries, such as iron and steel, as well as manufacturers supplying pipes and gas

RUB **11.8** billion is the overall economic benefit from Gazprom Group's import substitution activities in 2016 and 2017

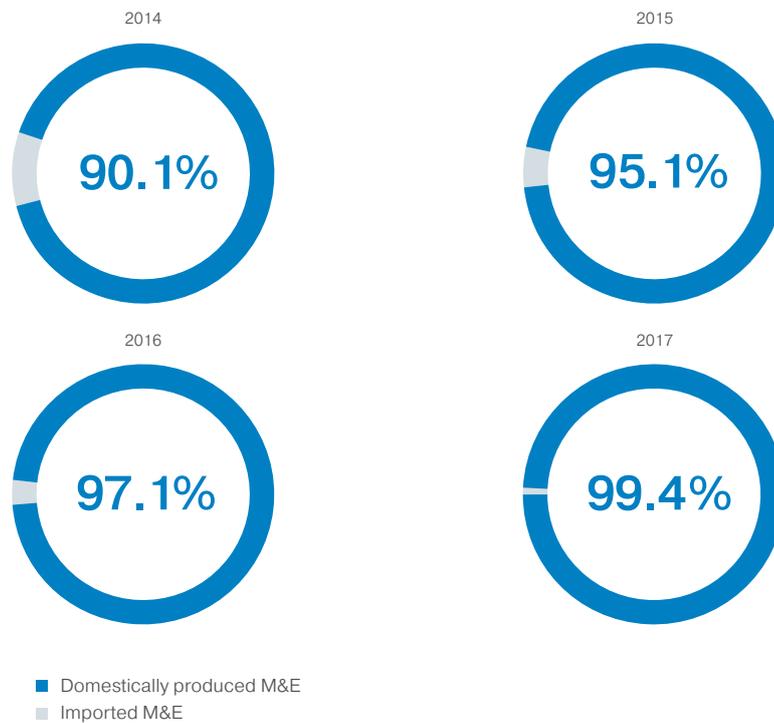
compressors, are experiencing economic recovery.

Implementation of the import substitution policy addresses the risks associated with the use of foreign-made equipment and technologies amidst economic sanctions. Gazprom mitigates those risks by increasing

the share of domestic products in the overall procurement volumes. In particular, in 2017, in procurement of materials and equipment (M&E), the share of Russian-made products was as high as 99.4%. The overall economic benefit from import substitution activities which targeted facilities of PJSC Gazprom, its subsidiaries and affiliates amounted to RUB 11.8 billion in 2016 and 2017.

Gazprom prioritizes import-substituting technologies for gas compressor production, equipment and technologies for offshore operations, LNG production equipment and technology, high-efficiency heat exchangers, reactants, catalysts, and sorbents.

Share of domestically produced M&E in overall procurement by Gazprom Komplektatsiya LLC, 2014–2017, %



Share of domestically produced M&E in overall procurement by Gazprom Komplektatsiya LLC, 2014–2017, RUB billion

	2014	2015	2016	2017
<b>TOTAL, incl.:</b>	<b>267.7</b>	<b>344.1</b>	<b>221.5</b>	<b>204.4</b>
domestically produced M&E	241.2	327.2	215.1	203.2
imported M&E	26.5	16.9	6.4	1.2



**Gazprom recommends Russian manufacturers to master the following technologies and equipment procured by the Group which are currently imported:**

- subsea hydrocarbon production technology;
- implementation of medium- and large-scale LNG production projects;
- modern high-power drive gas turbine engine;
- membrane technologies for gas separation;
- modern software products capable of modeling non-stationary processes for multiphase environments.

**IMPORT  
SUBSTITUTION  
MANAGEMENT**

The use of domestically produced technologies and products by Gazprom is regulated by the following documents:

- Order No. 495, of August 24, 2015, "On Uniform Technical Policy in the Utilization of Materials and Equipment and Substitution of Their Imports when Performing Production and Investment Activities" (as amended by Order No. 179 of April 3, 2017);
- Order No. 343, of May 23, 2017, "On the Approval of Procedure for Determining Country of Origin of Industrial Products Used for the Purposes of PJSC Gazprom, its Subsidiaries and Entities";
- Order No. 397, of June 8, 2017, "On Amending PJSC Gazprom Order No. 178 of March 31 2016, 'On the Approval of Membership of the Managing Committee for Import Substitution and Production Localization'";
- The Board of Directors' Resolution No. 2927, of April 12, 2017, "On the Progress with Development and Implementation of Import Substitution Plans";
- The Board of Directors' Resolution No. 3039, of November 1, 2017, "On Amending the Regulation on Procurement of Goods, Works, Services by PJSC Gazprom and Gazprom Group Companies".

**QUALITY  
MANAGEMENT**

PJSC Gazprom sets high quality standards for the products it receives from its vendors and suppliers. State-of-the-art and high-quality equipment will increase production efficiency while avoiding accidents and reducing environmental impact.

PJSC Gazprom has implemented and certified its Quality Management System (QMS) with the overall purpose of improving the Company's main business processes. The QMS of PJSC Gazprom conforms to the ISO 9001:2015 international standard. In the course of QMS implementation, the Company developed relevant documents, which contain requirements with respect to elements, organizational structure and compliance with QMS procedures.

Protection from dishonest suppliers relies on the Clearance System, with differentiated approach to quality assessment and product access to PJSC Gazprom facilities. The Company has identified and standardized six product groups according to the degree of their influence on the functioning of a particular production facility where the product is intended to be used. The complexity of the manufacturing process involved in its production is also taken into consideration.

The first two groups include the most vital, hi-tech equipment, which has a direct impact on reliability and safety of key production processes. The scope of quality control procedures assigned to each product group

depends on its criticality for the reliability and safety of the core processes.<sup>17</sup>

The Clearance System involves:

- validation of the products and the manufacturer's management systems for compliance with PJSC Gazprom requirements, as formalized in both national and corporate standards;
- on-site inspections of manufacturing processes and/or finished products before they are shipped to PJSC Gazprom production sites.

Clearance at these two stages is confirmed by appropriate certificates and acceptance deeds.

When assessing compliance of materials and equipment with its standards, PJSC Gazprom applies INTERGAZCERT, a voluntary certification system, which currently comprises 14 certification agencies and 74 test laboratories. INTERGAZCERT operates under

a single legal framework, which defines rules and approaches with regard to institutional and legal regulation, work processes and decision-making. It also sets participation criteria. All the terms and procedures are set out in the system's 33 fundamental documents. Special rules and procedures for compliance assessment in the form of certification may be adopted as required. INTERGAZCERT covers many homogeneous product groups, from oil and natural gas to a broad spectrum of oil and gas machinery and equipment, automation aids and software.

In addition, Gazprom has created a centralized M&E registry as a continuously updated source of information on the types of equipment and materials, which are acceptable for use at Gazprom sites and facilities and by manufacturing companies. It also records any cases of non-compliance in M&E supplies. In the future, the register will be integrated with information management systems linked to design and M&E demand assessment.

## WHO DOES GAZPROM GROUP PROCURE FROM?

*In 2017, Gazprom Komplektatsiya LLC started delivering to Gazprom facilities 530-mm to 1,420-mm pipes manufactured by JSC Zagorsk Pipe Plant.*

The Company is focused on long-term cooperation with Russian manufacturers, to the benefit of national economic development. Gazprom Group awards long-term contracts for batch production, delivery, servicing, repair and maintenance of import-substituting products included in the List of Priority Products, in the amounts equal to guaranteed future purchases, for the purpose of further technological development of Gazprom.

In 2017, PJSC Gazprom and Gazprom Komplektatsiya LLC signed, and proceeded to implement eight long-term agreements

on import substitution of the following products: casing and tubing pipes fit to operate under severe conditions, special purpose ball valves, anti-surge and control valves, full assembly modular compressor units, ASM and ASM-VS silica gel, longitudinal welded steel pipes and accessories for submerged and onshore field pipelines, GCUs based on reciprocating compressor units and equipment for offshore production system infrastructure development.

<sup>17</sup> With respect to pipes and accessories as a vital materiel category, acceptance decisions are made by Gazprom's permanent Commission on Acceptance of New Types of Pipe Products.

## WHAT DOES GAZPROM GROUP PROCURE?



Pipes constitute the largest part of Gazprom's material procurement. In 2017, Gazprom Komplektatsiya LLC procured RUB 117.7 billion worth of pipes. Gazprom received 922,300 tons of pipes, including 883,800 tons of large diameter pipes and over 36,300 units of accessories. In 2017, Russian manufacturers supplied 100% of pipes and accessories required by PJSC Gazprom, including 32 capital construction sites.

The second largest procurement item is gas pumping equipment and accessories. In 2017, Gazprom Komplektatsiya LLC

procured 19 gas compressor units with gas turbines and rotary pumps from Russian manufacturers.

Over 600,000 sets of electrical equipment, communication devices and instrumentation, over 3,600 km of cables were shipped to Gazprom facilities. As many as 56 capital construction projects received their full range of supplies under the PJSC Gazprom Investment Program, with the value exceeding RUB 12.2 billion (incl. VAT).

The Company also procures industrial software and services.

## WHY DOES GAZPROM GROUP PROCURE?

In 2017, products supplied by Russian manufacturers were delivered for the purposes of construction of the Power of Siberia gas trunk pipeline system, construction of Chayandinskoye gas field facilities, construction of second strings of the gas trunk pipelines Bovanenkovo – Ukhta 2 and Ukhta – Torzhok 2, construction of field facilities on Cenomanian-Aptian deposits of the Bovanenkovskoye OGCF,

and implementation of gas infrastructure expansion projects in the Leningrad and Kaliningrad Regions, and other projects covered by the PJSC Gazprom Investment Program.

The full range of supplies was timely furnished to facilities supporting new fixed capital commissioning, as envisaged by the 2017 PJSC Gazprom Investment Program.

## HOW DOES GAZPROM GROUP WORK WITH DOMESTIC BUSINESSES?

*The list can  
be accessed  
here:<sup>18</sup>*



Striving to make its relations with domestic vendors and suppliers highly transparent, simple and unhindered, the Company has released a List of Vital Products Targeted for Import Substitution and Localization on its website. The list also includes services, equipment and software.

The "Procurement" section of the PJSC Gazprom website also provides a ready-made supplier questionnaire form, a standard letter form requesting the enterprise questionnaire form, and description of the methodology used to pre-assess supplier capacity to manufacture products for PJSC Gazprom's needs. Those features were designed to simplify supplier relations as much as possible.

<sup>18</sup> [http://www.gazprom.com/f/posts/33/761787/2017.03.15\\_perechen\\_2016.pdf](http://www.gazprom.com/f/posts/33/761787/2017.03.15_perechen_2016.pdf).



**St. Petersburg industrial clusters  
to produce import-substituting products**

*In 2017, Alexey Miller, Chairman of the PJSC Gazprom Management Committee, and Georgy Poltavchenko, Governor of St. Petersburg, signed two cooperation agreements. The purpose of the documents is to establish two St. Petersburg-based industrial clusters bringing together production, research, design and educational entities of the North-Western Federal District. One cluster will specialize in natural gas liquefaction equipment and technology, while the other will focus on hi-tech solutions for development of resources of the World Ocean and the Arctic, including equipment for subsea hydrocarbon production systems. The agreements will help secure new import-substituting products and professional services for Gazprom, promote technological development of manufacturers in the North-Western Federal District, and contribute to staff capacity-building. In addition, the clusters will draw additional investments into the economy of St. Petersburg.*

Roadmaps have proven to be an effective tool supporting Gazprom's systematic import substitution efforts. They add dynamism to regional research and industrial organizations, making hi-tech competitive products available to the Company.

Gazprom Group has been applying the roadmap methodology since 2013 to projects aimed to promote the use of hi-tech and, in particular, import-substituting products and services offered by suppliers in different constituent territories of the Russian Federation, and to enhance their quality and competitiveness.

In 2017, Russia's 16 regions opted for this cooperation model, namely the North Caucasus Federal District, St. Petersburg, the Republic of Bashkortostan, the Republic of Mordovia, the Republic of Tatarstan, the Perm Territory, and Vladimir, Voronezh, Irkutsk, Kaluga, Nizhny Novgorod, Omsk, Tomsk, Tula, Tyumen and Chelyabinsk Regions.



## 2. ENVIRONMENT: SUSTAINABLE USE OF NATURAL RESOURCES

One of key missions of Gazprom Group is to preserve a balance between production development and environmental safety. Production, transportation, storage and processing of hydrocarbons, heat and power generation, expansion of the gas supply network in the country's regions all involve environmental risks. Solicitous of the planet's future, Gazprom makes efforts to minimize those risks.

Gazprom Group's sustainable use of natural resources is based on the principles of harm prevention, cleaning-up and damage control. The Company is engaged in large-scale efforts to reduce air emissions, to revive biodiversity and to reclaim areas disturbed by production, to clean up and to cut water consumption.

Gazprom Group respects people's rights to a clean environment and organizes its operations with due regard for nature and local communities.

### 2.1. THE YEAR 2017 IS A YEAR OF ECOLOGY AT GAZPROM

**682,000** people took part  
in Gazprom's environment-related events

RUB **27** billion was allocated  
on environment-related events

**19,100** environment-related events were  
organized by Gazprom Group companies

The year 2017 was declared a Year of Ecology at Gazprom. An extensive program of events was compiled to be run in all regions where Gazprom Group carries out its operations, including abroad – in Brazil, Belgium, Qatar, Iran. During the year, Gazprom Group and its affiliated companies arranged over 19,000 events under the slogan "Conserving Nature," from adopting innovative industrial technologies to outreach and awareness-raising campaigns.

**In 2017, Gazprom Group organized:**



3,084 events aimed at mitigating the negative impact from production operations on the environment;



6,199 events to keep a clean environment in regions of operations;



9,867 environmental awareness and dissemination events.

**VOLUNTARY  
ENVIRONMENTAL  
RESPONSIBILITY**



*Within the framework of the Year of Ecology, over 682,000 trees were planted with Gazprom Group's involvement in 2017, 53 million valuable baby fish were released into water bodies, aid was provided to 80 specially protected areas. 682,000 people took part in environmental campaigns: The Company's employees and their family members, schoolchildren, students and members of local NGOs.*

Gazprom's environmental events brought together different groups of the Company's stakeholders. Within the framework of those projects, Gazprom employees, environmental activists, regional administrators, reporters and local communities were trying to achieve a common goal – to restore biodiversity in cities, towns, other inhabited localities, natural reserves.

Within the framework of the Year of Ecology, 716 environmental forums, conferences, meetings at federal and regional levels were held, which were attended by over 23,300 people. More than 700 of various trade fairs, exhibitions and presentations were organized; they were dedicated to the World Water, Earth, Bird Days, Environmentalist Day, Car-Free Day, Earth Hour, which saw about 106,000 people taking part in them.

For instance, a conference entitled "Environmental Protection and Safety in the North Caucasus Federal District and Southern Federal District" was held in Stavropol in March 2017. Senior executives of Gazprom Transgaz Stavropol LLC noted that the biggest environmental effect in the region was achieved as a result of renovation of CS's, replacement and upgrade

of equipment at other industrial facilities. 12,000 tons of methane were prevented from being released into the air, nitrogen oxide emissions and the amount of industrial waste removed for burial were reduced.

JSC Gazprom Space Systems also raises environmental awareness among its employees and the general public. The company was awarded a prize "For the initiative and an important contribution to environmental protection" as an active participant of the nationwide environmental voluntary clean-up event Green Spring 2017. The award was bestowed by the Vernadsky Nongovernmental Ecological Foundation jointly with the Russian Geographic Society, with support from the State Duma Committee for Ecology and Environmental Protection, the Ministry of Natural Resources and Environment of the Russian Federation and some environmental NGOs.

Gazprom Group companies regularly organize events to restore biological resources. The companies' leadership believe preservation and augmentation of natural wealth to be an important link of the environmental strategy. For instance, within the framework of the Year of Ecology,



workers of Gazprom Dobycha Krasnodar LLC released about 80,000 European carp fry into the Azov Sea. The campaign was a major step to restore commercial fish stock.

500,000 northern whitefish fry were released by employees of Gazprom Transgaz Surgut LLC into the Irtysh River in the neighborhood of the village of Uvat (Tyumen Region). Thus, the company complied with the requirements of federal statutes prescribing that damage caused to aquatic bioresources and their natural habitat by a gas transmission enterprise in the course of its operations be repaired.

Those moves were a remedy to reduce a negative impact on water bodies after the completion of construction and repair work on gas pipelines in Gazprom Group's regions of presence.

The Novosibirsk Gas Pipeline Operation Center, a branch of Gazprom Transgaz Tomsk LLC, took care of the avian dwellers. During the Year of Ecology, special bird protective devices were installed on power transmission pylons of the lines supplying electric power to the gas trunk pipelines Omsk – Novosibirsk and Novosibirsk – Barnaul. The devices protect birds in the event of their collision with high-voltage wires. In 2017, Novosibirsk gas specialists installed 947 bird protective devices. Particular attention was given to the Kudryashov Wood, a nature reserve of regional importance and a specially protected natural area. 222 devices were installed there on 74 power transmission pylons.

In Caucasus Mineral Waters, a specially protected eco-resort region, Gazprom Transgaz Stavropol LLC restored the slope of the unique Kinzhal Mountain by planting over 1,500 young plants of the dwarf apricot tree and ash-tree. The event Plant a Tree – Save a Unique Region engaged not only the company's employees but also officials of the town administration, representatives of the housing maintenance and utilities sector, workers of the Beshtaugorsky forestry administration and forest farm, schoolchildren and teachers, reporters from major regional media, local residents.

10,000 young pines were planted across 4.5 hectares in the Priezorsky District, Leningrad Region. It was Gazprom Transgaz Saint Petersburg LLC that organized the Green Marathon, with support from the Executive Office and the United Trade Union Organization. The Vernadsky Nongovernmental Ecological Foundation and the Clean Vuoksa volunteer movement were partners of the campaign.

About 21,000 young plants of various tree species were planted by employees of Gazprom Transgaz Tomsk LLC within the framework of the Year of Ecology. Preservation of the region's forest potential is a tradition that the company has been keeping for a few decades now. In total, the company's employees revived the forest and planted trees and shrubs across an area of a few dozens of hectares.

In 2017, Gazprom Dobycha Orenburg LLC launched Green School, a sponsored project, which is aimed at cultivating environmental culture, running beautification and vegetation campaigns, disseminating knowledge on environmental protection, efficient use of resources. Four pecuniary grants on development of environmental initiatives will be allocated to educational institutions that have been most active in environmental efforts. In total, Gazprom Dobycha Orenburg LLC completed about 100 environmental campaigns over the year.

Last year, PJSC Gazprom subsidiaries organized 19,150 scheduled and additional events for a total amount of RUB 27,035 million.

The principal results of voluntary environmental activities during the Year of Ecology:

- 14,208 hectares of land were cleaned from waste and beautified;
- 682,677 young trees and bushes were planted;
- 20,807 tons of waste were removed;
- 329 water bodies were rehabilitated;
- 53,008,060 specimens of juvenile fish were grown and released into water bodies.

**ENERGY SAVING  
FESTIVAL  
#VMESTEYARCHE**

In a street in downtown Saratov, Gazprom Transgaz Saratov LLC organized a “boulevard of advanced energy efficient technologies.” The city residents could learn about the enterprise’s operations aimed at improving energy efficiency based on the use of innovative technologies and equipment, and also about prospective projects that help increase energy saving at production facilities. Energy-saving technologies used at the enterprise are not only efficient economically speaking, but are also warranted by environmental preservation.

In Perm, Gazprom Transgaz Tchaikovsky LLC also took part in the #VmesteYarche festival. The company presented CNG-powered motor vehicles and special machinery working at the enterprise. Additionally, an exhibition was put on display to showcase Gazprom Transgaz Tchaikovsky LLC and events it organizes within the framework of the Year of Ecology announced at PJSC Gazprom. At the festival, a wit and humor competition was organized under the slogan “The generation of the energy efficient 2030.”

Gazprom Transgaz Saint Petersburg LLC was on the list of organizers of the #VmesteYarche festival in the city on the Neva River. The company also took part in the exhibition “Boulevard of Energy Efficient Technologies.” Its specialists displayed MDG-20, a micro-turbo-expanding generator designed within the framework of an R&D program; its operation is based on conversion of the potential energy of the natural gas whose pressure is reduced at gas distribution stations into electric power energy. Application of that technology will not only help improve reliability of energy supply of gas distribution stations and cut natural gas transportation costs, but also mitigate



The #VmesteYarche [#TogetherBrighter] festival is sponsored by the Ministry of Energy of the Russian Federation, Ministry of Education of the Russian Federation, Federal Agency for Youth Affairs, Support Fund for the Reform of the Housing and Utilities Sector (a state corporation), Ministry of Culture of the Russian Federation, Roscongress Foundation. The core idea of the festival is that everyone at home, at work or in public places can see and give examples of solicitous attitude to energy and nature. Events of the festival are organized in 80 regions across the country. Traditionally, Gazprom Group is taking part in the festival, raising public awareness of specific steps that Group companies are undertaking in energy saving.

the adverse impact on the environment, as electric power is generated without combusting any extra fuel. For that solution, Gazprom Transgaz Saint Petersburg LLC won the regional round of the 4<sup>th</sup> nationwide competition of completed projects in energy saving and energy efficiency improvement (ENES-2017) in the category “Leader of adopting best available energy saving and energy efficiency enhancement technologies by energy industry enterprises.”

## ENVIRONMENTAL ACHIEVEMENTS OF 2017

PJSC Gazprom's efforts in making production greener and in organizing events of the Year of Ecology received accolades from supreme authorities of the Russian Federation. In a letter of commendation addressed to the PJSC Gazprom team, Vladimir Putin, President of the Russian Federation, praised highly the Company's active involvement in organizing and running events within the framework of the Year of Ecology in the Russian Federation.

For its important contribution to the mitigation of negative impact on the environment, PJSC Gazprom received a Merit Certificate from the Federation Council of the Federal Assembly of the Russian Federation.

In a ranking of the Carbon Disclosure Project (CDP), an international organization, Gazprom was for the sixth time named the best Russian energy company in terms of corporate climate reporting and greenhouse gas reduction strategy.

In 2017, PJSC Gazprom was ranked among the leaders of the Environmental Management and Disclosure categories in the Environmental Responsibility Rating of Oil and Gas Companies in Russia.

In 2017, Gazprom again topped the rating of environmental activities of Russian companies of the fuel-and-energy sector and of the iron-and-steel industry prepared by the Live Planet television channel.

In December 2017, best environmental projects received the V.I. Vernadsky National Environmental Award. The panel reviewed 200 works from 50 regions. Among the 26 winners, there were five projects completed by Gazprom Group companies: Gazprom Transgaz Tchaikovsky LLC, Gazprom Transgaz Stavropol LLC, Gazprom Dobycha Yamburg LLC, Gazprom Transgaz Yugorsk LLC, and Gazprom Transgaz Ukhta LLC.



**Gazprom Transgaz Tchaikovsky LLC came out the winner in the category "Innovative eco-efficient technologies in the industry and energy sector"; the project title: A System of Selective Catalytic Reduction for the Treatment of Emissions of Gas Turbines.**



**Gazprom Transgaz Stavropol LLC received a prize for its project Accessibility of Stavropol Territory Natural Heritage Sites to People with Disabilities (a 3D Tour Around the State Natural Reserve Strizhament), in the category "Environmental education in the interests of sustainable development."**



**Gazprom Dobycha Yamburg LLC won in the category "Environment mirrored by the media" with the project Unknown Yamal – At World's End.**



**Gazprom Transgaz Ukhta LLC's project Comprehensive Beautification of the Riverfront of the Chibiu in Ukhta won in the category "Social and environmental initiatives."**



**Gazprom Transgaz Yugorsk LLC's project To the Centenary of Russia's Natural Reserve System was awarded a prize in the category "Environment mirrored by the media."**

Gazprom Transgaz Stavropol LLC won the Global Eco Brand Award, an international environmental prize, in 2017. The company received an honorary certificate for its contribution to the preservation of friendly environment, successful rollout of highly efficient methods of environmental management and large-scale work aimed at raising the level of environmental culture of the corporate audience and local communities.



*The Global Eco Brand Award was founded by the Living Planet international environmental movement in 2012. It is aimed to identify and encourage strong achievers among members of the scientific, artistic, educational communities, representatives of enterprises, organizations, cities, constituent territories of the Russian Federation in preservation of clean environment. One distinctive feature of the award is that it is conferred for continued efforts in environmental preservation and the most significant achievements in those endeavors.*

In 2017, the Rzhev Gas Pipeline Operation Center of Gazprom Transgaz Saint Petersburg LLC was awarded a letter of commendation from the Tver Region Directorate of the Federal Service for Supervision of Natural Resources "For responsible policy in environmental safety, compliance with environmental legislation, contribution to environmental protection." Based on the results of inspections, the Rzhev Gas Pipeline Operation Center was among the top three entities in the Tver Region, out of 200, which successfully completed the verification of compliance with requirements of environmental legislation.

For their contribution to the preservation of nature and environment, five subsidiaries received letters of commendation from PJSC Gazprom based on their performance in the Year of Ecology in 2017: PJSC Gazprom Neft, Gazprom Dobycha Nadym LLC, Gazprom Dobycha Urengoy LLC, Gazprom Transgaz Kazan LLC, Gazprom Transgaz Yugorsk LLC.

## 2.2. ENVIRONMENTAL SUSTAINABILITY MANAGEMENT

Environmental safety of industrial operations is a priority of Gazprom Group. A systemic and rational approach to environmental protection is a rule the Company has adhered to for many years.

The commitments assumed by the Company are the foundation of long-term strategic goals in environmental protection. Those commitments are laid out in the Environmental Policy, and not a single investment project

can be launched if it is not compliant with that policy. The provisions of the policy apply not only to Group companies but also to everyone involved in collaboration with them, i.e. partners, contractors and counterparties.

All management levels of the Company, from the Board of Directors of PJSC Gazprom to branches and industrial facilities of subsidiaries, are covered by a common Environmental Management System (EMS).

## ENVIRONMENTAL POLICY

PJSC Gazprom is the first Russian company of the oil and gas sector to develop its own Environmental Policy. It was first adopted in 1995, and later it was amended, as Gazprom Group was enlarging its operations and legislation was modified. In 2015, a new version of the Environmental Policy was adopted.

The Environmental Policy is Gazprom Group's key document governing its environmental sustainability activities. Its provisions are compliant with the Constitution of the Russian Federation, federal laws, and other statutes and regulations of the Russian Federation, international legal documents regulating environmental protection and sustainable use of natural resources. When new projects for hydrocarbon exploration, production, processing and transportation are designed at Gazprom Group, the Environmental Policy is necessarily taken into account.

According to the Environmental Policy, PJSC Gazprom's strategy of becoming the leader among global energy companies implies a responsible attitude toward preserving a healthy environment for the present and future generations. The Environmental Policy outlines steps undertaken by the Company to ensure environmental safety in development of hydrocarbon fields and to minimize risks of negative impact on the environment, including natural sites with increased vulnerability and specially protected natural areas.

What are the commitments assumed by Gazprom when it follows its Environmental Policy?

- To guarantee compliance with the environmental standards and requirements set by the Russian laws and international regulations related to environmental protection, as well as the laws of the countries where the Company runs its business.

- To reduce adverse environmental impacts, ensure resource management, and do its best to preserve the climate and biodiversity, and make up for possible environmental damage.
- To employ a proactive approach in preventing adverse environmental impacts, which means prioritizing preventive actions over actions aimed at eliminating consequences of such impacts.
- To guarantee compliance with environmental safety standards and requirements when developing hydrocarbon fields on the continental shelf and in the Russian Arctic.
- To enhance energy efficiency of operations and take steps to reduce greenhouse gas emissions.
- To provide for the mitigation of environmental risks at all stages of investment projects, including with regard to natural sites with increased vulnerability and specially protected natural areas.
- To take into account interests of indigenous minorities and their rights to maintaining traditional lifestyles and preserving their native habitat.
- To engage the Company's personnel in activities aimed at environmental risk reduction and continuous improvement of the EMS and environmental performance.
- To strengthen competence and awareness of the Company's employees in dealing with environmental issues.
- To ensure broad availability of information regarding the Company's environmental protection efforts and related decisions.

The full text of the Environmental Policy can be found here:<sup>19</sup>



<sup>19</sup> [http://www.gazprom.com/f/posts/39/502580/environmental\\_policy\\_en.pdf](http://www.gazprom.com/f/posts/39/502580/environmental_policy_en.pdf).

## HOW DOES GAZPROM IMPLEMENT ITS ENVIRONMENTAL POLICY?



Between 2014  
and 2017,  
an average of over  
**9,000** people  
were engaged  
in environmental  
training every year.



Provisions  
of the Gazprom  
Environmental  
Policy apply not  
only to Gazprom  
Group but also to its  
contractors, partners  
and counterparties.

Gazprom has in place specific Environmental Policy implementation mechanisms.

The key mechanisms for fulfilling the commitments under this Environmental Policy are as follows:

- support for and improvement of the corporate environmental management system (EMS) based on the international ISO 14001 standard;
- establishment of measurable corporate environmental objectives to mitigate adverse environmental impacts and provision of resources required for the implementation thereof;
- mainstreaming environmental aspects and assessment of risks during activity planning and investment project development and implementation;
- provision of operational environmental control and monitoring, as well as environmental impact assessments with respect to the Company's business activities;
- execution of gas infrastructure expansion programs in Russian inhabited localities;
- comprehensive development of NGV fuel markets in Russia and abroad;
- participation in global environmental programs and sustainable development projects in the regions where the Company operates;
- promotion of scientific research and implementation of innovative projects aimed at increasing energy efficiency, as well as use of renewables and unconventional energy resources;
- application of best available technologies at different stages of production activities, including procurement of technologies, materials and equipment;
- insurance against high environmental risks;
- measures aimed at making sure that all of the Company's employees study, understand, and comply with applicable

legal and other requirements related to environmental aspects of the Company's activities in the regions where it operates;

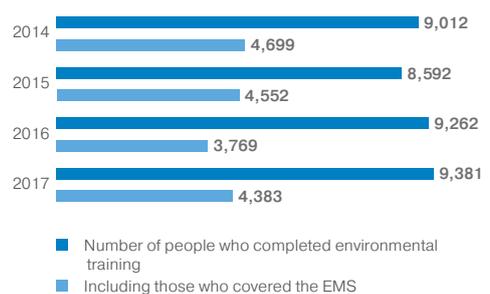
- enhancement of the environmental training system for the Company's personnel;
- engagement of all of the Company's employees in activities related to the environmental management system.

PJSC Gazprom actively disseminates environmental knowledge among employees. Education projects implemented at PJSC Gazprom and its subsidiaries serve the purpose.

In 2017, Gazprom Corporate Institute and other educational institutions provided training and skill upgrade to 9,381 people (out of them, 4,383 completed EMS training), including:

- at PJSC Gazprom and its main subsidiaries – 6,683 people (out of them, 3,540 completed EMS training);
- at Gazprom Neft Group – 1,477 people (out of them, 718 completed EMS training);
- at Gazprom Energoholding – 228 people (out of them, 21 completed EMS training).

**Environmental training of Gazprom Group staff, 2014–2017, people**



One of the most important tools of implementing the Environmental Policy is the EMS.

**THE ENVIRONMENTAL MANAGEMENT SYSTEM**

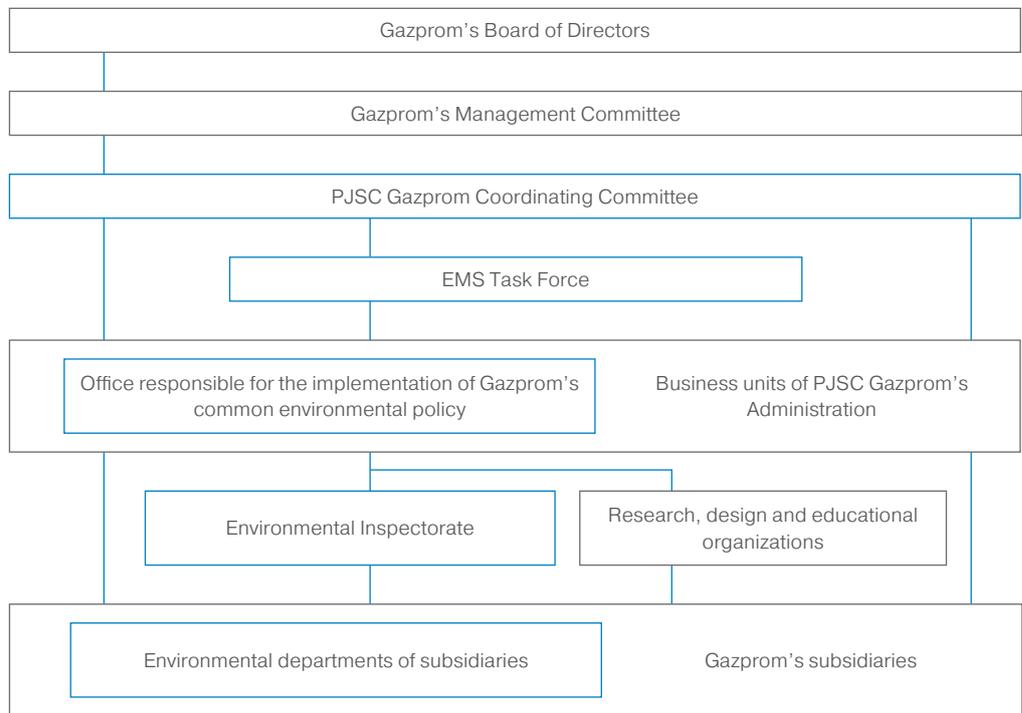
The EMS of PJSC Gazprom is the key element of implementation of the Company's Environmental Policy. The EMS covers 34 subsidiaries involved in exploration,

production, transportation, storage and processing of gas and gas condensate, as well as companies engaged in investment activities.



*The PJSC Gazprom Management Committee is the supreme governance body of the PJSC Gazprom EMS. The Management Committee reports to the Board of Directors on performance in environmental activities and implementation of the corporate Environmental Policy.*

**Gazprom Group Environmental Management System**



PJSC Gazprom units directly involved in handling environmental matters or supervising those issues

PJSC Gazprom's Coordinating Committee on Environmental Protection and Energy Efficiency determines key sustainability areas and target indicators for all business units and subsidiaries of the Company. It includes most members of the Management Committee and heads of structural divisions of the PJSC Gazprom Administration (relevant departments). The committee ensures comprehensive management of environmental

protection efforts, general coordination of activities of structural divisions of the PJSC Gazprom Administration, Gazprom Group's subsidiaries and affiliates, interaction with environmental management public authorities and environmental NGOs.

Environmental management efforts of business units are coordinated by the EMS Task Force of PJSC Gazprom. Its work ensures integrated

approach in environmental protection management.

A department responsible for the implementation of PJSC Gazprom's common environmental policy performs front-end work, interacting with subsidiaries and PJSC Gazprom entities so far as environmental protection and fulfillment of resolutions of the Coordinating Committee and PJSC Gazprom senior leadership are concerned.

In 2017, the EMS of PJSC Gazprom was certified according to a new version of the international standard ISO 14001:2015 "Environmental management systems – Requirements with guidance for use." As the transition to a new version of the standard was carried out, EMS functioning procedures were adjusted, the Company's regulations were re-worked, and staff training was completed.

In December 2017, the PJSC Gazprom EMS underwent a re-certification audit, on the basis of which a certificate was issued to confirm the system's compliance with requirements of the current version of the ISO 14001:2015 international standard valid until December 2020.



*RINA Consulting S.p.A., an independent advisor on environmental and social matters, completed the 15th international audit of the CS Portovaya and the onshore section of the Nord Stream gas pipeline. During field inspections, experts assessed fulfillment by the Company of its environmental and social commitments, including environmental protection, social commitments in occupational health, whether the Company's operations are compliant with requirements of international and Russian standards. The auditors emphasized that Gazprom's*

*operations were compliant with international requirements. Comments made by the auditors were in the nature of recommendations how to enhance the current situation.*

Gazprom Group companies to which the PJSC Gazprom EMS does not apply have also adopted successfully functioning in-house environmental management systems compliant with requirements of the ISO 14001:2015 international standard. Environmental management systems of those companies take into account special features of their operations and have their own specific aspects.

Gazprom Neft Group has an Integrated Management System compliant with the international standards ISO 45001, ISO 14001 and ISO 9001. It covers both environmental issues and health and industrial safety matters. In 2017, Gazprom Neft confirmed compliance of its ESM with the ISO 14001:2015 international standard.

In 2017, Gazprom Energoholding and its companies introduced amendments to internal regulations governing environmental protection policy.

Gazprom Energoholding has approved an environmental policy to achieve Corporate Environmental Targets of PJSC Gazprom. The document approves environmental target indicators for 2017–2019. PJSC TGC-1 adopted its Environmental Policy in 2017. PJSC Mosenergo completed transition to a new standard, ISO 14001:2015, which introduced new extra requirements for the EMS. PJSC MOEK works in accordance with the Environmental Policy approved in 2016 and a Program of Operational Environmental Control approved in 2015.

Environmental control is also performed at overseas industrial facilities of Gazprom Group. Gazprom EP International B.V. is the single operator of PJSC Gazprom's hydrocarbon exploration and production projects outside of Russia. The company applies innovative solutions to minimize its environmental footprint.

In 2018, PJSC Gazprom subsidiaries will continue with re-certification efforts to ensure compliance with the ISO 14001:2015 standard.

## ENVIRONMENTAL TARGETS FOR 2017–2019

Every year, as part of the EMS, PJSC Gazprom determines areas of significant environmental concern and, in order to address them, sets corporate environmental targets, and also designs and implements environmental programs.



*For 2017, areas of significant environmental concern for PJSC Gazprom included methane emissions from repairs of main gas pipelines, nitrogen oxide emissions released by gas compressor stations, noise exposure from operations of gas distribution stations, wastewater discharge and waste disposal, as well as excess pollutant emissions and discharges into water bodies above permissible limits as a result of delays in obtaining environmental permits.*

In accordance with a resolution of the PJSC Gazprom Coordinating Committee for Environmental Protection and Energy Efficiency, PJSC Gazprom Corporate Environmental Targets for 2017–2019 were updated in 2016. The indicators of respective targets reached in 2014 were adopted as the baseline.

In 2017, five out of six Corporate Environmental Targets set for 2017–2019 were achieved.

The failure to achieve the target indicator in the reduction of the tax on negative environmental impact above acceptable limits was caused by organizational factors only, and was not linked to an increase of any physical impact on the environment.

**Changes in performance of Corporate Environmental Targets of the PJSC Gazprom EMS**

Corporate environmental target	Companies within the EMS scope	Change against the 2014 baseline, %
<b>Reduction in methane emissions</b>	All subsidiaries involved in natural gas transportation	Reduction by 5.03%
<b>Reduction in nitrogen oxide emissions</b>	All subsidiaries involved in natural gas transportation	Reduction by 4.06%
<b>Reduction in untreated and undertreated wastewater discharged into surface water bodies</b>	All subsidiaries	Decrease by 18.02%
<b>Reduction in the proportion of buried waste</b>	All subsidiaries	Decrease by 5.71%
<b>Reduction in payments for negative environmental impact above acceptable limits</b>	All subsidiaries	Increase by 6.58%
<b>Reduction in energy consumption for operating needs (in comparable product and transportation operations)</b>	All subsidiaries involved in natural gas transportation	Decrease by 0.62%

Information on the fulfillment of corporate environmental targets is brought to the notice of PJSC Gazprom senior executives and is taken into consideration when evaluating efficiency of environmental activities of individual subsidiaries and PJSC Gazprom as a whole.

The Company strives to keep implementation of its corporate environmental targets at least on par with indicators of the best available techniques, or the most advanced technological solutions used in construction or production upgrade.

**OPERATIONAL ENVIRONMENTAL MONITORING AND CONTROL**

Over RUB **2.7** billion was spent by Gazprom Group on operational environmental monitoring and controls in 2017

**356** audits of compliance with requirements of environmental legislation were run by PJSC Gazprom's Environmental Inspectorate

Gazprom Group imposes strict environmental safety requirements on its entities and contractors during construction and operation

of industrial facilities. Within the framework of operational environmental control, subsidiaries verify fulfillment of environmental

measures specified in construction and refurbishment projects. Moreover, PJSC Gazprom's Environmental Inspectorate controls environmental protection activities of subsidiaries.

The Environmental Inspectorate handles tasks aimed at enhancing efficiency and effectiveness of environmental activities, monitors compliance with statutory and corporate environmental protection requirements, performs internal audits of the EMS and provides methodological support to environmental activities of PJSC Gazprom subsidiaries. In particular, corporate environmental control is performed at PJSC Gazprom facilities in accordance with requirements of STO Gazprom 2-1.19-275-2008 "Environmental protection at enterprises of PJSC Gazprom. Operational environmental control. General requirements."

In 2017, PJSC Gazprom's Environmental Inspectorate performed 356 inspections at subsidiaries, verifying compliance with requirements of environmental legislation, and internal audits of the EMS, including 271 field inspections at process facilities and 85 at investment construction and refurbishment sites.

Inspections covered 10 gas producing and 18 gas transmission enterprises, Gazprom UGS LLC, Gazprom Pererabotka LLC, Gazprom Energo LLC, 34 other subsidiaries (CJSC Gazprom Armenia, Gazprom Kyrgyzstan LLC, Gazpromtrans LLC, etc.), customers and general contractors performing works on the most important construction and renovation sites of the Unified Gas Supply System.

Simultaneously, the Environmental Inspectorate ran 193 internal audits of EMSs of structural divisions across 30 subsidiaries of PJSC Gazprom.



#### Preservation of environmental balance in Yamal

One example of how the data of operational environmental monitoring are used is given by environmental protection measures undertaken in Yamal, where new production capacities and the Bovanenkovo – Ukhta 2 gas pipeline were commissioned into operation in 2017.

To minimize adverse impact on the region's existing ecosystem in accordance with the design concept, wastewater is never discharged into surface water bodies, which helps preserve fish stock; a radial-type gas collection system is used to collect gas from clusters of gas wells, which helps mitigate the impact on landscapes.

On major trunklines, engineering measures are undertaken to achieve significant reduction of greenhouse gas emissions. To prevent land and landscape degradation, the Group employs methods of safe waste disposal and preservation of stability of geocryological conditions.

To preserve biodiversity, Gazprom suspends construction works during the bird-nesting season, and water is taken from water bodies using fish protection devices.

To create no obstacles to migration of the reindeer, special crossings over linear communications are used.

SIS-Yamal, a specialized information system, contains units of information that help find the optimal environmental solution in the construction and operation of sites and facilities.

The outcome of the inspections, analysis of those results and recommendations for improvement of environmental activities were brought to the notice of senior executives of relevant entities.

Furthermore, in 2017, state environmental supervision authorities ran 532 inspections to verify compliance with environmental requirements at Gazprom Group facilities. On the basis of 320 inspections, no violations were revealed. Out of 507 revealed violations, 14 (2%) were reversed by a court order, 335 (66%) were remedied within prescribed timeframes, and the deadline for the enforcement of the compliance orders with respect to other violations did not expire in the reporting year. In total, 741 violations were remedied during the year, including 406 that were revealed in previous inspections. Out of all revealed violations, 347 (68%) were not posing a hazard to the environment and did not entail any penalties for relevant legal entities.

Operational environmental monitoring operates at every subsidiary. Its mission is to track down the environmental situation and the air condition at Gazprom Group production sites, and monitor the impact of a particular enterprise's operations on the environmental situation.

The operational environmental monitoring system at PJSC Gazprom is well-equipped with required infrastructure, and stationary and mobile laboratories, meteorological and aerologic stations, automated control stations and inspection wells are available to Gazprom Group companies. Automated systems of operational environmental monitoring are operated at PJSC Gazprom sites and facilities as elements of an integrated system of operational dispatch management. In certain cases, Gazprom's operational environmental monitoring systems tracking down the environmental situation are integrated with regional environmental monitoring systems.



**Adverse impact under control**

*In 2017, according to requirements of federal environmental legislation, Gazprom Group completed timely classification and filing with state registration bodies of sites that produce a negative environmental impact. In 2017, state files had records on 9,568 sites producing a negative environmental impact, including 239 Class I sites, 2,281 Class II sites, 6,435 Class III sites, and 619 Class IV sites.*

In 2017, in addition to development and improvement of the physical infrastructure of operational environmental monitoring, a package of works was completed to analyze the environmental situation in specially protected natural areas. Gazprom provides various forms of backing to those areas: financing, machinery, workforce, organizational assistance, volunteer efforts. That way, assistance was rendered to 80 specially protected areas of federal, regional and local importance.

In 2017, Gazprom Group undertook 583 environmental monitoring measures.

At sites that have a special environmental status, Gazprom Group includes additional monitoring and observation actions in its operational environmental monitoring programs. For instance, within the framework of the Nord Stream 2 project, the environmental situation will be monitored according to the same principle that was used at Nord Stream: Comprehensive monitoring will be focused on particular aspects related to the operation of gas pipelines and remediation after construction.



**Nord Stream: 1,000 control points**

*Within the framework of the environmental monitoring program, studies on 16 environmental parameters were carried out in the area adjacent to the Nord Stream gas pipeline, such as physical and chemical characteristics of surface waters and bottom deposits, biological habitat (condition of fish, bird and marine mammal populations), socio-economic conditions (assessment of impact on commercial fisheries and cultural heritage sites). Data for the study were collected from nearly 1,000 monitoring points along the entire gas pipeline route. The research under the monitoring program was carried out during the entire construction period and continued for three years after the commencement of the gas pipeline operations, which helped minimize the environmental impact. On the basis of the monitoring results, no negative impact on environmental components has been discovered.*



**Study and preservation of the Atlantic walrus population: The process and the results**

*Gazprom Neft carries out an ongoing corporate program for the preservation of biodiversity on the basis of a list of flora and fauna that indicates a stable condition of marine ecosystems of the Arctic area of the Russian Federation. The program was developed by the company with input from major scientific research institutions, the Russian Arctic National Park, Marine Mammal Council, and was compiled subject to proposals of the UN Development Program, Global Environment Facility, the Ministry of Natural Resources and Environment of the Russian Federation, and the Russian office of the World Wildlife Fund (WWF). To assess its impact on Arctic ecosystems, Gazprom Neft carries out environmental monitoring in the area of its operations.*

*The studies completed in 2017, including toxicological and genetic analysis of biological samples, did not reveal any adverse changes. In 2017, within the framework of a program to study and preserve the Atlantic walrus, PJSC Gazprom Neft carried out on-the-way ship observations, onshore studies of walrus colonies, air observations of marine mammals, satellite observations, walrus observations using trail cameras. In July, during onshore works on Matveyev Island of the Nenets state natural reserve, two groups of walruses, or 60 individual animals all in all, were recorded in the colony during observations. In the water area of the Prirazlomnoye licensed block, marine mammals were not seen during on-the-way ship observations. On Matveyev and Vaygach Island, and on the Karpov Islands, as a result of surface observations and satellite tagging, walrus colonies were recorded with a total number of animals ranging from a few dozen to 1,000 individuals. During fieldwork, samples were taken from the walruses in the colony to run toxicological and genetic tests; analyses did not reveal any negative changes in the condition of the animals. During the ice season, in April, aerial survey was carried out using the Nord laboratory aircraft. The Polar Research Institute of Marine Fisheries and Oceanography was involved in the aerial survey and assessment of the occurrence of various species of marine mammals. During the surveys, different marine mammals (beluga whales, walruses, Greenlandic seals, ringed seals) were observed 19 times; all of them are flag species for that water area. In total, 41 animals were observed. Environmental monitoring, including implementation of a special program to study and preserve the Atlantic walrus in the area of the Prirazlomnoye Offshore Ice-Resistant Platform, is performed on an annual basis since 2010 and will continue until the completion of all works in the Prirazlomnoye oil field.*



In 2017, Gazprom Group spent over RUB 2.7 billion on operational environmental control and operational environmental monitoring; PJSC Gazprom accounted for nearly 77% of that amount.

Between 2014 and 2017, Gazprom Group allocated RUB 10.9 billion on support of operational environmental control and operational environmental monitoring. Spending for 2018 is expected to be at least RUB 2.5 billion.

**Gazprom Group's spending on operational environmental monitoring and control, 2014–2017, RUB million**



### 2.3. MITIGATING ADVERSE IMPACT ON THE ENVIRONMENT

The impact of Gazprom's operations on the quality of water resources, soil and air is a major concern for the communities where the Group's production operations are carried out or planned, and is also an issue that worries environmental activists, investors, and local authorities.

Following the principles of the Environmental Policy, implementation of EMS provisions, use of innovative materials and technologies, renovation of waste treatment facilities allow Gazprom Group to develop production and, concurrently, reduce its adverse impact on the environment.

### GAZPROM GROUP'S SPENDING ON ENVIRONMENTAL PROTECTION

Over RUB **35.58** billion was invested by Gazprom Group in environmental protection in 2017.

In 2017, Gazprom Group's total spending on environmental protection in the Russian Federation was up 23%, mainly through the rise of investments in environmental protection and sustainable use of natural resources.

Between 2014 and 2017, Gazprom Group invested RUB 114.41 billion in environmental protection and sustainable use of natural resources. In 2017, investments increased by 58% versus 2016, to over RUB 35.58 billion.

**Gazprom Group's spending on environmental protection, 2014–2017, RUB billion**



**Investments in fixed assets used in environmental protection and sustainable use of natural resources, 2014–2017, RUB million**

	2014	2015	2016	2017
<b>Gazprom Group</b>	<b>15,578.35</b>	<b>15,754.33</b>	<b>22,541.85</b>	<b>35,584.53</b>
Gas business companies	7,703.04	6,931.87	2,542.10	4,450.87
incl. PJSC Gazprom	7,526.22	6,893.16	2,270.89	2,862.86
Gazprom Neft Group	3,995.61	3,114.05	14,275.03	27,101.67
Gazprom Energoholding	800.78	2,837.54	368.31	579.20
Gazprom Neftekhim Salavat	3,078.92	2,870.87	5,356.41	3,452.79

In 2017, investments were made within the framework of PJSC Gazprom's large-scale investment construction projects, such as development of the Yamal gas production center, Chayandinskoye oil and gas condensate field, construction of the Ukhta – Torzhok 2, Bovanenkovo – Ukhta 2, Nord Stream 2, TurkStream gas trunk pipelines, construction of the Amur gas processing plant, construction of a complex for LNG production, storage and shipment near the CS Portovaya, etc.

Gazprom Neft almost doubled its investments in fixed assets used for environmental protection and sustainable use of natural

resources in 2017 versus 2016, in connection with implementation of a number of large-scale investments programs to upgrade fixed environmental assets used in oil treatment, fulfilment of gas programs (refurbishment and retrofitting of gas transportation, treatment and processing facilities), completion of building of gas infrastructure in the area of the second booster pump station of the Yety-Purovskoye field, construction and commissioning of the first startup facility of a gas compression and treatment unit of the Novoportovskoye oil and gas condensate field and disposal of associated petroleum gas (APG) in the Shinginskoye, Zapadno-Luginetskoye, Urmanskoye, Archinskoye fields.

Part of investments in the protection and sustainable use of water resources was allocated to major projects from the Action Plan for the Year of Ecology in the Russian Federation, in particular:

- construction of closed-type Biosphere water treatment facilities at the Omsk Oil Refinery

(JSC Gazprom Neft Omsk Oil Refinery) and the Moscow Oil Refinery (JSC Gazprom Neft Moscow Oil Refinery);

- construction of a decontamination sulfide-alkaline wastewater unit of the Monomer Factory and the oil refinery of Gazprom Neftekhim Salavat LLC.

**Structure of Gazprom Group investments in environmental protection and sustainable use of natural resources, 2017, %**



**Gazprom Group's current expenditure on environmental protection, 2017, RUB billion**



Current expenditure on environmental protection in 2017 changed only slightly versus 2016. Across Gazprom Group, it amounted to RUB 34,467.98 million (in 2016, RUB 34,103.25 million).

**Current expenditure<sup>(1)</sup> on environmental protection, 2014–2017, RUB million**

	2014	2015	2016	2017
<b>Gazprom Group</b>	<b>31,656.24</b>	<b>32,169.03</b>	<b>34,103.25</b>	<b>34,467.98</b>
Gas business companies	16,895.69	17,348.59	18,757.29	19,246.64
incl. PJSC Gazprom	12,113.02	14,787.92	15,423.62	15,595.46
Gazprom Neft Group	6,210.19	6,656.05	7,005.29	7,027.52
Gazprom Energoholding	2,380.27	2,214.70	2,717.38	2,325.85
Gazprom Neftekhim Salavat	6,170.09	5,949.69	5,623.29	5,867.97

<sup>(1)</sup> Current expenditure includes operating expenditure, expenditure on environmental services and expenditure on the overhaul of fixed assets involved in environmental protection.

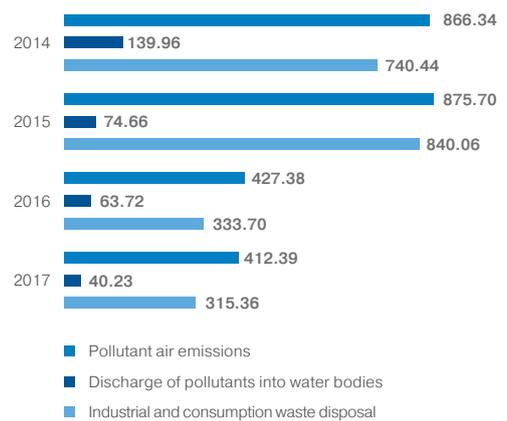
In 2017, Gazprom Group's fees for the adverse impact on the environment amounted to approx. RUB 768 million.

**Payment for adverse impact on the environment, 2014–2017, RUB million**

	2014	2015	2016	2017
<b>Gazprom Group</b>	<b>1,746.89</b>	<b>1,790.42</b>	<b>824.80</b>	<b>767.97</b>
Gas business companies	619.85	483.78	275.35	302.80
incl. PJSC Gazprom	452.37	375.12	237.47	266.07
Gazprom Neft Group	545.61	837.11	270.86	211.00
Gazprom Energoholding	571.11	460.01	260.91	232.63
Gazprom Neftekhim Salavat	10.32	9.52	17.68	21.54

In 2017, payments for pollutant air emissions (53.7%) and for industrial and consumption waste disposal (41.1%) dominated the adverse impact fee structure. In 2017, Gazprom Neft Group completed APG disposal programs. Moreover, excess fees for pollutant discharges were also cut. These two factors helped reduce total fees for negative environmental impact in 2017 versus 2016.

**Structure of environmental payments of Gazprom Group, by types of negative impact on the environment, 2014–2017, RUB million**



**AIR:  
PREVENTION  
AND REDUCTION  
OF EMISSIONS**

Total pollutant emissions across Gazprom Group declined by **2.5%** in 2017

**2,263,580** tons of pollutants were collected and treated at Gazprom Group enterprises in 2017

Gazprom Group's industrial operations are fraught with certain risks posing hazards for the air condition. To cut pollutant air emissions, Gazprom implements energy saving and energy efficiency programs, tries to reduce and, in the long run, to cease APG flaring, and uses special units to collect and treat pollutants from exhaust gas.

In 2017, Gazprom Group's exhaust gas purification units collected and treated 2,263,580 tons of pollutants, including 2,132,010 tons (94%) at Gazprom Energoholding. In 2017, 791,180 tons of methane emissions were prevented from being released into the atmospheric air during repairs of gas trunk pipelines. The success was achieved thanks to scheduled energy efficiency and energy saving measures.



*Solid emissions dominate Gazprom Group's energy segment, emissions of volatile organic compounds are the highest at Gazprom Neft Group companies and gas business companies specializing in hydrocarbon production and processing.*

The specific nature of Group gas companies' operations determines the composition of the emissions. The main pollutants in the Group's aggregate emissions are:

- hydrocarbons (predominately methane, about 55%);
- carbon monoxide;
- nitrogen oxides;
- sulfur dioxide.

In 2017, total pollutant air emissions from stationary sources of Gazprom Group companies amounted to 2,795,970 tons, or 2.5% less than the 2016 indicator. Implementation of programs of construction and commissioning of APG disposal technological infrastructure facilities largely helped drive down pollutant emissions compared to 2016. In addition, the reduction can be explained by the replacement of coal for natural gas in the fuel balance of Gazprom Energoholding generating enterprises.

**Gazprom Group's total pollutant air emissions, 2014–2017, thousand tons**



**Electric cars will make the air cleaner**  
*PJSC Mosenergo signed a cooperation agreement with the Moscow government to promote the use of electric cars. Motor vehicle charging stations are owned by PJSC Rosseti and PJSC Mosenergo, with PJSC Mosenergo to install stations for electric cars at its own expense, and the Moscow government to provide land plots for the purpose. Thus, Gazprom Energoholding makes its contribution to development of green transport.*

**WATER:  
TREATMENT  
AND SCALING  
BACK  
CONSUMPTION**

**58** wastewater treatment units with a total capacity of  
**492,030** cubic meters per day

and **4** water recycling systems with a total capacity of

**504,010** cubic meters per day were launched into operation in 2017

**91%**

*is the ratio of acceptably clean (without treatment) and acceptably treated wastewater in the total discharges of Gazprom Group.*

Lower impact on water resources is an important vector of Gazprom Group's environmental endeavors. One core mission the Company pursues in protection of water bodies is to reduce the quantity of water taken from water bodies, and treatment of discharged wastewater.

Efficient water resource management is a crucial element of Gazprom's Environmental

Policy. PJSC Gazprom's EMS sets a corporate environmental target for 2017–2019: to reduce the ratio of polluted and undertreated wastewater in the total volume of discharges into surface water bodies compared to the baseline value of 40.13%. Corporate environmental target performance is assessed every year. In 2017, the target was achieved, and the indicator was 22.11%.



*From 2014 to 2017, Gazprom Energoholding was building the greater portion of its generating capacities using steam-gas technologies. Those technologies ensure small water consumption by the enterprise: Use of steam-gas units reduces water consumption per one unit of generated electric power, compared to steam power plants.*

Indicators of water use across Gazprom Group, 2014–2017, million cubic meters

	2014	2015	2016	2017
Water taken, received, total	4,895.38	4,511.81	4,538.21	4,523.45
incl. from natural sources	4,410.68	4,290.12	4,301.46	4,283.52
Used for internal needs	4,779.50	4,387.64	4,449.27	4,421.11
incl. for processing needs	4,506.18	4,149.04	4,192.10	4,164.84
Water discharge, total, incl.:	4,279.46	4,105.66	4,084.29	4,141.40
Water discharge into surface water bodies, of which:	4,179.09	3,853.75	3,855.45	3,905.26
polluted (without treatment)	105.72	122.81	99.48	60.02
polluted (insufficiently treated)	81.78	70.37	64.74	63.56
acceptably clean (without treatment)	3,956.54	3,631.29	3,664.06	3,754.89
acceptably treated	35.05	29.28	27.17	26.79
Water discharge into public utility systems	–	145.01	130.08	144.15
Water discharge into underground horizons	44.73	49.09	48.93	45.28

In accordance with the Environmental Policy, PJSC Gazprom subsidiaries consistently cut water intake from rivers, lakes and seas. A recycling water supply system is installed at enterprises, and after proper purification, cooling and treatment, wastewater is recycled for industrial needs. It helps save large quantities of water in processing.

From 2014 to 2017, Gazprom Group's wastewater discharges into surface water bodies were cut by 6.6%. Acceptably clean (without treatment) wastewater and wastewater acceptably treated at treatment facilities accounted for 91% of the Group's total discharges.

The biggest large-scale environmental effect was achieved in 2017 as a result of equipment upgrade and

adoption of innovative environmental technologies.

Three measures of PJSC Gazprom in that area were included in the Plan of Action of the Year of Ecology in the Russian Federation: construction of treatment facilities of the Biosphere unit of JSC Gazprom Neft's Moscow Oil Refinery, building new treatment facilities at the Omsk Oil Refinery, installation of a treatment plant for sulfide-alkaline drains of the Monomer factory.

During the Year of Ecology, construction of Biosphere, an innovative biological treatment unit, was completed at Gazprom Neft's Moscow Oil Refinery. The construction of the Biosphere unit is an environmental project in a comprehensive program of upgrade of Gazprom Neft oil refining assets.

By investing in innovative environmental solutions, adopting advanced digital technologies of production management, we set new standards of industrial and environmental safety, which will define further development of the entire Russian oil refining industry.

Alexander Dyukov,  
Chairman of the Management Board,  
PJSC Gazprom Neft

Another example of measures undertaken to improve the condition of the water ecosystem in 2017 is production of new clean marine fuel. In October 2017, the first batch of new marine fuel with enhanced environmental characteristics was produced at the Omsk Oil Refinery. Thanks to a minimal sulfur content (no more than 0.1%), the product is suitable for use in Sulphur Emission Control Areas (SECAs), as they are defined by the International Convention for the Prevention of Pollution from Ships (MARPOL). The new fuel received a certificate of compliance with the requirements of technical regulations of the Eurasian Economic Community.

*The technology of production of low-sulfur marine fuel from hydrotreated vacuum catalytic gasoil was designed by specialists of the Omsk Oil Refinery in 2016. The new fuel grade formula includes an agent that lowers the flow point and prevents paraffins from forming a residue in the marine fuel. Investments in the project amounted to about RUB 200 million.*

Launching of new hi-tech wastewater treatment units and installations based on advanced, reliable and mainly domestic components helps treat drains to reach acceptable indicators and to mitigate the environmental footprint.

Within the framework of environmental monitoring, Gazprom Group enterprises monitor the condition of water bodies in their regions of operations.



#### The Biosphere unit by numbers

- Wastewater treatment efficiency index is up to **99.9%**.
- Reduction of river water intake by **2.5** times.
- Reducing the impact of production on the environment by **4** times.
- Investments in the project – **RUB 9 billion**.
- This unique technology system improves wastewater treatment efficiency to **99.9%**. Using advanced technologies, Biosphere will ensure closed-circuit water consumption and will reduce the load on the urban water treatment infrastructure. **75%** of treated drains will be recycled and reused in the production, thus cutting the amount of used river water by **2.5** times. The key water treatment technology is the use of a membrane bioreactor and activated sludge, which consists of microorganisms that use oil refinery products, nitrogen and other substances as a nutrient medium. Technological solutions designed by Russian engineers made it possible to significantly reduce the total area of treatment facilities, to make them more compact and to ensure complete tightness of water treatment process phases. In particular, the Biosphere project will reduce the area of treatment facilities **17** times, with the overall productivity improved by **20%**.

Indicators of water discharge into surface water bodies across Gazprom Group, 2014–2017, million cubic meters

	2014	2015	2016	2017
<b>Gazprom Group</b>	<b>4,179.09</b>	<b>3,853.75</b>	<b>3,855.45</b>	<b>3,905.26</b>
Gas business companies	40.35	34.09	35.10	33.87
incl. PJSC Gazprom	10.66	10.88	11.69	10.74
Gazprom Neft Group	0.32	27.20	0.11	0.12
Gazprom Energoholding	4,091.95	3,754.12	3,781.85	3,832.00
Gazprom Neftekhim Salavat	46.47	38.34	38.39	39.26

In 2017, Gazprom Group commissioned 58 wastewater treatment units with a total capacity of 492,030 cubic meters per day and 4 systems of recycling water supply with a total capacity of 504,010 cubic meters per day (two units at Gazprom Neftekhim Salavat and one at each of Gazprom Transgaz Saratov LLC and Gazprom Transgaz Surgut LLC).

For instance, a single set of equipment for environmentally safe thermal neutralization of liquid drains was installed at the Chayandinskoye field in the reporting year.



**Water treatment at the Chayandinskoye field: Green and efficient**

*At the peak load, the installation recycles 1,000 cubic meters of drains per day. It is sufficient for the Chayandinskoye field even when active construction operations or overhauls are performed at wells and large volumes of drilling waste are generated. Using only Russian-made components, designers of TyumenNIIgiprogaz LLC developed a system of high-performance thermal utilization units. The system will ensure compliance with environmental requirements and high economic efficiency of production.*



**Gazprom Neftekhim Salavat to neutralize highly resistant pollutants**

At the oil refinery of Gazprom Neftekhim Salavat LLC, a large-scale environmental project was implemented in 2017 – construction of a unit to decontaminate sulfide-alkaline wastewater, with a capacity of 50 tons per hour.

Wastewater contains persistent chemical pollutants, including aromatic compounds and phenols, which are highly resistant to biodegradation. Launching of a new hi-tech sulfide-alkaline wastewater treatment unit will achieve parameters at which treated wastewater can be transferred for final treatment at the company’s main sewage treatment plant without any violation of the sewage treatment plant technology. Also, irretrievable water losses from drainage will be stopped and water consumption will be reduced as a result, thus decreasing the load on the Belaya River ecosystem.

**LAND:  
RECLAMATION  
AND PREVENTION  
OF NEGATIVE  
IMPACT**

**19,600**

hectares of land  
were restored  
by Gazprom Group  
in 2017



The principal factors adversely affecting the condition of lands and soils are exploration, construction and repair of wells and pipelines.

Gazprom Group is responsible for the reclamation of lands disturbed during works. In 2017, the impact on land resources was not a subject of particular environmental concern for the Group, as reclamation is carried out by Gazprom subsidiaries to the required extent and within prescribed timeframes. Therefore, no cumulative effect is observed in terms of the environmental damage caused to land resources.

Gazprom Group companies apply economically and technologically sound methods of reclamation, which prevent development of adverse erosion processes, help stabilize landscapes and repair the topsoil and vegetation. Accessible, including secondary, materials are regularly used, for instance unpolluted drilling waste, as well as geotextile and plant growth stimulants. Specially selected strains of soil microorganisms increase the speed and intensity of root formation and growth of plants, which strengthen the topsoil, including slopes of banks at facilities.

Those measures help make land usable again in production. For instance, reindeer pastures

are returned to the traditional system of use of natural resources in the Far North, emptied quarries get a new life, forests are restored.



**A forest will grow in place of a quarry**

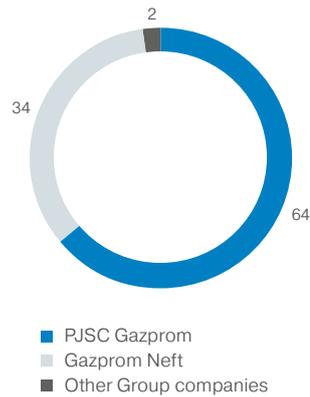
*In 2017, Gazprom Neftekhim Salavat completed reclamation of the area of a depleted quarry. From the mid-1990s to the early 2000s, the 6-hectare quarry was used to produce ceramic wall materials. Reclamation was performed in two stages. At the technical stage, negative topographic forms were flattened, and reclamation layers were added. At the biological stage of reclamation, a package of agro-technical and revegetation measures was taken, with the aim of planting greenery and preventing ravine erosion. 444 trees were planted where the quarry used to be.*

Within the framework of environmental control, environmental services of Gazprom enterprises perform regular monitoring of the condition of restored lands. Operational environmental control during construction and renovation of sites includes inspections to verify conformance of restored soils to environmental standards; soil, geological and botanical, agrochemical and other inspections are carried out for the purpose.

**Area of disturbed lands (incl. polluted ones) and reclamation, 2014–2017, hectares**

	2014	2015	2016	2017
Area of disturbed land during the year	15,407.40	58,054.53	27,027.45	42,162.29
incl. polluted ones	105.43	82.30	71.31	87.33
Disturbed lands reclaimed during the year	12,589.34	18,220.34	42,450.24	19,600.05
incl. polluted ones	464.39	187.37	94.08	89.10
Polluted lands as of year's end	140.17	35.09	4.80	3.02

Extent of land disturbance  
by Gazprom Group companies, 2017, %



As construction was expanding, Group companies disturbed 42,162 hectares of lands in 2017, or 15,135 hectares more than in 2016. PJSC Gazprom subsidiaries reclaimed 19,600 hectares of disturbed land and there remained fewer polluted lands as of the end of the reporting year than in 2016 – 3.02 hectares in 2017 versus 4.8 hectares in 2016.

Group companies were carrying out works to prevent seepage of pollutants into soils, surface and underground water bodies.



*Microbiological agents, such as humic substances, ion-exchange substrate, and rhizosphere bacteria, are used in reclamation, as well as algae-based revegetation methods. Soil is reinforced using latex coatings, Xanthan biopolymer, used drilling fluid. The slopes are reinforced with geowebs and geotextiles. Microbiological agents (Putidoil, Devoroil, BIOROS) help clean up soils contaminated with hydrocarbons. To reclaim lands, soil remediation (bioremediation) technologies are also used, as well as mechanical cleanup of lands and phytoremediation by specially selected mixed grass crops.*

Gazprom Group also undertakes preventive measures to cut the area of disturbed land. For instance, Group companies use innovative methods of horizontal and directional drilling, which help fully avoid disturbance and contamination of lands, reduce the amount of waste and areas for its storage. Technologies of modular construction of field facilities from ready-made elements, well clustering in the fields, laying multi-string gas pipeline systems within a single corridor contribute to sustainable management of the areas where Group companies carry out construction.

Gazprom Group expands the use of innovative technologies and materials in construction and repair of pipelines, which prevents their premature breakdowns and malfunctions. New technologies designed by domestic manufacturers improve reliability of pipes and help minimize the damage caused to the areas through which they run.



### **Nanotechnologies will help protect the environment**

*Gazprom Group's leadership perceives an enormous potential in the use of nanotechnological products of domestic manufacturers in its projects, for instance, of pipes with a special corrosion-resistant coating, pipes and coupling elements with a nanomodified protective concrete surface for gas pipeline laying in a complex environment, mobile road slabs for quick construction of makeshift roads, electrical insulating stands included in pipeline supports, preventing them from developing corrosion. Nanotechnologies will help build industrial facilities with a minimal impact on the environment. In 2017, the Company's leadership held a series of talks with domestic enterprises on collaboration in the area of nanotechnologies.*

## WASTE MANAGEMENT

Waste management is a crucial aspect for Gazprom Group, for a number of reasons. In some regions of Russia, a serious man-caused impact on the environment exacerbates the environmental situation. Another important factor is that Gazprom builds industrial facilities in areas with severe climate conditions – in the Far North, in Eastern Siberia, in the Far East, and offshore, where there is no waste management infrastructure.

Reducing the percentage of buried waste is one of Gazprom's corporate environmental targets.

Waste management follows the Production and Consumption Waste Management Master

Plan that operates at PJSC Gazprom facilities located in different regions across Russia. The percentage of buried waste is decreased through optimization of enterprises' waste handling operations. Waste management measures are taken subject to regional specifics.

**Waste generation in Gazprom Group, 2014–2017, thousand tons**



## OIL SPILL PREVENTION

Oil production and transportation are fraught with the risk of oil spills. As others, this type of Gazprom Group operations is compliant with safety standards. Since 2013, Gazprom Neft Group has been implementing an EMS compliant with requirements of the ISO 14001 series of international standards. In 2017, Gazprom Neft validated compliance of its EMS with requirements of the ISO 14001:2015 international standard. In its safety policy, Gazprom Neft is governed by the ISO 14001:2015 and ISO 45001 international standards.

Gazprom, its subsidiaries and affiliated companies adhere to a systemic approach in making sure they are all ready for an adequate oil spill response. The basic principle there is that the company must be always ready to handle an emergency situation.

Control measures are based on certain criteria:

- those measures must ensure the biggest net environmental benefit;
- selected strategies must ensure the best possible cleanup of spilled oil and the least

- possible damage to the environment;
- the undertaken measures must be aimed, first of all, at those sensitive areas and resources that are the least capable of self-recovery;
- in emergency response, materials and workforce must be used in the most effective way;
- the amount of waste generated during emergency response and control operations must be minimized.

Companies have oil response and management teams. Emergency response teams at all facilities are permanently on alert. Management teams are on duty 24/7 in case of emergencies; their on-duty members stay on alert in crisis situations and response coordination teams are in a standby mode in emergency situations. An operation control duty desk works 24/7. Theoretical classes, drills and exercises to control emergencies of different levels, with involvement of executive authority officials, are organized on a regular basis. Every year, dozens of practice drills and oil spill response exercises are organized at the company's industrial facilities.

Group enterprises operating in the oil sector attach a great importance to preventive measures. For instance, Sakhalin Energy, in accordance with legislative requirements, has developed oil spill response plans for all industrial facilities, subject to the protection priority status of areas of environmental vulnerability. The company compiles updated sensitivity maps for all areas that can be affected by an oil spill, matches individual packages of detailed information collected from onshore and offshore facilities, including descriptions of areas, site and facilities, lists of equipment, locations, bed slopes. Those data are input in a geographic information system that helps the company's leadership make informed decisions.



*Priority areas in terms of protection include national parks and reserves, ground and water-based habitats of rare and protected species of mammals and birds included in the Red List of the International Union for Conservation of Nature and Red Lists of the Russian Federation and the Sakhalin Region, salmon spawning streams, natural landmarks, sites worthy of being included in the Ramsar List, and other water bodies and wetlands.*

In accordance with standards of response in case of an oil spill, recommendations have been developed for employees how they should act in an emergency. For instance, wild animals found in an area of an accidental oil spill are deterred to make them leave it, and others, which were affected by the oil spill nonetheless, are caught and cleaned.

Special measures are in place to save marine mammals.

Gazprom Neft Shelf LLC is governed by a plan of oil spill containment and cleanup in the operational area of responsibility of the Pirazlomnoye Offshore Ice-Resistant Platform in the Pechora Sea.

The following actions are envisaged by the company's policy in the event of an oil spill:

- protection of the life and health of the personnel and communities;
- stopping oil leakage from the source;
- localizing the spill as fast as possible and as close to the source as possible;
- effectual use of resources and means to localize and control the oil spill, mobilizing additional capabilities and means, including physical and financial resources;
- minimizing the damage caused to the environment, avoiding a larger damage from the operations than damage from oil;
- minimizing waste generation;
- remedying the damage caused to the environment by oil spills.

To prevent and control oil product spills during operations of the Offshore Ice-Resistant Platform, the company keeps up continuous emergency response and rescue alertness; relevant resources and facilities of oil spill control available in professional emergency response and rescue units are used in those efforts. Support vessels that are continuously on duty at the Offshore Ice-Resistant Platform will immediately launch response actions to prevent spread of the oil spill if it should happen.



**Ready for an emergency situation!**

*In 2017, a subsidiary of Gazprom Neft Shelf took part in Arctic-2017, a comprehensive training organized by the Ministry of Natural Resources and Environment of the Russian Federation. The mission of the training was to improve the personnel's skills in controlling an oil spill of 5,000 cubic meters*

*in the vicinity of the Prirazlomnoye platform. The participants focused on techniques of handling an oil spill caused by a collision of a tanker with a support vessel, and organized protection of the Varandei Settlement coastline from the oil spill hazard in an ice period. Based on the outcome of the exercises, the company was pronounced to be ready to control and clean up accidental oil spills at sea and in the coastal area.*

**2.4.  
MITIGATING  
CLIMATE  
IMPACT**

Climate change is a global challenge that catches the eye of the media, environmentalists and communities. Gas and oil production and transportation, work related to oil treatment and gas processing involve air pollution hazards and a stronger greenhouse impact.

The Company pursues an open information policy with respect to climate impact, and provides data on greenhouse gas emissions and on mitigating measures, within the framework of the Carbon Disclosure Project (CDP).

In the past seven years, Gazprom has invariably been the leader of the "Energy" sector of the Russian rating of that project. Participation in the CDP climate and water program gave PJSC Gazprom an opportunity to showcase its corporate strategy of greenhouse gas emission and water

resource management to global financial institutions and investors that take into account those parameters in outlining their investment portfolio building policies.



*In accordance with its policy of informational transparency in the area of greenhouse gas emissions, PJSC Gazprom released information on greenhouse gas emissions from PJSC Gazprom's core businesses in 2017; that information was included in an environment report. The following information was verified by an independent auditor, KPMG: Greenhouse gas emissions from transportation amounted to 92.28 million tons of CO<sub>2</sub> equivalent, those from production to 13.07 million tons of CO<sub>2</sub> equivalent, from processing to 5.46 million tons of CO<sub>2</sub> equivalent and from underground storage to 1.34 million tons of CO<sub>2</sub> equivalent.*

**GAZPROM  
GROUP'S  
STANDPOINT ON  
THE REDUCTION  
OF GREENHOUSE  
GAS EMISSIONS**

Methane and carbon dioxide emissions are the biggest hazards of oil and gas production, in terms of climate impact. Methane, according to Russian legislation, is both a greenhouse gas and a pollutant. Carbon dioxide is on the list of greenhouse gases.

Reduction of greenhouse gas emissions is part of PJSC Gazprom's corporate strategy. In accordance with principles of sustainable development, Gazprom Group adheres to the international legal framework

and national legislation related to climate change. Pursuing its activities aimed at reducing the climate impact, the Group proceeds from the relevant provisions of the following documents:

- Energy Strategy of Russia for the period of up to 2030;
- State program of the Russian Federation "Environmental Protection" for 2012–2020;
- Climate Doctrine of the Russian Federation approved by Executive Order No. 861-RP, of December 17, 2009, of the President of the Russian Federation;

- Decree No. 752, "On Reduction of Greenhouse Gas Emissions," dated September 30, 2013, of the President of the Russian Federation;
- Action plan on 75% Greenhouse Gas Emission Reductions Below 1990 Levels by 2020 approved by Resolution No. 504-r, of April 2, 2014, of the Russian Government;
- Methodology Guidelines for the Development of Greenhouse Gas Emission Reduction Indicators by Sectors of Economy, approved by Order No. 767, of November 28, 2014, of the Ministry of Economic Development of the Russian Federation;
- Concept for the Development of a System for Monitoring, Reporting and Verification of Greenhouse Gas Emission Volumes in the Russian Federation, approved by Order No. 716-r, of April 22, 2015, of the Government of the Russian Federation.

The Company's standpoint is consistent with the national target of the Russian Federation approved by Decree No. 752, of September 30, 2013, of the President of the Russian Federation. The goal is to bring greenhouse gas emissions by 2020 to no more than 75% of what they were in 1990.

## GAZPROM GROUP'S VISION OF THE ROLE OF GAS IN SCENARIOS OF LOW-CARBON DEVELOPMENT

The Paris climate accord that took effect on November 4, 2016 opens up new prospects for gas consumption. A number of European countries, notably Germany and the Netherlands, declared their intention to cut the coal intensity of power and heat generation, and, ultimately, to abandon coal altogether. Giving up this fuel will boost gas consumption, and that factor will be an additional opportunity to increase natural gas supplies and to improve low-carbon development of EU countries.

Use of natural gas can promote implementation of the EU's Long-Term Low Greenhouse Gas Emission Development Strategy to 2050 by the following ways:

In accordance with Principle 15 of the 1992 Rio Declaration on Environment and Development, Gazprom Group takes precautionary measures to protect the environment. At all stages of the lifecycle of an investment project, from conception to construction, Group companies carry out environmental review of contemplated activities. Since 1994, the Company provides corporate expert review of project materials before submitting the documents to the state expert review and state environmental expert review (for facilities specified in Federal Law No. 174-FZ, of November 23, 1995, "On Environmental Review"). The corporate environmental review procedure is governed by STO Gazprom 2-2.1-031-2005 "Regulations on the review of preliminary and detailed project design documentation in PJSC Gazprom." Within the framework of corporate review, compliance of conceptual design and project materials with statutes, regulations and corporate standards in the area of environmental protection, energy saving and energy efficiency improvement is verified.

- A well-developed gas infrastructure helps cut emissions promptly and without any significant outlays while replacing coal-based power and heat generation with natural gas. Additionally, reduction of emissions can be ensured by converting transport to natural gas. Those measures will make it possible to cut greenhouse gas emissions in the EU quickly by 13% to 18% from the current level and ensure achievement of the EU's proclaimed 2020 targets (to the 1990 level) within preset timeframes.
- Taking into account capabilities of the existing gas infrastructure for the transportation and storage of those energy resources, use of a new low-carbon fuel based on methane-hydrogen mixtures

in the EU energy industry and transport sector will help reduce greenhouse gas emissions by 25-35% and, consequently, will drive achievement of EU climate targets for 2030.

- Development and wide-scale adoption of economically effective technologies of hydrogen production from natural gas without CO<sub>2</sub> emissions (cracking, pyrolysis,

“cold plasma”, etc.) will bring about an 80% reduction of greenhouse gas emissions in the EU by 2050.

Utilization of readily available, cheap, eco-friendly gas in combination with renewable energy sources will help find economically and environmentally efficient solutions for sustainable development.

## WHAT DOES GAZPROM GROUP DO TO REDUCE GREENHOUSE AND CONTAMINATING GAS EMISSIONS?

A system of greenhouse gas monitoring and control is introduced and improved in all Gazprom Group companies. Since 2016, all Gazprom subsidiaries, regardless of their business area, have been monitoring and calculating greenhouse gas emissions according to a single algorithm, i.e. based on the Methodology Guidance and Procedure Manual on Greenhouse Gas Emission Volume Evaluation by Business and Other Organizations Performing Activities in the Russian Federation approved by Order No. 300, of June 30, 2015, of the Ministry of Natural Resources and Environment of the Russian Federation.

Basically, reduction of greenhouse gas emissions is achieved by measures that ensure decrease of technology-based natural gas consumption. Those measures are undertaken within the framework of corporate programs, such as:

- PJSC Gazprom’s energy saving and energy efficiency improvement program;
- A comprehensive program of renovation and technical retrofit of production facilities;
- A comprehensive program of renovation and technical retrofit of gas transmission facilities, booster compressor stations and compressor stations of underground gas storage facilities of PJSC Gazprom.

The strongest effect in the reduction of greenhouse gas emissions is achieved through energy-saving measures at gas transport facilities. Specifically, they include the following measures:

- optimization of operating modes of the gas transmission system processing facilities (distribution of gas flows between gas pipelines, load between compressor stations of each gas pipeline, between gas compressors in shop floors);
- renovation and upgrade of technology equipment (replacement, upgrade and renovation of gas compressors, renovation of the linear telemetric system);
- reduction of gas losses at CS’s, linear parts of gas pipelines, gas distribution stations (pumping gas from the linear sections of gas trunk pipelines to be removed out of service, gas utilization for internal consumption by compressor workshops when running scheduled preventive maintenance, hot tapping technologies, repairs using reinforcing coupling elements);
- rectification of leaks (replacement of faulty ball valves at CS’s and at linear sections of gas trunk pipelines, repair of leaking ball valves using modern sealing materials, etc.);
- cutting gas consumption for process needs of auxiliary facilities (overhaul of boilers operating in boiler-rooms with replacement of heating tubes; replacement, cleaning, operational adjustment of boilers);
- improvement of hydraulic efficiency of gas pipelines (cleaning gas pipelines using cleaning pigs);
- introduction of automated control and telemetric systems, improvement of metering devices.

As a result of measures included in PJSC Gazprom’s Energy Saving and Energy Efficiency Improvement Program

in 2017, greenhouse gas emissions were reduced by 26.3 million tons of CO<sub>2</sub> equivalent.

PJSC Gazprom's greenhouse gas emissions from transportation amounted

to 92.28 million tons of CO<sub>2</sub> equivalent, from production to 13.07 million tons of CO<sub>2</sub> equivalent, from processing to 5.46 million tons of CO<sub>2</sub> equivalent and from underground storage to 1.34 million tons of CO<sub>2</sub> equivalent.

**Greenhouse gas emissions, 2014–2017, million tons of CO<sub>2</sub> equivalent**

Company	2014 <sup>(1)</sup>	2015	2016	2017
<b>TOTAL Gazprom Group, incl.</b>	<b>228.25</b>	<b>219.96</b>	<b>228.19</b>	<b>233.83</b>
PJSC Gazprom	110.70	102.56	101.24	113.17
Gazprom Energoholding	98.85	99.99	99.72	96.17
Gazprom Neft Group	14.46	11.22	16.18	13.31
Gazprom Neftekhim Salavat	–	–	4.56	5.75
Sakhalin Energy	3.52	3.70	3.42	3.22
Other companies	0.72	2.49	3.07	2.21

<sup>(1)</sup> Up to 2014, inclusive, greenhouse gas assessments are based on the global warming potential (GWP) of methane, which is equal to 21. In 2015, the methane GWP was changed to 25.



*Methane emission assessments include methane emissions from all natural gas operations in all industrial segments across the board: gas production, processing, transportation, UGS, distribution.*

In 2017, greenhouse gas emissions from all Gazprom Group facilities amounted to 233.83 million tons of CO<sub>2</sub> equivalent, or 2.5% more than in 2016. The addition was caused by growing production volumes across all segments of PJSC Gazprom operations, and by expansion of operating boundaries, as the Company was seeing an increase of the subsidiaries and entities included in relevant reports.

**Utilization of innovative technologies and materials** helps mitigate negative environmental impact. Gazprom Group implements an Innovative Development Program through to 2025. Its system of key performance indicators reflects PJSC Gazprom's innovativeness, environmental friendliness and efficiency. Indicators that characterize the Company's efforts to reduce the "carbon footprint" and

energy intensity of its industrial operations are "Reduction of consumption of fuel and energy resources used for internal needs and losses" and "Specific greenhouse gas emissions in CO<sub>2</sub> equivalent" (in percentage to the baseline year of 2014). Implementation of innovative projects drove up those indicators to 8.3% and 8.7%, respectively, in 2017.

**Monitoring of methane emissions** within the framework of state accounting of hazardous impacts on the atmospheric air and inventory-taking of pollutant emissions have been present at the Company since the 1990s. Many years ago, the Company created and still operates a system of monitoring, assessment and accounting of methane emissions. The results of inventory-taking are submitted according to annual federal statistical survey form No. 2-TP (air). Filled-out forms are

the basis for charging the Company for air emissions.

Group companies carry out comprehensive measures to reduce natural gas exhausts during process operations and repair works. Inspections and helicopter overflights to survey the linear part of gas trunk pipelines, instrumental inspections to assess methane losses as a result of leaks are organized on a regular basis.



*In March of this year, PJSC Gazprom in association with major international energy companies, such as Wintershall, Shell, BP, Equinor, Eni, ExxonMobil, Total, Repsol, signed the Guiding Principles on Reducing Methane Emissions Across the Natural Gas Value Chain (upstream and downstream). This bolsters the Company's commitment to further reduce greenhouse gas emissions and decrease the "carbon footprint" of its industrial operations.*

**Energy saving and development of gas infrastructure** are effective instruments to reduce greenhouse gas emissions. PJSC Gazprom's energy saving and energy efficiency improvement program is a tool to cut CO<sub>2</sub> emissions significantly. By increasing gas supplies to consumer in the Russian Federation and other countries, Gazprom Group provides them with an environmentally clean fuel, reducing the ratio of coal and mazut (black mineral oil) in the fuel balance and moderating adverse impact of those fuels on the environment and climate.

**Timely renovation and technical retrofit of equipment** used in gas production and transportation, of booster compressor stations and CS's of UGS is another important step that Gazprom Group companies make towards reduction of greenhouse gas emissions. Those

measures are governed by comprehensive programs:

- PJSC Gazprom's Energy Saving and Energy Efficiency Improvement Program;
- a comprehensive program of renovation and technical retrofit of production facilities;
- a comprehensive program of renovation and technical retrofit of gas transmission facilities, booster compressor stations and compressor stations of underground gas storage facilities of PJSC Gazprom.

Reducing flaring of associated petroleum gas (APG) is essentially important for the reduction of greenhouse gas emissions and resource saving. APG is a by-product of oil production, which is generated during the oil separation process. It contains hydrocarbons that can be utilized to produce fuel and some chemical substances widely used in manufacturing plastics and rubbers. As far back as 10 years ago, over half of all APG volume was flared, which caused a major damage to the environment and was economically counter-productive. Gazprom is expanding facilities to recover APG and use it in a commercially profitable way.

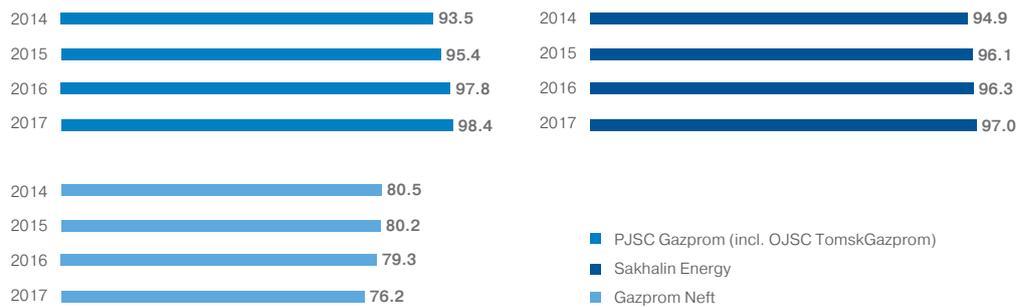
In 2017, APG effective utilization across different gas fields of gas producing subsidiaries of PJSC Gazprom (including OJSC TomskGazprom) was 98.4%, in Gazprom Neft Group 76.2%, in Sakhalin Energy 97%.

**APG production<sup>(1)</sup> of Gazprom Group in the Russian Federation, 2014–2017, bcm**



<sup>(1)</sup> Excluding the APG production share of the companies investments in which are classified as joint operations.

Utilization of APG by Gazprom Group companies, 2014–2017, %



Gazprom Group carries out investment projects to use APG produced at its fields; their ultimate goal is to use at least 95% of APG, in accordance with requirements of Resolution No. 1148, of November 8, 2012, of the Government of the Russian Federation.



*For instance, in its oil production regions, Gazprom Group implements projects of efficient APG processing. This helps minimize air-polluting emissions. For instance, in 2017 Gazprom Neft launched the first phase of a gas treatment plant at the Novoportovskoye oil and gas condensate field in the Yamal-Nenets Autonomous Area. In the eastern section of the Orenburg oil and gas condensate field, a new CS was commissioned into operation in late 2017, through which all APG produced at the field will be supplied to the Orenburg gas processing plant and its utilization will be boosted to 95%.*

Increase of flared APG quantities at Gazprom Neft is linked to growing oil production in the Vostochno-Messoyakhskoye, Novoportovskoye, Urmano-Archinskoye fields. Construction of infrastructure for APG utilization at those assets is nearing completion.

Gazprom Neft is carrying out a program to boost APG production levels at all of its production assets. The key target of Gazprom Neft is to increase APG utilization to 77.7% in 2018, 90.2% in 2019 and 95% by 2020. In 2017, the Company used 76.16%<sup>20</sup> of APG.

Gazprom Neft's key projects to utilize APG in 2017:

- to launch fuel gas treatment plants to cater to fuel needs of the Vostochno-Messoyakhskoye field gas turbine power plant;
- to increase APG consumption on oil preparation by boosting production fluid at JSC Messoyakhaneftegaz; to convert the gas turbine power plant to APG instead of natural gas in its fuel provision;
- commissioning into operation of a 96 MW gas turbine power plant and an APG compression plant at Novoportovskoye field facilities to ensure APG injection into the formation;
- commissioning of CS's of the Shinginskoye and Zapadno-Luginetskoye fields.

In 2018, the Company will continue its gas program aimed at further improvement of APG utilization, and, as a result, will drive down specific indicators of air polluting and greenhouse gas emissions.

<sup>20</sup> Used APG volume at the Company-owned assets, excl. joint ventures. In 2017, Gazprom Neft Shelf LLC was included in the scope for the first time.

**Use of environmentally clean motor**

**fuel:** natural gas used in various kinds of transport will help mitigate the adverse impact on the atmospheric air and improve the environmental situation in cities and towns.



*Combustion of 1,000 liters of liquid oil motor fuel produces exhaust gas, 180–300 kg of carbon monoxide, 20–40 kg of hydrocarbons, 25–45 kg of nitrogen oxides; all that goes into the air.*

*Using **natural gas** instead of oil-based fuel will cut toxic emissions released into the environment by approx. 2–3 times in terms of carbon monoxide content, 2 times in terms of nitrogen oxide content, 3 times in terms of hydrocarbons, 9 times in terms*

*of smoke content; at the same time, no soot is generated, unlike in the operation of diesel engines.*

In his public speeches at large international and national economic and energy forums, Vladimir Putin, President of the Russian Federation, pointed out multiple times to the need of a wider use of NGV fuel in Russia because of its environmental and economic benefits, and its peculiarities as a resource.

Use of natural gas as motor fuel is a weighty contribution to cutting harmful air emissions from transport. Therefore, Gazprom Group is taking a systematic approach to the development of the NGV fuel market and making EcoGas-branded natural gas more popular.

**2.5.  
ENERGY  
SAVING  
AND ENERGY  
EFFICIENCY:  
SAVING  
RESOURCES  
TO BENEFIT  
THE PLANET**

**18.5%** is how much specific consumption of fuel and energy resources for the Company's internal needs decreased across Gazprom Group's gas business in 2017, compared to 2011.

Gazprom Group's long- and mid-term energy saving and energy efficiency programs enable planning and handling tasks related to improvement of the energy efficiency of all types of activities, in compliance with provisions of Russian laws.

In its efforts to improve energy efficiency, Gazprom Group is governed by provisions of Russia's Energy Strategy through to 2030, Federal Law No. 261, of November 23, 2009, "On Energy Saving and Energy Efficiency Improvement and on Amending Certain Statutes of the Russian Federation," and also by the Energy Saving and Energy Efficiency Improvement Concept of PJSC Gazprom through to 2020.

In 2017, PJSC Gazprom's Energy Saving and Energy Efficiency Improvement Program

for 2017–2019 took effect. Once that program is fulfilled, the Company plans to save over 5 bcm of natural gas, over 600 million kWh of electric power, and over 520,000 Gcal of heat energy.

In total, from 2017 to 2019, the Company plans to carry out more than 2,800 measures, which will help save over 6 million tons of fuel and energy resources in terms of reference fuel, for a total amount exceeding RUB 18 billion.

In 2017, PJSC Gazprom continued to ensure compliance with requirements of the ISO 50001 standard, "Energy Management Systems." And the Company also kept on incentivizing specialists towards adopting energy efficient solutions and technologies.



**In 2017, innovative solutions implemented in line with the research paper entitled Corporate Management System for Energy Efficiency and Greenhouse Gas Emissions at Gazprom and employed as part of the Company's energy efficiency management system received Gazprom's Science and Technology Prize. The cumulative economic effect from using the results of the work exceeded RUB 18 billion.**

Gazprom Neft Group companies, Gazprom Energoholding, Gazprom Neftekhim Salavat, and Sakhalin Energy have their own ongoing energy saving programs.

Gazprom Neft has reaffirmed conformance of its energy saving and energy efficiency improvement management system with requirements of the ISO 50001 standard. The current Energy Saving and Energy Efficiency Improvement Program for 2016–2018 allows the company to carry out measures saving fuel and energy resources.

Generating companies of Gazprom Energoholding have adopted framework documents on energy efficiency and energy saving initiatives in accordance with legislative requirements. PJSC Mosenergo,

PJSC MOEK and PJSC TGC-1 have adopted and update annually their mid-term energy saving programs.

Since 2013, PJSC OGK-2 has implemented its program of operating efficiency improvement ("Efficiency" project), which includes energy efficiency measures. The main areas of the programs are implementation of technical retrofit and renovation projects (capacity additions), improvement of equipment cost-effectiveness (through major overhauls and medium repairs), other organizational and technical measures (upgrade of lighting systems, etc.), energy efficiency studies, development and adoption of guidelines based on energy sustainability principles and practices.

## GAS BUSINESS

**18.9** million tons of fuel and energy resources were saved by Gazprom Group in the gas business segment in terms of reference fuel

**(554 million GJ)** between 2011 and 2017

From 2011 to 2017, as a result of a package of measures within the framework of the Energy Saving and Energy Efficiency Improvement Concept for 2011–2020, Gazprom's gas business units saved 18.9 million tons of fuel and energy resources in terms of reference fuel (554 million GJ), 15.8 bcm of natural gas, 1.85 billion kWh of electric power, 1.5 million Gcal of heat energy.

First and foremost, Gazprom Group improves energy efficiency of its production through the use of innovative technologies and equipment, and by optimizing industrial processes. Most fuel and energy savings (84.4%) were achieved through the efforts to improve efficiency of transport along gas trunk

pipelines, Gazprom's most energy-intensive business. In 2017, improvement of energy efficiency of the processing equipment and reduction of greenhouse gas emissions continued, which was achieved through the following steps:

- cutting the volumes of blown gas during repair works;
- optimization of operating modes of power-consuming equipment;
- replacing changeable flow sections of centrifugal compressors;
- use of high-efficiency sources and lighting layouts;
- redirecting gas from gas pipeline sections under repair into an operating gas pipeline;
- converting the gas compressor startup system from a pneumatic principle to power drive, using an electric starter.

In addition, the Company was carrying out projects of using the heat from exhaust gases at CS's, installed turboexpanders on gas distribution stations.

**Saved fuel and energy resources, PJSC Gazprom, 2011–2017, million tons of reference fuel**

Types of fuel and energy resources	2011	2012	2013	2014	2015	2016	2017
Gas	2.72	2.06	2.19	2.36	2.57	2.64	3.48
Electric power	0.06	0.08	0.10	0.08	0.08	0.08	0.11
Heat power	0.01	0.03	0.03	0.03	0.03	0.04	0.04
<b>Saved fuel and energy resources, TOTAL</b>	<b>2.80</b>	<b>2.18</b>	<b>2.32</b>	<b>2.48</b>	<b>2.69</b>	<b>2.76</b>	<b>3.63</b>

**The outcome of PJSC Gazprom's Energy Saving and Energy Efficiency Improvement Program, 2017**

Type of business	Natural gas, million cubic meters	Electric power, million kWh	Heat energy, thousand Gcal
Gas, condensate, oil production	362.8	28.1	11.6
Gas transportation	2 579.8	222.7	60.1
Underground gas storage	16.6	9.4	0.0
Gas, condensate and oil processing	39.2	56.0	193.0
Gas distribution	14.5	8.5	3.6
Non-core activities	0.6	6.7	0.2
<b>TOTAL</b>	<b>3,013.5</b>	<b>331.4</b>	<b>268.4</b>
<b>TOTAL, thousand tons of reference fuel</b>	<b>3,480.6</b>	<b>107.7</b>	<b>38.4</b>
<b>TOTAL, million GJ</b>	<b>101.98</b>	<b>3.16</b>	<b>1.13</b>

**OIL  
BUSINESS**

Gazprom Neft set the following energy saving targets for 2017:

- To implement an energy saving and energy efficiency improvement program (215 million kWh). To achieve planned indicators of electric power consumption across the Upstream Unit (29.39 kWh/tons). The target was achieved, the program was completed, and planned indicators were outperformed: normalized

specific electric power consumption is 1.4% lower than what was projected for the year.

- To implement an Energy Saving Program and to save 279,400 Gcal of heat energy, 137,500 tons of fuel in terms of reference fuel, and 18.9 million kWh of electric power. The target was achieved, the program was completed, and planned indicators were outperformed.

**Outcome of energy saving and energy efficiency improvement programs, Gazprom Neft, 2014–2017**

Type of business	Electric power, million kWh			
	2014	2015	2016	2017
Gas, condensate, oil production	154	205	433	363
Oil processing	25.3	27.0	16.2	18.9

Type of business	Fuel, thousand tons of reference fuel			
	2014	2015	2016	2017
Oil processing	39.3	60.0	25.7	137.5

Type of business	Heat energy, thousand Gcal			
	2014	2015	2016	2017
Oil processing	439.6	1 68.9	258.7	279.4

Gazprom Neft managed to save fuel and energy resources thanks to a series of measures. For instance, enhanced electric centrifugal pumps are used. Asynchronous submersible motors are replaced with AC electric ones. Wells are converted to a temporary-duty or intermittent operating mode. The amount of produced water is cut, and water is reinjected into the formation. Pump units are upgraded, energy efficient rotors are introduced, as well as variable-speed drives for them. Energy efficient lights and heating devices are installed at facilities.

In 2018, Gazprom Neft plans to implement its energy saving program and save the following quantities of principal fuel and energy resources:

- heat energy – 109,400 Gcal;
- fuel – 38,300 tons of reference fuel;
- electric power – 3.9 million kWh.

The cumulative economic effect is expected to be RUB 460.7 million.



**The Moscow Oil Refinery improves energy efficiency**

*Upgrade and repair of key units at the Moscow Oil Refinery in 2017 helped reduce fuel consumption by the plant by 2.1%, heat energy consumption by 0.9%. The main contribution to fuel consumption reduction was made by the upgrade of ELOU-AVT-6 process furnaces, which account for 19% of the refinery's total power consumption, and completion of a project to convert them from liquid to eco-friendly gas fuel. Additionally, installation of state-of-the-art energy efficient equipment and conversion of the entire lighting system at the plant to energy-saving technologies also contributed to energy saving.*

**ELECTRIC  
POWER  
BUSINESS**

**935,300** tons of fuel in terms  
of reference fuel  
**(27.40 million GJ)** was saved  
by Gazprom Group's energy business in 2017

**588.03** million kWh of electric power  
was saved in 2017  
**174,630** Gcal of heat energy was  
saved in 2017

Gazprom Energoholding generating enterprises also work in accordance with energy saving programs.

**Outcome of energy saving and energy efficiency improvement programs implemented in Gazprom Energoholding, 2017**

Name of generating company	Saved fuel, thousand tons of reference fuel.		Saved electric power, million kWh	Saved heat energy, thousand Gcal
	Total	Incl. gas		
PJSC Mosenergo	900.93	885.78	565.28	87.62
PJSC TGC-1	11.19	11.04	0.62	0.14
PJSC OGK-2	23.03	13.64	22.13	7.38
PJSC MOEK	0.15	0.15	–	79.49
<b>TOTAL</b>	<b>935.29</b>	<b>910.61</b>	<b>588.03</b>	<b>174.63</b>

**ENERGY  
OF THE FUTURE:  
RENEWABLE  
AND SECONDARY  
ENERGY  
RESOURCES**

**471,470** kWh is the amount of energy generated from renewables and secondary energy resources (excl. hydrogeneration) across Gazprom Group in 2017

**1,959** power plants on the basis of renewables and secondary energy resources (excl. hydrogeneration) were used across Gazprom Group in 2017

Gazprom Group continues to use alternative, environmentally clean energy sources in production. Renewable energy sources (renewables) are used in remote or technologically isolated areas, where their operation is economically and technically viable.

Solar and wind generators, converters of gas heat and flow energy into electric power are used at production facilities, trunk gas transmission and gas distribution grids to supply power to telemetric systems, for cathode protection of trunk pipelines, for lighting and other purposes.

Heat and electric power generation from secondary energy resources has a powerful energy saving potential, as it cuts consumption of primary energy resources. Secondary energy resources are used by Gazprom to produce heat energy without fuel combustion. The maximum effect from using secondary energy resources can be achieved through the use of appropriate electric power generating equipment using heat of exhaust gases produced by gas compressors and turboexpanders installed at Unified Gas Supply System facilities. To receive heat energy without fuel combustion, waste heat recovery units have been installed at most of Gazprom's CS's.

Hydrogeneration helped produce 13.72 billion kWh of electric power at PJSC TGC-1 and

at Nugush Hydroengineering Complex LLC. Hydropower plants of PJSC TGC-1 account for the bulk of generation, as they make a significant contribution to the green energy industry of Russia's North-Western Federal District.

In 2017, in addition to hydroelectric units, 1,959 power supply plants based on secondary energy resources and renewables were operating across Gazprom Group. The aggregate volume of electric power generated by those power supply plants was 471,470 kWh.

Use of renewables allows Gazprom Group to cut consumption of nonrenewable resources and minimize the adverse impact on the environment.

**Electric power generation from renewables and secondary energy sources across Gazprom Group, 2016-2017**

Generation	Electric power generation, kWh		No. of units	
	2016	2017	2016	2017
<b>All types of renewables and secondary energy resources</b>	<b>13,036,783,055.28</b>	<b>13,723,908,386.01</b>	<b>1,907</b>	<b>2,077</b>
Turboexpanders	38,470.46	143,915.52	10	20
Thermal electric power generators	774.14	2,670.00	672	719
Solar and wind generators	321,235.68	324,887.49	1,107	1,220
Hydraulic turbines	13,036,422,575.00	13,723,436,913.00	118	118



*In 2017, Gazprom Neft Yamal LLC began a pilot testing of a combined wind and solar power plant called YURTA with a capacity of 27.5 kW, designed to supply electric power to a block of linear consumers. A hybrid technology will achieve a major cut of costs involved in power supply of extended facilities and those located far from the grid infrastructure, as construction of power supply lines will no longer be required. Equipment for the power plant is manufactured in Russia and was designed to operate at temperatures of up to  $-60^{\circ}\text{C}$ . Due to the vertical shape of the wind generators, electric power can be produced irrespective of the direction of airflows.*

*Gazprom Neft works on technologies to generate power from renewable sources in Serbia. The company is involved in a few successful projects in the geothermal energy industry and in a project of construction of a wind power plant in Plandište, jointly with Energowind NIS.*

## 2.6. GAZPROM GROUP'S STAKEHOLDER ENGAGEMENT IN ENVIRONMENTAL PROTECTION

Gazprom Group's operations are linked with construction of new gas and oil production and transportation infrastructure facilities. That work requires taking into account opinions of various groups of stakeholders: local authorities, environmentalists, communities. Gazprom Group is open to dialogue with each one of them.

Hearings and discussions are held in all regions of the Group's presence. That dialogue is especially important for environmentally sensitive areas. They include Sakhalin Island, the Republic of Sakha (Yakutia), Yamal-Nenets Autonomous Area, Primorye Territory, Krasnoyarsk Territory, Irkutsk Region.



*In accordance with Russian legislation, most investment projects must be discussed in public hearings. However, there are no standard requirements for the procedure of those hearings. To bridge that legal gap, PJSC Gazprom has developed a document of a corporate standardization system in 2014, which gives recommendations for public discussions and hearings based on environmental impact assessments (EIA) for projected economic or commercial operations.*

In 2017, public hearings were held on the following projects:

- Development of experimental sites of the Novoportovskoye oil and gas condensate field for the period of test operation. Landfill for solid household and industrial waste. Expansion;
- Development of well clusters at the Novoportovskoye oil and gas condensate field. 3rd stage. Group 21;
- Trial operation of the Zapadno-Chatylkinskoye field. Well clusters No. 4, 4 BIS;
- Development of the Zapadno-Messoyakhskoye field. Landfill for solid household and industrial waste. Correction;
- Substantiation of planned economic activities during the implementation of the project estimate for technical retrofit of the Prirazlomnoye Offshore Ice-Resistant Platform. System 34, "High-Pressure Flare System," and system 35, "Low-Pressure Flare System," for sootless combustion;
- Plan for prevention and control of emergency oil and oil product spills in the area of responsibility of the Prirazlomnoye Offshore Ice-Resistant Platform, including EIA materials;
- Exploration well No. 1 of the Ayash area and Plan for the prevention and control of emergency oil and oil product spills during construction of exploration and evaluation well No. 1 in the Ayash area;
- A complex for LNG production, storage and shipment in the area of CS Portovaya. Stage 1;

- A complex for LNG production, storage and shipment in the area of CS Portovaya. Stage 3: construction of a complex for LNG production, storage and export in the area of CS Portovaya, including environmental impact assessment (EIA) materials;
- A complex for LNG production, storage and shipment in the area of CS Portovaya. Stage 4;
- Development of gas transmission facilities of the Unified Gas Supply System in the north-western region, the Gryazovets – CS Slavyanskaya section;
- A terminal for receiving, storing and regasification of liquefied natural gas (LNG) in the Kaliningrad Region;
- Alpica Service, an alpine resort in the Adler District of Sochi;
- Nord Stream 2.

Gazprom Group enterprises have organized design and adoption of regulations for the interaction when handling claims and reports on environmental protection violations. Employees working at the enterprise analyze information of the report and prepare official feedback.

Every year, Gazprom subsidiaries build reports that include indicators of the environmental impact of industrial operations, completed measures and scope of their funding, fees for the adverse impact on the environment; those reports are submitted to public executive authorities and state statistics bodies of the Russian Federation.

Leadership of Gazprom Group companies regularly hold briefings with members of the nationwide and regional press,

environmentalists, public figures. Within the framework of those events, matters of sustainable use of natural resources, environmental protection and energy saving are discussed; guests are shown around principal industrial facilities and get familiarized with the system of controls that ensure compliance with environmental standards.



**Environmental information is accessible to everyone**

*The Moscow Oil Refinery continues to operate a street screen displaying environmental monitoring indicators. Data on the condition of the atmospheric air in the plant's area of impact have been shown on a special street Eco-Informer since October 2015. As for the Omsk Oil Refinery, information on the condition of the atmospheric air in its area of impact has been released on the enterprise's official portal since August 2016.*

You can learn more about Gazprom Group's environmental protection activities here:<sup>21</sup>



Information on Gazprom Group's projects is released promptly on the Company's website: <http://www.gazprom.com> and on websites of subsidiary enterprises, in the "Protection of Nature" section. PJSC Gazprom, its subsidiaries and affiliated companies actively collaborate with the media, supplying information on their activities and operations. Information on Gazprom's current and prospective activities in the area of environmental protection and energy efficiency is regularly published in the corporate magazines *Gazprom*, *Gas Industry*, in newspapers and other periodicals of Gazprom Group subsidiaries, in specialized industrial publications.

PJSC Gazprom's Sustainability Report and Annual Report, the corporate publication *Gazprom in Figures* have sections covering matters related to environmental protection and energy saving. Every year, an environmental report is brought to the attention of the shareholders and all stakeholders.

<sup>21</sup> <http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf>.



### 3. PEOPLE: DECENT LIVING AND WORK STANDARDS

People are a valuable resource of Gazprom: To a large extent, efficiency of Group enterprises depends on their employees. Gazprom is doing its best to ensure for them a comfortable working environment and safety, decent standards of pay and social benefits.

Gazprom Group has a personnel management system based on the respect of human rights, principles of fairness and transparency. Equal opportunities and a continuous dialogue with supervisors, professional growth and development, recruitment and retention of the best talent have become an integral part of that system and also a priority of the Company's general development.

The Group continuously works to train young specialists and help them adapt. To recruit new talent, collaboration with educational institutions is pursued: Gazprom provides an opportunity of employer-sponsored education, sets up specialized departments at universities in the regions of presence, offers on-the-job training programs to students, organizes recruiting events. Young specialists who just begin their careers at enterprises are assisted by experienced mentors.

Social policy is carried out through benefits, guarantees and compensations, healthcare and treatment at health resorts, a wide

range of personal insurance programs and additional retirement insurance plans.

Conservation of life and health of its employees is another absolute priority for the Group. Gazprom respects legislation in the area of occupational health, industrial and fire safety, carries out activities aimed at enhancement of work culture and promoting a responsible attitude to workplace safety among employees.

Gazprom Group strives to find a balance between production efficiency and public interests: It creates jobs, expands gas grid coverage of various regions, carries out infrastructure projects, engages in social and charity programs, fosters preservation of national identity of indigenous small-numbered peoples of the North. Together with its subsidiary enterprises, Gazprom supports culture, science, education. The high level of the Group's social responsibility is supported by programs aimed at promotion of sports and healthy lifestyles.

**96%** of shift personnel works in regions of the Far North and equivalent localities.

**35,600** people – total shift personnel in 2017

**469,600** people – the Group's roster

### 3.1. GAZPROM GROUP'S PERSONNEL

Number of employees, Gazprom Group, 2014–2017, thousand people

Company	Roster as of end of the reporting period			
	2014	2015	2016	2017
PJSC Gazprom	24.3	24.8	25.5	26.2
Main PJSC Gazprom subsidiaries (production, transportation, processing and underground gas storage)	233.3	235.4	237.4	235.6
Other subsidiaries and entities	202.0	202.2	204.5	207.8
<b>TOTAL</b>	<b>459.6</b>	<b>462.4</b>	<b>467.4</b>	<b>469.6</b>

As of December 31, 2017, Gazprom Group companies had 469,600 people on their roster (467,400 people in 2016). The headcount increased (by 2,200 people) in 2017 due to transfer of catering operations to a specialized subsidiary, Gazprom Pitaniye LLC, consolidation of project activities at Gazprom Proyektirovaniye LLC, and also due to changes in the structure of assets of Gazprom Mezhregiongaz group companies. Gazprom Group's personnel accounts for 0.6% of all people employed in the Russian Federation.

Gazprom offers a safe working environment and a comprehensive social package to its staff. It is one of the reasons for low personnel turnover across Group companies. For

instance, in 2017 it was 4.7%. At subsidiary enterprises involved in gas production, transportation, processing and storage, that indicator declined from 1.9% to 1.3% between 2012 and 2017. The turnover rate is calculated as the ratio of the number of employees who quit of their own accord (except for those who were dismissed for a valid reason) to the average number of employees as of the end of the reporting period.

Indicators of employee movements, Gazprom Group, 2015–2017

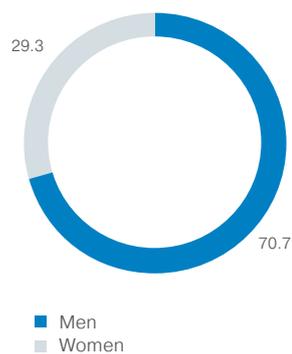
Indicator	2015	2016	2017
Hires a year, thousand people	71.2	65.9	70.5
Dismissals a year, thousand people	68.8	57.1	71.1
Personnel turnover, %	3.9	4.0	4.7
Staffing level, %	95	95	96

In 2017, the staffing level at Gazprom Group was 96% and remained stable (96.3% across budgeting system entities), which attests to stability of Gazprom teams and systematic recruiting efforts in Group companies.

**Personnel structure, Gazprom Group, 2014–2017, thousand people**

Indicator	2014	2015	2016	2017
<b>Personnel roster</b>	<b>459.6</b>	<b>462.4</b>	<b>467.4</b>	<b>469.6</b>
Executives, of which:	63.0	63.4	64.9	65.2
men	48.0	48.8	49.3	49.4
women	15.0	14.6	15.6	15.8
Specialists and other employees, of which:	142.2	145.7	147.8	148.0
men	81.2	84.7	87.2	85.0
women	61.0	61.0	60.6	63.0
Workers, of which:	254.4	253.3	254.7	256.4
men	197.7	200.9	198.6	197.5
women	56.7	52.4	56.1	58.9

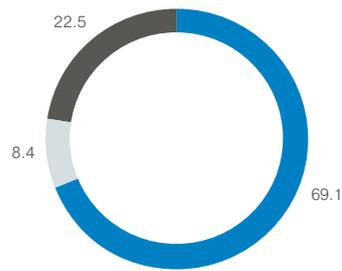
**Gender personnel structure, Gazprom Group, as of December 31, 2017, %**



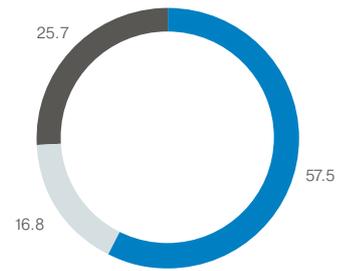
Men account for the larger part of Gazprom Group employees (70.7%), which can be explained by specifics of the Group's activities.

Age structure of Gazprom personnel, 2017, %

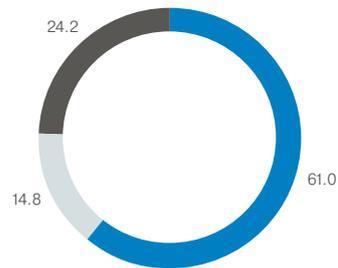
PJSC Gazprom



Other subsidiaries and entities



Principal subsidiaries of PJSC Gazprom  
(production, transportation, processing  
and underground gas storage)

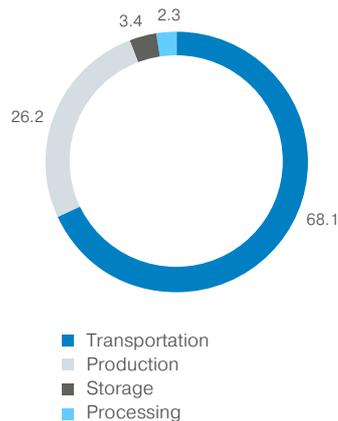


■ Below 30 years  
■ From 30 to 50 years  
■ 50 years and above

Gazprom Group uses all opportunities to build an efficient team of professional associates, in which experiences of the older generation complement the energy and enthusiasm of the youth, and a proper environment for professional growth and development of each team member is created.

In terms of the age structure at Gazprom Group, middle-aged employees (30 to 50 years old) prevailed (59.9%) in 2017, with young employees of up to 30 years accounting for 15.3%.

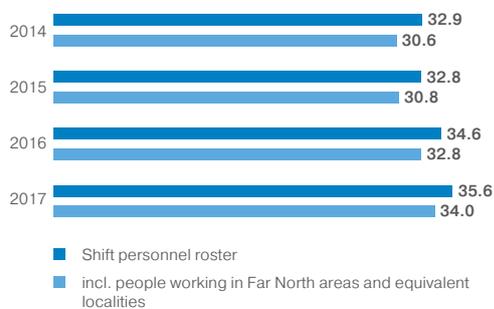
**Personnel structure,  
principal PJSC Gazprom subsidiaries,  
as of end-2017, %**



PJSC Gazprom's principal subsidiaries employ 235,600 people (as of end-2017), with the larger part of them working for the transportation (68.1%) and production (26.2%) segments.

Gas fields in the Far North and equivalent localities are developed in harsh climate conditions. Therefore, Gazprom practices a shift system. In 2017, total shift personnel equaled 35,600 people, 96% of whom worked in regions of the Far North and equivalent localities.

**Number and structure of shift personnel,  
2014–2017, thousand people**



Adequate working and living conditions have been created for the shift personnel to ensure their efficient work, namely:

- transportation of personnel to and from worksites;
- development of the camp infrastructure, which guarantees essential comforts and living standards for shift personnel while working away from home;
- healthcare and social amenities;
- adherence to the established work/rest regimen.



**What are the living conditions  
of the shift personnel in the Far North?**

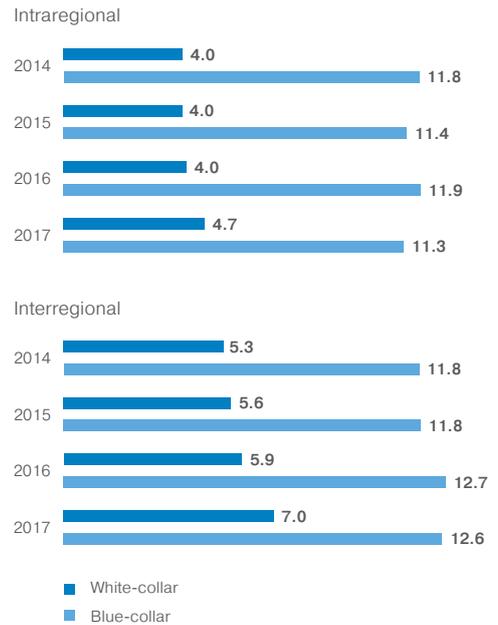
Gazprom Dobycha Yamburg LLC, a gas producing company, creates comfortable living conditions and adequate social infrastructure for its shift personnel. The Yamburg and Novozapolyarny camps have community centers for entertainment and sports, with swimming pools, universal gyms and fitness rooms, table tennis and billiard rooms. 110 sports groups in Yamburg and 96 in Novozapolyarny were active in those community centers.

An occupational health facility is the only healthcare unit that de facto performs the functions of a center for industrial medicine. At present, qualified medical assistance is available in their camps for over 8,000 employees of Gazprom Dobycha Yamburg LLC and more than 6,000 employees of other units of PJSC Gazprom, as well as for indigenous communities of the Yamal-Nenets Autonomous Area.

In areas of the Group's High Arctic fields, camps have been built where living conditions are up to the latest world standards. PJSC Gazprom continuously develops the infrastructure of camps for the shift personnel, builds and renovates utilities, catering, healthcare, physical culture and sport facilities.

Traditionally, workers account for the bulk of the shift personnel structure. They are employed according to two forms of shift patterns: interregional (55.1% of the total shift personnel roster), where workers have to travel very far (sometimes a few thousand kilometers) and cross different climate and time zones, and intraregional (44.9%). Under the latter pattern, workers do not travel very far and are usually employed for short periods of time (one or two weeks). Stable transportation and communication links are maintained between principal inhabited localities and camps for shift personnel.

**Shift personnel roster, by designation of workers, 2014–2017, thousand people**



Over many years, Gazprom Group has been maintaining leadership in Russian employer attractiveness ratings.



In 2017, PJSC Gazprom made it to the top of Universum, a rating of Russia's most attractive employers in students' opinion.

**Majoring in Business:**

- PJSC Gazprom – 2<sup>nd</sup> place,
- PJSC Gazprom Neft – 4<sup>th</sup> place.

**Majoring in Engineering / Natural sciences:**

- PJSC Gazprom – 1<sup>st</sup> place,
- PJSC Gazprom Neft – 3<sup>rd</sup> place.



In 2017, PJSC Gazprom Neft was ranked first among Russia's most attractive employers according to the international Randstad Award. PJSC Gazprom Neft replaced PJSC Gazprom, after the latter had won the Randstad Award three times in a row, and, according to the rules of the competition, was introduced into the award's Hall of Fame.



In 2017, PJSC Gazprom Neft was also ranked 5<sup>th</sup> in Russia's Employers, an annual rating of the HeadHunter HR agency.



In the rating of FutureToday (rating of the best employers, according to students of Russia's major universities), PJSC Gazprom was ranked 3<sup>rd</sup>, and PJSC Gazprom Neft 6<sup>th</sup> in 2017.



The Group's subsidiaries have won multiple nationwide competitions. In 2017, Gazprom Dobycha Astrakhan LLC won six awards at the regional leg of the nationwide competition Russian Entity of High Social Efficiency.

### 3.2. HR MANAGEMENT AT GAZPROM GROUP

Strong performance and stability of Gazprom as a whole largely depends on professional expertise, competencies, skills and abilities of its personnel.

Personnel management involves creating the best working conditions, incentivizing good performance, improvement of professional qualities of employees and building an objective system of evaluating personal contribution of each and every employee. Those processes are implemented in accordance with an HR Management Policy enforced at PJSC Gazprom, its subsidiaries and entities. Effective implementation of the policy will contribute to the achievement of Gazprom's strategic mission and is consistent with global targets of sustainable development and stakeholders' expectations. Gazprom executives of all levels, with the Chairman

of the Management Committee at the helm, are responsible for implementation the HR Management Policy.

In the long term, the existing HR management planning system makes it possible to predict staff strength, to determine the need for manpower across the Company and its subsidiaries, in accordance with PJSC Gazprom's development strategy, to carry out forward-looking staff training programs.

Within the framework of the PJSC Gazprom Long-Term Development Program (which is updated on an annual basis), PJSC Gazprom's need for human resources has been predicted for the next ten years (2018–2027).

### PRINCIPLES OF PERSONNEL MANAGEMENT AT GAZPROM GROUP

Gazprom respects the principles of transparency and openness in personnel management, improves management techniques, provides a favorable working environment for its employees and an opportunity for them to upgrade their skills and realize their potential.

Proceeding from provisions of the International Labor Organization, Gazprom Group adheres to fundamental labor standards, namely:

- freedom of professional associations and effectual recognition of the right to negotiate collective agreements;
- elimination of all forms of forced or compulsory labor;
- effectual prohibition of child labor;
- prevention of discrimination in employment and occupation.

Gazprom complies with standards of the International Labor Organization so far as matters related to the duration of

the working day and working conditions, occupational health and remuneration system, social insurance, paid vacation are concerned.

Gazprom has a group-wide package of documents governing personnel management:

- HR Management Policy of PJSC Gazprom, its subsidiaries and entities;
- Comprehensive HR Management Performance Improvement Program of PJSC Gazprom, its subsidiaries and entities for 2016–2020.

One of the most important factors of Gazprom employee development is the HR Management Policy of PJSC Gazprom, its subsidiaries and entities, which is carried out according to plan and defines personnel management approaches. Efficient implementation of the policy determines to a large extent the employees' ability to handle tasks at hand in a productive and qualified manner.

Gazprom's HR Management Policy is based on the following principles:

- Gazprom's maximal flexibility in personnel management;
- continuous improvement of HR management methods;
- ability to quickly and efficiently adapt to changes in social, political and external economic factors;
- personnel's expertise;
- efficiency in HR management;
- consistency of planning of personnel management processes;
- transparency and openness in HR management;
- continuity: keeping positive traditions in the Group's HR management.

Key areas of the HR management policy:

- personnel selection, evaluation and employment;
- training and development;
- motivation and remuneration;
- social policy;
- corporate communications.

The basic document aimed at improvement of personnel management at Gazprom Group is the 2016–2020 Comprehensive HR Management Performance Improvement Program of PJSC Gazprom, its subsidiaries and entities. It is designed to enhance efficiency of implementing of personnel management business processes in:

- Human resource planning;
- Recruitment and staffing at Gazprom;
- Employee training and development;
- Employee motivation;
- Corporate communications;
- Information support.

## OPPORTUNITIES FOR YOUNG SPECIALISTS

**3,238** graduates of higher and secondary vocational education institutions were hired by Gazprom Group in 2017

Key areas of Gazprom's corporate HR policy include recruitment, selection and adaptation of young specialists, evaluation of professional qualities of employees every year, and using their potential efficiently.

One of goals of the corporate HR policy is to create conditions for successful adaptation

**Number of graduates hired by Gazprom Group, 2014–2017, people**



<sup>(1)</sup> Versus 2016 +18%.

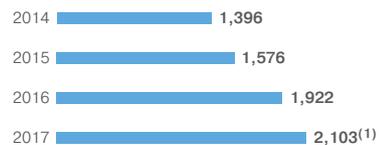
The employer is interested in having a young specialist complete internship immediately at the enterprise, in seeing them build professional skills and realize their potential successfully. The “young specialist” status is awarded to graduates of higher and secondary vocational educational institutions aged below 30, who were first hired by the Group based on their college major; the status remains valid for three years.

In 2017, the status of PJSC Gazprom's employer-sponsored student was awarded to 2,103 students of higher and secondary vocational education institutions.

**13,975** students interned at subsidiaries and entities of PJSC Gazprom

of young specialists, improvement of their skills, and development of their creative potential. In 2017, 3,238 graduates of higher and secondary vocational education institutions were hired to work for Gazprom Group.

**Number of employer-sponsored students at PJSC Gazprom, 2014–2017, people**



<sup>(1)</sup> Versus 2016 +9%.

Gazprom recruits young specialists, including:

- via the Gazprom Vacancy portal;
- at job fairs and during Gazprom Days;
- via Gazprom classes. Successful graduates of Gazprom classes can be recommended by the enrollment committee for enrollment to anchor universities as employer-sponsored applicants;
- on the basis of a contest of young specialists vying to be employed at PJSC Gazprom subsidiaries;
- via anchor universities: PJSC Gazprom has entered into agreements with 12 universities having the status of PJSC Gazprom's Anchor Universities.



**A successful start for young specialists**

*Since 2007, Gazprom Dobycha Yamburg LLC in Novy Urengoy (Yamal-Nenets Autonomous Area) hosts an annual contest of young specialists Successful Start to win employment at PJSC Gazprom subsidiaries. Since the inception of the contest, over 1,500 people have taken part in it. On the basis of the contest, employment certificates to be recruited by PJSC Gazprom subsidiaries were given to 182 participants.*

*At present, in addition to Gazprom Dobycha Yamburg LLC, five other subsidiaries co-sponsor the contest: Gazprom Dobycha Nadym LLC, Gazprom Pererabotka LLC, Gazprom Dobycha Urengoy LLC, Gazprom Dobycha Noyabrsk LLC, Gazprom Podzemremont Urengoy LLC.*

Gazprom has collaborated with the anchor universities for a few years now. One aspect of the interaction is targeted training of specialists and improvement of educational programs in order to minimize expenditures on adaptation of young specialists in their new jobs. The Group helps universities build their lab and training bases, develop teaching aids, organize internships for students. In turn, educational institutions engage executives and employees of Gazprom Group to be teachers and mentors. Within the framework of PJSC Gazprom's Innovative Development Program through to 2025, agreements were made on collaboration with major anchor universities, including:

- Gubkin Russian State University of Oil and Gas (national research university);
- St. Petersburg State University of Economics;
- National Research Tomsk Polytechnic University;
- St. Petersburg Mining University;
- Kazan National Research Technological University;
- Ukhta State Technical University;
- Bauman Moscow State Technical University (national research university);

- Lomonosov Moscow State University;
- National Research University Higher School of Economics;
- Ufa State Oil Technical University;
- Tyumen Industrial University;
- St. Petersburg State Marine Technical University.

To enhance the quality of training of future specialists, Gazprom initiates setting up specialized departments at anchor universities. The main purpose of their establishment is to share hands-on knowledge and build additional competencies in students. The Group's employees deliver lectures and run workshops, master classes, supervise graduation and term papers, on-the-job-training and internships, engage students in projects and studies. Gazprom Group supports 30 specialized departments.

In 2017, 13,975 students of higher and secondary vocational educational institutions completed internship and undergraduate apprenticeship at PJSC Gazprom enterprises and subsidiaries. Students who are successful in that training are given an opportunity to take part in a competition for jobs and to be eligible for a position in the event of an opening.

Gazprom Neft Group also strives to use new approaches to recruit young specialists. For instance, a Recruitment Center was opened at Gazprom Neft. It includes an Interregional Recruitment Center and regional recruitment centers. The center uses a SAP-based recruitment model, which is integrated with the Gazprom Neft career portal: <http://www.gazprom-neft.com/career/>. Gazprom Neft also develops programs of targeted student training in the regions of its operations with employment prospects at enterprises after the students' graduation.

Recruitment of young specialists is a key area of work at Gazprom

Energoholding. Company Days, job fairs, round-table discussions attended by leading specialists of Gazprom Energoholding are held for students of industry-specific institutions, internship is organized, contests of graduation projects among college students, tours to enterprises are arranged for schoolchildren and students.

In collaboration with PJSC Mosenergo and National Research University Moscow Power Engineering Institute, an applied bachelor's degree program in Heat Energy Industry and Heat Engineering was designed and approved, under which 19 students take their courses. One special feature of the program is extended internship at the station where the graduate will be working after graduating from the university.

Every year, PJSC TGC-1 submits to industry-specific universities lists of graduation

projects it is interested in seeing developed as particularly relevant, and invites graduates of bachelor's and master's programs to take part in a contest for the best graduation project among college students of the North-Western Federal District. Most winners of the contest are included in the prospective talent pool. Twice a year, Gazprom Energoholding pays a special scholarship of PJSC TGC-1 named after S.A. Kazarov.

Councils of young scientists and specialists function at subsidiaries. Their principal goal is to recruit young talent to take an active part in the industrial operations and R&D activities of entities. The councils monitor the observance of the interests of young scientist and specialists, supervise research workshops, scientific and practical conferences, sport and entertainment events.

## PERSONNEL TRAINING AND DEVELOPMENT

**40,000** employees  
completed training with the use of remote  
technologies

**2,654** candidates and **141** doctors  
of science are employed by Gazprom

Over  
**342,000**  
employees  
completed  
advanced training  
and professional  
retraining programs  
in 2017

Gazprom Group implements special programs to improve professional skills, including in the area of industrial safety and environmental literacy, on a permanent basis.

Gazprom has uniform personnel training and development standards for all Group companies. Based on the results of the evaluation of managerial and professional competencies of employees, corporate programs of their development are designed.

Gazprom takes a proactive approach to personnel training, recruitment of the best graduates and advanced skill upgrade of its employees. Depending on the tasks at hand, training and development programs are classified according to the following categories:

- advanced training and retraining of employees;
- programs of adaptation of young specialists;
- programs of talent pool training;
- training programs for top qualification human resources.

### A SYSTEM OF PERSONNEL'S CONTINUING CORPORATE VOCATIONAL EDUCATION



One of long-term priorities of the HR Management Policy at PJSC Gazprom, its subsidiaries and entities is personnel's continuing corporate professional education. Therefore, to promote professional growth of personnel, the Company has a functioning Continuing Corporate Professional Training System (CCPTS). It is designed for executives, specialists and workers.

Training is provided by Gazprom's educational institutions, training and industrial centers of PJSC Gazprom subsidiaries, and also by Russia's major universities. The CCPTS includes Gazprom Corporate Institute, Gazprom Training Simulator Computer Center (a private institution of further vocational education), Gazprom Vocational School Novy Urengoy (a private professional educational institution), Gazprom College Volgograd (a private professional educational institution).

Twenty-three core production subsidiaries have functioning CCPTS training and industrial centers, and there are educational

units at Gazprom Energo LLC, Gazprom Tsentrremont LLC, Gazprom VNIIGAZ LLC and Gazprom Flot LLC.

Educational units at subsidiaries have licenses to provide education and training in 242 trades, of which 136 are linked to performance of work at hazardous industrial facilities.

In 2017, 342,900 Gazprom Group employees completed advanced training and professional retraining programs.

Corporate training programs for executives and specialists of PJSC Gazprom, its subsidiaries and entities are implemented within the framework of a centralized schedule of advanced training and professional retraining of PJSC Gazprom executives and specialists. In 2017, 645 corporate educational programs were fulfilled in accordance with a centralized schedule, with 13,600 executives and specialists completing education in that period (in 2016 – 10,500 people).

The annual average learning time per employee of core business subsidiaries was 83.7 hours for workers and 36.6 hours for executives, specialists and other employees in 2017.

**Gazprom Group employees who completed advanced training and professional retraining programs, 2014–2017, thousand people**



**Annual average learning time (academic hours) per employee of core business subsidiaries, 2014–2017, hours**

Indicator	2014	2015	2016	2017
Quantity of hours spent by executives, specialists and other employees on professional retraining and advanced training	38.6	37.1	36.5	36.6
Quantity of hours spent by workers on professional training, retraining and advanced training	78.5	85.7	88.9	83.7

In 2017, **55,891** employees of Gazprom Neft Group completed training, including 83% of women (out of all female employees) and 82% of men (out of all male employees).

In 2017, Gazprom Group continued implementing a series of target programs of personnel development, including:

- programs of managerial talent pool development;
- a targeted program to train HR at specialized subsidiaries for implementing top-priority projects of offshore hydrocarbon field development;
- a concept of language training of executives and specialists PJSC Gazprom and its subsidiaries;
- project management;
- design, rollout and audit of a quality management system;
- training of PJSC Gazprom subsidiaries' employees in construction supervision, diagnostics and welding techniques.

Gazprom Neft Group's training and development system covers all personnel categories and targeted groups of potential employees, including schoolchildren and students. The content of educational and training programs is dictated by strategic objectives of Gazprom Neft and results of evaluation of managerial and professional competencies of every employee.

In 2016, PJSC Gazprom Neft set up a Corporate University. Five schools encompass virtually all Gazprom Neft operations. The university has a portal launched in 2017 as its operational platform.

Using the portal, employees complete e-training, communicate with coworkers and experts. Over a year, 85,000 courses were completed via the portal, pilot courses were run using augmented reality technology, mobile apps started to function.

In 2017, a modular targeted training program in Partnership Management was started; it is focused on executives responsible for strategic partnership relations.

Gazprom Neft Group's expenditure on worker training amounted to RUB 182.2 million in 2017, and spending on training of executives, specialists and other employees amounted to RUB 865.9 million.

In 2017, Gazprom Energoholding organized training of all personnel categories in accordance with a preset schedule, current and prospective development plans of Gazprom Energoholding and an annual consolidated plan of personnel development. Instruction was provided in the form of advanced training, professional retraining, short-term workshops and coaching.

Jointly with PJSC Gazprom, Gazprom Energoholding has arranged internship of specialists from overseas companies ENGIE, CNPC and PetroVietnam at the training center of PJSC Mosenergo, and those from Uniper at the training center of PJSC TGC-1.

*In 2017, expenditure on training workers of Gazprom Energoholding generating companies amounted to RUB 28.5 million, and that on training of executives, specialists and other employees to RUB*

**118.7** million.

In 2017, Gazprom Energoholding entered into 19 agreements with universities to arrange internship for students, to organize employee training and development, and run R&D.

In 2017, a Common Center of Personnel Training set up at the PJSC Mosenergo Training Center continued work at Gazprom

### REMOTE LEARNING TECHNOLOGIES

Over **40,000** Gazprom employees completed remote learning programs in 2017

The CCPTS widely uses state-of-the-art educational technologies and innovative training methods based on the use of means of information and communication systems. Training with the use of remote technologies provides an opportunity to organize on-the-job training for personnel, including for shift staff.

Energoholding. It is an educational and training platform to provide Gazprom Energoholding with qualified human resources, and it pulls up resources of all training centers of generating companies and builds a single educational space with common approaches to personnel training and development.

Training with the use of remote educational technologies at Gazprom dates back to 1995. Since then, a number of regulatory documents have been drafted, and a Remote Learning System and a CCPTS Database have been launched, e-courses in Gazprom's key areas of operations have been designed.

Gazprom Corporate Institute provides training in more than 200 e-courses in a variety of areas, such as company management, communication management, finance management, personnel management, project management, personal growth, industrial safety, gas production and transportation, information technology. Access to major e-libraries of business literature, including e-libraries of partner universities, is available.

### BUILDING A NATIONAL SYSTEM OF QUALIFICATIONS

Gazprom takes an active part in building a national system of qualifications. Work is carried out to develop and adopt professional standards in Gazprom Group's operations.

In accordance with an action plan of drafting (updating) professional standards, PJSC Gazprom developed drafts of seven professional standards in 2017:

- gas equipment customer support specialist;
- gas safety and rescue specialist at oil and gas industry facilities;
- specialist in oil, gas and gas condensate

production (update of a professional standard approved by Order No. 1124n, of December 25, 2014, of the Ministry of Labour and Social Protection of the Russian Federation);

- specialist in quality monitoring of gas, gas condensate and their derivatives;
- specialist in organizing construction, renovation and overhaul of oil and gas industry facilities;
- commercial operator (update of a professional standard approved by Order No. 182n, of March 23, 2015,

of the Ministry of Labour and Social Protection of the Russian Federation);

- well survey specialist.

On the basis of discussions at the Council for Professional Qualifications in the Oil and Gas industry, drafts of those standards

were submitted to the Ministry of Labour and Social Protection of the Russian Federation for approval according to an established procedure. A positive review has been received on those drafts from the National Council of Professional Qualifications under the President of the Russian Federation.

## TALENT POOL MANAGEMENT

Gazprom attaches a great importance to building a talent pool, i.e. employees and executives who have managerial skills, outstanding professional aptitude and personal qualities that meet corporate requirements and make those individuals suitable for important executive positions.

The purpose of talent pool management is to build a group of employees who are adequately trained to perform management in this day and age and to ensure continuity, consistency and efficiency of corporate governance.

Talent pool management is a priority that ensures the Company's successful functioning. In accordance with the HR Management Policy of PJSC Gazprom, its subsidiaries and entities, executives at all governance levels of the Company are appointed mostly from the executive talent pool.



*In 2017, targeted training was carried out at PJSC Gazprom under two-year executive talent pool programs:*

- *Gazprom MBA: Management of an Oil and Gas Corporation in a Global Environment (St. Petersburg State University of Economics);*
- *Gazprom MBA: Sustainable Development and a Company's Social Management (St. Petersburg State University of Economics);*

- *Gazprom MBA: HR Management (Gazprom Corporate Institute);*
- *Management of a Global Energy Company, Talent Pool School, Company Management (Gazprom Corporate Institute).*

Nominees to the Gazprom Neft talent pool are selected at meetings of the Talent Committee, where executive teams of companies convene and hold discussions. Specialists are nominated based on their annual performance. In 2017, a new employee performance and potential evaluation took place at Gazprom Neft Group. Over 19,000 employees were evaluated in 2017, or 1.5 times more versus 2016.

Gazprom Energoholding runs the Management Academy, Chief Engineer School and Corporate Safety School, where employees and members of the talent pool are trained to master technologies and instruments that help uncover their managerial potential, personal efficiency and business communication skills.

In 2017, over 900 employees were included in Gazprom Energoholding's talent pool, of which more than 700 succession candidates and participants of accelerated development programs were selected and completed training under individual development plans.

Training highly qualified personnel under postgraduate and doctoral programs is

the most complex form of advanced training that involves a lot of responsibility. Group companies employ 2,654 candidates and 141 doctors of science. Gazprom VNIIGAZ LLC and OJSC SevKavNIPigas have postgraduate programs in 11 academic profiles; there are two thesis boards that review doctor of science and candidate of science theses in six academic profiles. Gazprom scientists roll out their own solutions and know-

how, contributing to import substitution in technology.

Gazprom Group has established personal grants to cover tuition under postgraduate and doctoral programs in the most relevant subjects for the industry, as well as specialized scholarships for intellectually gifted university students, which are awarded on a competitive basis.

## INCENTIVES AND REMUNERATION

The Company has an Employee Remuneration Management Policy which operates for all entities of PJSC Gazprom and sets out common approaches to remuneration. The purpose of the policy is to create conditions for recruitment and retention of personnel with

required qualifications, to incentivize employees to carry out tasks at hand.

The Group's existing system of employee motivation combines financial and nonfinancial incentives.

### FINANCIAL INCENTIVES FOR EMPLOYEES

In accordance with the Employee Remuneration Management Policy adopted by PJSC Gazprom entities, all PJSC Gazprom subsidiaries and entities have a remuneration and incentive system based on a Uniform Salary Plan and a time-rate-plus-bonus payment system based on a salary grade structure.

In addition to basic salary, employees receive the following bonuses:

- monthly performance bonuses;
- extra payments and allowances, depending on working conditions and workload;
- one-time excellence bonuses;
- year-end performance bonuses.

Every year, Gazprom readjusts wages and salaries in accordance with provisions

of the General Collective Agreement, subject to price growth. Effective from January 1, 2017, base rates and basic salaries of employees at subsidiaries and entities PJSC Gazprom located in the territory of the Russian Federation were increased by 5%.

Employees working in localities with a harsh climate are remunerated subject to the locality pay factor (up to 1.8) and are entitled to extra payment (up to 80%), depending on the locality.

In 2017, the Employee Remuneration Management Policy of PJSC Gazprom entities was amended to include recommendations aimed at the improvement of the system of performance bonuses to employees of PJSC Gazprom entities for their industrial and economic activities.

The purpose of the recommendations was to build uniform approaches to establishment

of a link between employee performance and the bonuses on the basis of bonus pay targets.

Key executives of Gazprom Group, including members of PJSC Gazprom executive bodies, are motivated to earn the variable component of remuneration by a system of annual bonuses that functions for PJSC Gazprom executives. The annual bonus system is based on uniform principles and approaches to bonuses paid to executives: the amount of the remuneration depends on the achievement of the key performance indicators (KPIs).

The annual bonus system regulations apply to officers and executives, from unit head and above, to general directors, their deputies and chief accountants of subsidiaries performing core operations. The following criteria are used to evaluate performance of executives:

- general corporate KPIs, which characterize performance of Gazprom Group as a whole across the most important areas of operations;
- key performance indicators of supervising officers of subsidiaries, which reflect performance of a subsidiary;
- individual targets of executives set specifically for each executive within the framework of their functional area of responsibility.

Gazprom has a program of stock options available to executives. Its purpose is to additionally incentivize executives financially and motivate them to boost the market value of the Company's stock.

Participation in the program is open for PJSC Gazprom executives holding positions of department heads and above, and to executives of core business subsidiaries. In 2017, 70 executives were entitled to take part in the program.

## NON-FINANCIAL INCENTIVES FOR PERSONNEL

Gazprom Group attaches a great importance to nonfinancial personnel incentives. Nonfinancial incentives of employees include

corporate badges of merit, letters of commendation, honorary titles, citations.



### State and corporate awards received by Gazprom Group employees in 2017

State awards of the Russian Federation	Recognition of merit from the president of the Russian Federation	Awards of the government of the Russian Federation	Awards from ministries and government agencies		PJSC Gazprom corporate awards
			The Ministry of Energy of the Russian Federation	Other ministries and agencies	
70	33	3	1,446	63	2,818

To drive employee motivation and performance in personnel development, Gazprom holds regular professional excellence competitions.

Participation in those competitions enhances professional excellence, helps expand the in-house network of experience and information sharing, identify and disseminate best practices and techniques.

Top and other prize winners of those competitions are bestowed with certificates of merit and commemorative awards.



**The following contests were organized in 2017:**

*In computer design and IT (St. Petersburg branch of the Gazprom Corporate Institute), winners in those categories: Nikolai Pechnikov, Gazprom VNIIGAZ LLC, and Oleg Galimov, Gazprom Komplektatsiya LLC; Best cable jointer of the PJSC Gazprom telecom segment (Gazprom Transgaz*

*Yekaterinburg LLC), winner: Pavel Tarasov, Gazprom Transgaz Yekaterinburg LLC; Best welding operator of PJSC Gazprom (Gazprom Transgaz Nizhny Novgorod LLC), winner: Sergei Silantyev, Gazprom Dobycha Nadya LLC; Best corrosion protection specialist of PJSC Gazprom (Gazprom Transgaz Tomsk LLC), winner: Bato Balzhitov, Gazprom Transgaz Tomsk LLC; Best teacher of an educational unit of PJSC Gazprom subsidiary (Gazprom Training Simulator Computer Center (a private institution of further vocational education)), winner: Denis Davydov, Gazprom Transgaz Saratov LLC.*

In May 2017, PJSC Gazprom approved a Regulation on Labor (Professional Excellence) Festival, within the framework of which every even-numbered year, beginning in 2018, professional excellence competitions will be organized in several professions of core operations of PJSC Gazprom subsidiaries.

**SOCIAL POLICY**

**140,900** people is the number of participants of Gazprom's corporate pension insurance program

**VECTORS OF GAZPROM'S SOCIAL POLICY**

Social policy is built and pursued by PJSC Gazprom jointly with employees and their representative – Gazprom Trade Union, an interregional trade union organization (Gazprom Interregional Trade Union).

Gazprom Group takes good care of the welfare and social security of its employees and their family members. Gazprom's social policy is implemented

through long-term social programs. Priorities of the Group's social policy include social insurance benefits, providing housing to employees, employees' healthcare, nongovernmental pension insurance.

There are social insurance benefits that are established for all categories of employees and there are those that are paid only to their individual categories (including payments to employees of subsidiaries located in the Far North and equivalent localities).



Gazprom Group continues to carry out a corporate housing program based on mortgage loans; it helps recruit and retain young and key employees.

Healthcare in Gazprom is aimed at improvement of health of employees and their family members and prevention of diseases among them. If there are medical indications, employees can have resort treatment and undergo rehabilitation under direct agreements with healthcare facilities or via voluntary medical insurance. Healthcare is largely provided at first-aid posts and healthcare facilities funded by subsidiaries.

Corporate pension insurance of employees is a priority vector of Gazprom Group's social policy. Developed in accordance with principles of the long-term development

strategy of the pension system of the Russian Federation, Gazprom's corporate pension insurance program is designed to enhance the level of retirement benefits of employees after they finish their career.

Nongovernmental pension insurance of people employed at Gazprom Group entities is carried out on the basis of pension agreements entered into with GAZFOND, a nongovernment pension fund.

To be eligible for a corporate pension, an employee must be employed in the PJSC Gazprom system for at least 10 years and reach the retirement age as a Gazprom employee.

There were 130,600 participating retirees in 2017.

## SOCIAL PARTNERSHIP

In 2017, social and labor relations at Gazprom Group were regulated in accordance with labor legislation of the Russian Federation and other countries where the Company operates, the 2017–2019 Industrial Agreement for the Oil and Gas Industry and Construction of the Oil and Gas Complex, the 2016–2018 General Collective Agreement of PJSC Gazprom and its subsidiaries, collective agreements and other local standard regulations of PJSC Gazprom subsidiary and affiliated companies.

Social partnership is put into effect jointly with Gazprom Trade Union, an interregional trade union organization, in accordance with labor legislation of the Russian Federation.

The General Collective Agreement is the framework document regulating social policy of PJSC Gazprom and of its 28 principal subsidiary companies.

The 2016–2018 General Collective Agreement sets out the following key goals:

- improvement and development of the social partnership framework in the form of a constructive dialogue between parties to the agreement;
- engaging employees in the enhancement of their key performance indicators and achievement of planned targets of the Company's operations;
- building uniform approaches to matters related to the protection of employees' interests concerning salaries, employment, safe working conditions, benefits, guarantees and compensations;
- creating a working mechanism to ensure social stability at PJSC Gazprom and its subsidiaries.

A collective agreement covers all employees that are engaged in employer/employee relations. Based on the General Collective Agreement, subsidiaries enter into local collective agreements that cover regional peculiarities and existing practices.

Occupational health remains one of the most important areas of activities of the Gazprom Interregional Trade Union, as it aims to improve the process of creating safe working conditions, to conserve life and health of personnel, and provides for consultations and employee engagement in the occupational health and safety system.

Technical labor inspectorates and the institute of occupational health and safety commissioners, which includes 6,017 commissioners, monitor compliance with labor legislation and other standard legal acts specifying rules of labor law, compliance with terms of collective agreements, occupational health and safety agreements.

Each PJSC Gazprom subsidiary has occupational health and safety commissions; they include representatives of the employer, of the elective body of the primary trade union organization or occupational health and safety commissioners.

Gazprom Trade Union and its structural units actively participate in the social life of the regions where the Group operates.

In 2017, Gazprom Trade Union represented over 279,000 of the Group's employees.

As a result of successful implementation of social partnership principles at PJSC Gazprom, there are no conflict situations between employees and employers that might lead to strikes, work suspension, collective labor disputes.

All employees of PJSC Gazprom and its subsidiaries<sup>22</sup> are covered by collective agreements. At PJSC Gazprom Neft and its subsidiaries, 42% of employees are covered by collective agreements<sup>23</sup>. At Gazprom Energoholding LLC and companies consolidated under its managements, 99% of employees are covered by collective agreements<sup>24</sup>. At Gazprom Neftekhim Salavat LLC and its subsidiaries, 84% of employees are covered by collective agreements<sup>25</sup>.

<sup>22</sup> PJSC Gazprom, Gazprom Dobycha Astrakhan LLC, Gazprom Dobycha Nadym LLC, Gazprom Dobycha Noyabrsk LLC, Gazprom Dobycha Orenburg LLC, Gazprom Dobycha Urengoy LLC, Gazprom Dobycha Krasnodar LLC, Gazprom Dobycha Yamburg LLC, Gazprom Pererabotka LLC, Gazprom UGS LLC, Gazprom Transgaz Volgograd LLC, Gazprom Transgaz Yekaterinburg LLC, Gazprom Transgaz Kazan LLC, Gazprom Transgaz Krasnodar LLC, Gazprom Transgaz Makhachkala LLC, Gazprom Transgaz Moscow LLC, Gazprom Transgaz Nizhny Novgorod LLC, Gazprom Transgaz Samara LLC, Gazprom Transgaz Saint Petersburg LLC, Gazprom Transgaz Saratov LLC, Gazprom Transgaz Stavropol LLC, Gazprom Transgaz Surgut LLC, Gazprom Transgaz Tomsk LLC, Gazprom Transgaz Ufa LLC, Gazprom Transgaz Ukhta LLC, Gazprom Transgaz Tchaikovsky LLC, Gazprom Transgaz Yugorsk LLC, Gazprom Export LLC, Gazprom Mezhhregiongaz LLC.

<sup>23</sup> Data of PJSC Gazprom Neft.

<sup>24</sup> Data of Gazprom Energoholding LLC.

<sup>25</sup> Data of Gazprom Neftekhim Salavat LLC.

## CORPORATE COMMUNICATIONS

The existing system of corporate communications at Gazprom Group implies that employees should be informed of all aspects of the Group's operations and activities that may affect their interests in a clear, open and timely fashion that provides for feedback.

Communications develop corporate culture at Gazprom Group, create opportunities for a dialogue between employees of all levels and their supervisors.

In particular, for that purpose, Gazprom Trade Union set up a website, mpogazprom.ru, a weekly newspaper, and Trade Union Wave, a program on the Nord FM radio station.

A convenient system of communications helps prevent and settle potential conflict situations.

To ensure effective communications between the Group's employees and executives, its companies have their intranet portals, corporate information and reference systems, hotlines.

For instance, every employee of Gazprom Neft can get their opinion across to supervisors or propose an idea how to improve efficiency of industrial processes. Initiatives related to process optimization are an integral part of the lean production system adopted across the company's assets. Specialized services work for the purpose, such as Idea Factory and IDEA. They incentivize employees to come up with initiatives, regulate review and adoption of their initiatives.

Forums, conferences, round-table discussions are traditional venues for sharing information and networking.

Employees and executives of Gazprom Group companies receive news from industrial media published within the Group, such

as the magazines *Gazprom*, *Gas Industry*, *Gas Industry Human Resources* (a scientific methodological collection), the corporate magazine *Siberian Oil*, the periodical publication *Oil Newspaper* and its versions released by subsidiaries, corporate radio stations of Gazprom Neft Aero and of the Omsk Oil Refinery. One of the principal and complete information channels is the official web portal of Gazprom Group<sup>26</sup>. In total, 63 industry-specific media function at subsidiaries and affiliated companies: 52 newspapers, 4 magazines, 2 radio stations, and 5 TV channels.

One key feedback instrument at Gazprom Neft is the annual study of the socio-psychological climate. During the survey, at interviews and in focus groups, employees can voice their opinions on a number of subjects concerning key areas of their trade, from workplace management to evaluation of the motivation system to opportunities for development and efficiency of implementation of social programs. In addition, there are indices showing employee engagement. The data obtained in the course of the survey form the basis for planning further activities in the area of personnel management, communications, and make a case in managerial decision-making.

The corporate communication system at Gazprom Energoholding includes the following instruments:

- informational – issue of a corporate newspaper, informational mailouts, administrative support, and filling information boards;
- analytical – employee satisfaction survey;
- communicative – organization of corporate events, adaptation trainings, competitions among employees, sport events;
- organizational – regular information meetings with the personnel, attendance and organization of conferences and meetings.

<sup>26</sup> <http://www.gazprom.com>.

Gazprom Energoholding enterprises organize annual corporate contests, competitions, sports events, conferences on areas of operations, regular meetings of representatives of all Gazprom Energoholding companies. PJSC OGK-2

has a program called School of Internal Correspondents, which is carried out jointly with the Higher School of Economics and is aimed at professional training of freelance reporters to work for the OGK-2: Positive Energy public channel.

### 3.3. INDUSTRIAL SAFETY CULTURE: OCCUPATIONAL HEALTH, INDUSTRIAL AND FIRE SAFETY

Industrial safety and reliable functioning of the industrial process are key prerequisites for sustainable operations of enterprises in the long term. Gazprom treats the life and health of employees

as a priority, and is fully conscious of its responsibility to society for creating safe working conditions, and ensuring compliance with requirements of industrial and fire safety.

#### OCCUPATIONAL HEALTH, INDUSTRIAL AND FIRE SAFETY MANAGEMENT SYSTEM AT GAZPROM GROUP

Safe working conditions are a priority for Gazprom's leadership. PJSC Gazprom's activities in the field of occupational health, industrial and fire safety ("industrial safety") aim to eliminate or minimize the impact of harmful or hazardous industrial factors on people. Those activities are organized

in accordance with the Labor Code of the Russian Federation, Federal Law No. 16-FZ, "On Safety of Hazardous Industrial Facilities" and Federal Law No. 69-FZ "On Fire Safety."

#### INDUSTRIAL SAFETY AS A KEY VALUE OF THE BUSINESS CULTURE

Safe working conditions for employees is a priority of Gazprom Group's activities.

Industrial safety culture means employees and supervisors at all levels must be aware of the importance of industrial safety in the system of corporate values, and safe conduct must become a habit in everyday life and in hazardous situations.

Implementing PJSC Gazprom's Strategy of Development of the Industrial Safety Management System through to 2020 will

help the Company be proactive in achieving adequate level of corporate safety culture across PJSC Gazprom by 2020.

The main targets of the strategy are:

- to define approaches, principles, mechanisms and organizational procedures in the field of industrial safety, which would ensure sustainable functioning of the industrial processes at PJSC Gazprom;
- to plan and implement multilevel systemic transformations in order to optimize an integrated industrial safety management system, improve working methods that aim to enhance the corporate industrial safety culture.

Expected results of the strategy implementation:

- building an effective organizational structure of industrial safety management;
- reaching the projected level of maturity in the development of an industrial safety management system;
- achieving a high level of corporate safety culture;
- arriving at the zero level of accidents with fatalities.

Priorities in the development of the industrial safety management system have been identified:

- commitment and leadership;
- personnel motivation;
- safety communications;
- investigating accidents and microtraumas;
- risk management in occupational health and industrial safety.

In each top-priority area, work was performed in 2017:

- The PJSC Gazprom Occupational, Industrial and Fire Safety Policy approved by PJSC Gazprom Order No. 797 of November 28, 2017 was revised.
- PJSC Gazprom's Program for the Development of Leadership Skills of Executives in Industrial Safety was drafted; it was approved by Vitaly A. Markelov on February 15, 2018.
- A Methodology of Evaluating Performance of PJSC Gazprom Subsidiaries, Entities and Branches in Achieving Targets in the Field of Occupational Health, Industrial and Fire Safety was drafted; it can be used by those divisions when summarizing the results of their activities.
- Recommendations for Personnel Motivation were drafted and brought to the notice of subsidiaries, entities and branches.
- A regulation on organizing a Safety Day at PJSC Gazprom was drafted and approved by PJSC Gazprom Order No. 122 of May 03, 2017.

- A draft regulation on the analysis of the root causes of accidents was prepared and will be approved in line with established procedures.
- Requirements for the interaction with contractors were drafted.

The fundamental document that regulates the Company's activities in the area of industrial safety is PJSC Gazprom's Occupational, Industrial and Fire Safety Policy.

According to the policy, the Company's main targets are:

- to create a safe working environment and to protect the lives and health of employees;
- to reduce the risks of emergencies and incidents at hazardous facilities;
- to provide fire safety.

Implementation of the main provisions of the Company's policy is ensured by the Unified Occupational and Industrial Safety Management System (UO&ISMS) existing at PJSC Gazprom. The UO&ISMS sets out uniform procedures regulating creation of safe working conditions and aiming to mitigate the risk of accidents at hazardous industrial facilities.

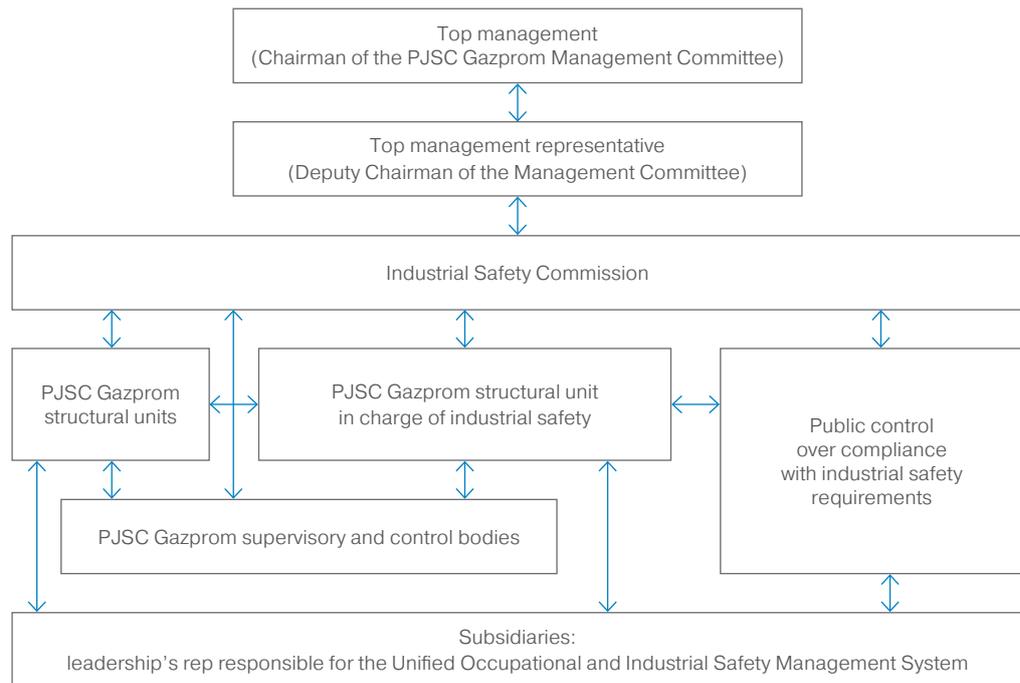
The UO&ISMS aims to identify, eliminate and minimize on-the-job hazards and risks, and to achieve preset targets in occupational health, industrial and fire safety.

The UO&ISMS covers the administration of PJSC Gazprom, subsidiaries responsible for the production, preparation, transportation, processing, distribution and storage of natural gas, gas condensate and oil; their total roster exceeds 328,000 people.

The structure of the UO&ISMS includes units that are immediately involved in preserving industrial safety.

There were  
**4,797**  
hazardous industrial  
facilities operated  
at subsidiaries  
and entities in 2017.

**Structure of the Unified Occupational and Industrial Safety Management System at PJSC Gazprom**



The Chairman of the PJSC Gazprom Management Committee is the top executive who supervises industrial safety arrangements. General supervision of occupational health and safety in PJSC Gazprom is performed by the Deputy Chairman of the PJSC Gazprom Management Committee who is in charge of the industrial unit.

In 2013, PJSC Gazprom's Process Safety Commission, the main body that coordinates and monitors implementation of the O&ISMS, was set up at PJSC Gazprom, and it still functions to date.

The PJSC Gazprom unit that is authorized in the area of industrial safety coordinates

activities of PJSC Gazprom's structural divisions, subsidiaries and entities on matters related to the functioning and improvement of the UO&ISMS.

Trade union organizations of PJSC Gazprom and its subsidiaries perform public scrutiny of compliance with standard regulations in occupational health. Senior executives of subsidiaries ensure compliance with UO&ISMS requirements by the entities they run.

PJSC Gazprom and its subsidiaries have identified hazards and risk levels and assessed risks in occupational health, industrial and fire safety in terms of their tolerability.

The Deputy Chairman of the PJSC Gazprom Management Committee has approved PJSC Gazprom's occupational health, industrial and fire safety targets and programs to ensure their achievement. The Company's main vectors of activities in that area are as follows:

- to prevent traffic accidents;
- to improve working conditions, occupational health and safety;
- to ensure safety of works in electric installations;
- to prevent falls of employees on same-level surfaces;
- to prevent accidents in the event of impacts of moving and disintegrating mechanisms or objects on employees;
- to prevent accidents in the event of falls, crashes, collapses of objects, materials, soil;
- to prevent accidents in the event of third-party attacks against employees;
- to prevent accidents during loading and unloading operations and cargo warehousing;
- to reduce employee fatalities caused by cardiovascular diseases;
- to ensure fire safety and compliance with fire safety requirements at facilities.

The procedure of setting occupational health and safety targets and of monitoring their achievement, as well as the procedure of drafting programs of measures to achieve those targets are defined by STO Gazprom 18000.1-003-2014 "Unified Occupational and Industrial Safety Management System. Drafting targets and programs."

The PJSC Gazprom UO&ISMS was certified as compliant with requirements of the OHSAS 18001:2007 international standard in 2014. Its re-certification to verify its compliance with requirements of the OHSAS 18001:2007 international standard was conducted by the Russian Register certification association (International Certification

Network, IQNet) in 2017. In 2017, certification at Gazprom Group covered production, preparation and transportation, processing, distribution and storage of natural gas, gas condensate and oil.

The list of entities with a certified UO&ISMS is expanding continuously. As of December 31, 2017, the PJSC Gazprom Administration and 51 subsidiaries and entities of the Company with more than 300,000 employees were certified.

In 2016, the PJSC Gazprom leadership resolved to follow requirements of the ISO 45001 international standard.

It will take three years for all parties involved in the process to make a transition from the OHSAS 18001 standard to ISO 45001. Certificates of compliance with OHSAS 18001 will be valid until the end of the transition period. According to the schedule of adopting requirements of the ISO 45001:2018 international standard in PJSC Gazprom, re-certification of the governance system is set for the fourth quarter of 2020.

The fundamental corporate document regulating principles of activities and commitments of PJSC Gazprom Neft is the Policy of Industrial, Fire, Transportation, Environmental Safety, Occupational Health and Civil Protection. Its objectives are:

- to bring down indicators of workplace injuries, occupational diseases, accidents and negative impact on the environment;
- to organize safe production based on risk analysis and risk management, and to minimize industrial risks;
- to adopt the world's best practices in the area.

To implement those targets, Gazprom Neft has a functioning management system of industrial, environmental safety, occupational health and civil protection (EHS&CP). PJSC Gazprom Neft's EHS&CP

Management System is compliant with requirements of PJSC Gazprom's UO&ISMS.

The EHS&CP Management System sets target indicators and helps realign activities for their achievement. The EHS&CP Management System consists of eight interrelated elements:

- supervision and responsibility;
- policy and targets;
- organization and resources;
- contractor and supplier management;
- risk management;
- projections and planning;
- adoption, control and monitoring;
- audit, analysis and review.

All Gazprom Neft industrial enterprises have a functioning integrated EHS&CP management system compliant with requirements of the OHSAS 18001:2007 and ISO 14001:2015 international standards.

In 2017, a joint Committee on Operations and Industrial Safety Management started work at Gazprom Neft.

Gazprom Neft provides remote training, and special courses, such as "Occupational Health in Office," "Fire Safety: Procedures and Management," "Electric Safety," "Anti-Alcohol Policy," "Safe Driving" and others, have been designed and made available to all employees.

At Gazprom Energoholding, occupational and industrial safety is managed in accordance with an Occupational Health and Safety Management System, the fundamental document regulating occupational safety and health policy in each industrial company. Responsibility for compliance with it falls on managing (general) directors of generating companies, and chief engineers coordinate activities.

All Gazprom Energoholding companies have defined their occupational health, safety and fire safety targets for 2017. Work has been completed to identify, assess and eliminate risks in occupational health and safety. Risk matrices have been compiled.

Safety risk is identified, assessed and managed in accordance with the existing Regulation on the Industrial Safety Management System. Within the framework of a uniform risk management system in the area of occupational health and fire safety, work to identify, assess and eliminate fire and injury hazards is carried out across all sites and facilities of Gazprom Energoholding. At every branch, risk management teams have been appointed and completed required training. The results of risk assessment were recorded in roadmaps, and systematic work is performed to eliminate identified risks depending on their hazard level and severity of consequences.

## FIRE SAFETY

**20,400** fire inspections  
were conducted across Gazprom Group in 2017

**3,155** joint fire tactics trainings  
and classes with fire-fighting units were organized  
in 2017



In 2017, work in the following priority areas was carried out to ensure fire safety of PJSC Gazprom sites:

- improvement of the fire safety system in accordance with requirements set out in article 5 of Federal Law No. 123-FZ of July 22, 2008, "Technical Regulation on Fire Safety Requirements";
- working out and implementing measures to scale back the number of fires and accidents at PJSC Gazprom sites;
- improvement of activities of emergency response and rescue teams and fire-fighting units safeguarding PJSC Gazprom sites from fires;
- enhancing efficiency of technical decisions made by design organizations in the design of fire safety installations and systems, and in the development of structural and engineering measures to ensure fire safety of designed sites;
- ensuring fire safety of PJSC Gazprom sites located in forest areas or areas adjoining forests, in accordance with Fire Safety Rules applicable in the Russian Federation<sup>27</sup> and Forest Fire Safety Rules<sup>28</sup>;
- interaction with executive bodies and local authorities performing functions of state and municipal control and supervision in fire safety, land and forest legislation;
- use of aerospace technologies for the monitoring of the fire situation near protective zones of trunk pipelines and hydrocarbon production and processing facilities;
- drafting and formalizing requirements for the fire safety system of PJSC Gazprom

sites in accordance with Federal Law No. 162-FZ of June 29, 2015, "On Standardization in the Russian Federation";

- representing PJSC Gazprom's standpoint in drafting and amending standard fire safety regulations and documents, within the framework of the procedure of public discussion and evaluation of the regulatory impact of the projects.

In 2017, PJSC Gazprom drafted a plan of organizational and technical measures to ensure fire safety. The plan includes six sections mapping out 53 fire safety measures. All contemplated measures have been completed within prescribed time limits and within prescribed scopes.

Fire prevention works are carried out on a permanent basis in hazardous locations. Most subsidiaries of PJSC Gazprom have functioning fire safety commissions that operate jointly with standing health and safety commissions. Compliance with fire safety requirements is monitored at various levels of administrative and industrial control.

Fire prevention is one of the principal tasks of the fire safety unit. Its employees and fire safety specialists periodically inspect serviced hazardous locations; those can be one-man inspections or inspections carried out by fire safety commissions of PJSC Gazprom subsidiaries.

<sup>27</sup> Approved by Resolution No. 390, of April 25, 2012, of the Government of the Russian Federation.

<sup>28</sup> Approved by Resolution No. 417, of June 30, 2007, of the Government of the Russian Federation.

#### Effectiveness of fire prevention measures

Indicator	2017
Number of fire inspections by fire safety commissions	20,379
Number of inspections by bodies of the Ministry of Emergency Situations	248
Number of joint fire tactics trainings and classes according to plans (schedules) of implementing preliminary planning documents	3,155
Number of practical drills to ensure safe evacuations of employees in case of fire	4,582
Number of inspections of employees' places of residence	2,619
Number of inspections of sources of external and internal fire-fighting water mains	5,219
Number of classes with the in-house fire safety unit employees, members of voluntary fire brigades and freelance emergency and rescue units	7,610

Monitoring has been organized to supervise drafting and amending of standard regulations and standard documents on fire safety.

Within the framework of a procedure of public discussion and evaluation of the regulatory impact, 82 drafts of standard fire safety regulations and standard fire safety documents were reviewed in 2017. Comments and suggestions on 25 draft documents,

which are the most significant for PJSC Gazprom's operations, were notified to the authors.

In 2017, a pilot operation was run to test a complex for the monitoring of the fire hazard situation; the tests confirmed efficiency of aerospace technologies for the monitoring of the fire hazard situation at facilities of gas transmission and gas production companies.

**GAZPROM  
GROUP'S  
ACTIVITIES  
TO IMPROVE  
WORKING  
CONDITIONS  
AND INDUSTRIAL  
SAFETY**

**16%**

is the decline in the number of injuries as a result of accidents in 2017

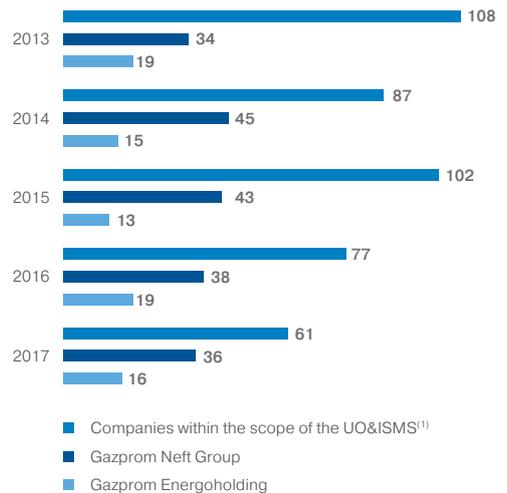
**MAIN INDICATORS**

As a result of systemic work to improve working conditions at Gazprom Group, the number of accidents, injuries and occupational diseases dropped in 2017: 113 injured persons were registered in 2017, or 16% less than in 2016 (134 injured persons). Despite all the efforts of the Group, it turned out to be impossible to avoid all accidents with fatalities: eight people died in 2017, including six employees across PJSC Gazprom subsidiaries where the UO&ISMS applies, one at Gazprom Neft Group, and another one at Gazprom Energoholding. Internal investigations were conducted on all cases, and appropriate measures were taken to minimize the risk of seeing similar accidents in the future.

As a result of continued efforts in occupational health and safety, the number of accidents in Gazprom Group declined in 2017.

At the enterprises within the scope of the UO&ISMS, there were four fewer accidents and nine fewer incidents compared to 2016. In total, 5 accidents and 21 incidents at hazardous industrial facilities were registered in 2017.

**Number of persons injured as a result of accidents, 2013–2017, people**



<sup>(1)</sup> On the basis of an internal probe, one case in 2015 and one in 2016 were found out to be unrelated to production. Hence the updates of the data previously released in PJSC Gazprom's Annual Report.



**Newsflash information leaflets**

To bring information on accidents to the notice of employees, Newsflash information leaflets are disseminated at Gazprom subsidiaries. They describe accidents and plans of remedial activities to prevent similar accidents in the future. The causes of accidents and measures for their prevention are analyzed at regular meetings.

## PREVENTION OF ACCIDENTS

Gazprom is involved in large-scale work to prevent accidents and to keep personnel ready to take action in emergency situations:

- in-house and freelance emergency and rescue services or units are started and set in motion;
- enterprises interact with professional emergency and rescue services;
- engineering systems of control and prevention of potential accidents and emergencies are launched, along with warning, communication and protection systems;
- adequate emergency inventories of materiel are defined, a reserve of finance is stockpiled to enable localization and control of the fallout of accidents;
- training facilities and inventories are improved to train employees for response in an accident;
- employees of hazardous industrial sites are trained to be able to respond and localize potential breakdowns and emergencies and control their fallout.

To cut the number of accidents and incidents even further, PJSC Gazprom carries out projects aimed at building an industrial safety culture.

The fundamental principles of industrial safety culture are defined by executives, first and foremost.

Gazprom is very keen on maintaining leadership in industrial safety. The following subject-relevant events were held by the Company in 2017:

- a practical workshop for the Company's top executives on matters of leadership in industrial safety;
- a round-table discussion "Leadership in occupational health as a key factor of occupational safety at enterprises" within the framework of participation in the 3<sup>rd</sup> nationwide week of occupational health (April 2017).

In 2016, PJSC Gazprom developed and approved corporate documents aimed at reinforcement of industrial safety, including a regulation on a contest for the best subsidiary in occupational health and safety. The first contest took place in 2017, and, looking forward, it will be a regular occasion.



### **Contest for the best subsidiary in arranging occupational health measures between 2014 and 2016**

*At its meeting, the PJSC Gazprom Management Committee awarded prizes to winners of a contest for the best subsidiary in arranging occupational health measures between 2014 and 2016. In 2017, the contest was held for the first time, and 71 Gazprom subsidiaries took part in it. Efficiency of the occupational health and safety management system was assessed according to an integrated methodology. In particular, the rate of workplace injuries, working conditions and qualifications of the specialists responsible for workplace safety were taken into account. Gazprom Transgaz Moscow LLC was acknowledged as the best subsidiary among those involved in core production operations, Gazpromtrans LLC as the best entity among those involved in support and development of the infrastructure, and JSC Giprospeftgaz as the best among specialized entities.*

In 2017, senior executives of subsidiaries and their deputies held regular meetings with staff and conferences where matters related to improvement of the working conditions, enhancement of the industrial safety culture and prevention of workplace injuries were discussed jointly with trade unions.

### ASSESSMENT OF WORKING CONDITIONS

Special assessment of working conditions is one of the basic measures that Gazprom Group takes in occupational health and safety. Special assessment of working conditions is organized with the aim of revealing harmful and hazardous industrial factors affecting people's health in their workplaces. All subsidiaries assess workplaces during the year, and on the basis of the results of that assessment, grades of working conditions are established, measures are worked out and implemented in order to improve working conditions of employees.

In 2017, special assessment of working conditions was carried out at 46,872 workplaces, or 100% of the planned number. 6,000 measures were carried out to improve working conditions. As a result, working conditions were made better at 5,500 workplaces. Measures aimed at mitigating the impact of harmful factors on employees helped downgrade harmful indices compared with previous reporting periods. In total, the number of workplaces with harmful and hazardous working conditions has been reduced across PJSC Gazprom from 40% to 19.8% in the past six years.

### COORDINATING SUPPLIERS AND CONTRACTORS IN ORDER TO ENSURE INDUSTRIAL SAFETY CULTURE

Contractors providing services and performing repair and construction works for Gazprom produce a significant impact on safe operation of the Group's sites and facilities.

To ensure safety of the works performed by contractors for Gazprom Group, the contractors' personnel are checked for occupational health and safety certificates, industrial and fire safety certificates, when they are about to carry out works at industrial facilities; in addition, they go to induction meetings on occupational health and safety, and complete basic training in workplace safety. Before any works can be carried out, appropriate permits and authorizations must be obtained. Works are supervised, and their quality is monitored.

PJSC Gazprom requires from its suppliers and contractors rigorous compliance with the Company's standards and rules of occupational health, industrial and fire safety in performing any work at Gazprom's sites and facilities. Prevention of accidents and workplace injuries is one of the main prerequisites for collaboration with contractors. During induction meetings and before work permits (authorizations) are issued, contractors are informed and advised about UO&ISMS requirements, identified risks and changes affecting safety. Representatives of contractors are invited to take part in PJSC Gazprom's meetings and workshops on the implementation of the industrial safety policy, on the enhancement of industrial safety culture and on the development of leadership qualities of executives.

### 3.4. GAZPROM GROUP'S SOCIAL PROJECTS

PJSC Gazprom backs up science, culture and arts, sports, children's creative endeavors, builds sport and social infrastructure in the regions of presence. Those projects are the contribution that the Company and its subsidiary enterprises are making to the development of the regions and the quality of life of their communities.

When planning sponsored and charity social projects and events, PJSC Gazprom is governed by the following principles:

- high level of social importance;
- large scope: supporting events of international, nationwide or regional significance;
- relevance;
- continuity;
- effectiveness;
- targeted assistance;
- media importance in terms of building and reinforcement of Gazprom's goodwill, positive publicity from the event;
- carrying out a uniform sponsorship and charity policy across PJSC Gazprom, its subsidiaries and entities.

Gazprom Neft Group's social and charity projects are carried out within the framework of a single integrated program of social investments. The program called Home Towns was launched in 2013. The underlying idea is that residents of small towns are as entitled to the same quality of social environment as people in megalopolises. This principle determined an integrated approach to creating an environment that favors development of regions where Gazprom Neft operates. That approach means preservation of the cultural potential, development of sport infrastructure, construction of urban amenities, assistance to young talent, development of civil initiatives of the people who want to change their surroundings for the better.



#### Home Towns by numbers

Over five years, more than **2,500** projects worth RUB **19 billion** have been completed within the framework of the program.

Over **4,500** employees have been involved in the volunteer movement, and more than **350** local initiatives have been backed by grants.

The program was designed in accordance with Gazprom Neft's development strategy and with due consideration of current social challenges faced by regions of the company's operations. In 2017, the program covered 35 regions of presence, with 221 projects completed and 339 charity and volunteer events organized.

In 2017, Gazprom Energoholding allocated RUB 36.6 million to charity projects. Assistance was rendered in several areas, including purchase of medicines and medical equipment, support to children with disabilities, orphans and disadvantaged children, funding of cultural, scientific, educational and other significant projects.

**SUPPORT  
OF CULTURE,  
ARTS AND  
SCIENCES**

**15** regions of Russia  
opened multimedia historical parks  
with Gazprom's support

**MUSIC AND THE ART OF DANCING**

One of missions of Gazprom's social projects is providing an opportunity of self-fulfillment to employees, not only in their professional career but also in arts.

Since 2003, Gazprom has sponsored Fakel, a corporate festival of amateur performing groups and individual performers. Employees of PJSC Gazprom subsidiaries and entities take part in the festival. Keeping traditions and cherishing its informal atmosphere, the festival constantly expands its creative and geographic boundaries, updates its program and the entry list.

The program of the festival includes a few genres: singing (folk, pop, classics, jazz), dancing (folk, pop, ballroom, classic), variety and circus shows, magic, folklore. The Young Artist contest is organized for children of employees within the framework of the festival.

In May 2017, the finals of the 7<sup>th</sup> corporate Fakel Festival were held in Krasnaya Polyana (Sochi). Over 1,600 representatives of 40 Gazprom subsidiaries from Russia, Armenia, Belarus, Kyrgyzstan, delegations from China, Slovenia, Germany, France, Vietnam and Bolivia took part in the festival.

In addition to running its own projects, Gazprom helps famous professional groups of performers, sponsors music and dance festivals. In 2017, Gazprom backed the A.V. Alexandrov Academic Song and Dance Ensemble of the Russian Army, the State Academic Mariinsky Theatre and



**Fakel: Not only culture but environment as well**

The festival helps preserve Russia's unique and ethnically diverse culture. Amateur performers bring folk songs, humorous rhymes, dances, acts in modern genres from their native towns and villages, thus showcasing the culture of Russian provinces. Performances based on traditional rituals and ethnic ceremonies are played out on stage. The festival is environmentally focused, and in a prominent way. Celebrating the beauties of their native land, performers, in their own creative way, promote solicitous attitude to natural heritage and conservation of clean nature.

its Primorye branch in Vladivostok, as well as Context. Diana Vishneva, an international festival of modern choreography.

From August 28 to September 3, 2017, Spasskaya Tower, the 10th international military music festival, was organized with PJSC Gazprom's sponsorship in Moscow. By its scale, contents, audience and effect, the festival is ranked as one of the biggest international cultural projects in Russia. Over 500,000 people visited Red Square during the festival.



*In 2017, Irkutsk hosted the 7<sup>th</sup> international opera music festival Breath of Baikal. Gazprom Dobycha Irkutsk LLC sponsored that music event for a sixth time in a row. From May 24 to 28, lead singers from Bolshoi Theater, Serbia's National Opera Theater, Italy's Giuseppe Verdi Theater (Trieste), Krasnoyarsk Opera and Ballet Theater took to the stage of the Irkutsk Regional Philharmonic Society. Irkutsk musicians also took part in the festival, including Ilmar Lapinš, honored worker of arts of Russia, the person who conceived the idea of the festival and runs it as art director, the Governor's Symphonic Orchestra and a chamber choir led by Yelena Boyarkina. Gazprom Dobycha Irkutsk LLC has been involved in joint projects with the Irkutsk Regional Philharmonic Society since 2011. Within the framework of that collaboration, musical equipment and concert costumes are*

*purchased for groups of performers from the Philharmonic Society, important concerts and festivals are organized, and musicians tour areas of the company's industrial operations – the Zhigalovsky and Kazachinsko-Lensky Districts, Irkutsk Region.*

Since 2013, Gazprom Neft has been a partner of Bolshoi, Serbia's biggest festival of classical music founded in partnership with Serbian director Emir Kusturica. The festival aims to support young musicians from Serbia and Russia and to promote social and cultural interaction between the two countries. In 2017, 62 representatives of key regions of Gazprom Neft's operations took part in the event. Valery Gergiev, the art director of the Mariinsky Theatre, was a guest of honor at the festival. In July 2017, Gazprom sponsored a sacred music concert of the Grand Choir "Masters of Choral Singing" within the framework of a music festival in Ravello, Italy.

## THE COUNTRY'S CULTURAL HERITAGE

Gazprom is very dedicated to the conservation of the country's cultural heritage. Within the framework of Russia. My History, a large-scale patriotic and educational project sponsored by PJSC Gazprom, multimedia historical parks featuring history of the country and its individual regions were opened in 15 constituent territories of the Russian Federation in 2017. Professional historians – scholars from the Institute of Russian History of the Russian Academy of Sciences, Moscow State University, Russian State University for the Humanities – were involved in the implementation of the project. Unique materials were contributed by the State Archives of the Russian Federation, archives of the Ministry of Defence of the Russian Federation, Russian State Archives of Social and Political History, Central Archives of the Federal Security Service of Russia, State

Central Museum of Contemporary History. Designers, artists, moviemakers, computer graphics specialists also worked on the presentations.

The parks of the Russia. My History project are very popular. For instance, in 2017, the Moscow Manezh hosted Russia Focused on the Future, an 18-day exhibition that was attended by over 200,000 people.

Some of the Russia. My History projects gave impetus to revival of cultural heritage sites. For instance, the historical building of the Nizhny Novgorod Fair, one of the city symbols, was restored in Nizhny Novgorod. Additionally, the Officers' Club, which had been in a dilapidated state, was reconstructed in Novosibirsk, and now the city has a new museum space.

Opening of four other historical parks is scheduled for 2018; they had financial backing

of PJSC Gazprom and constituent territories of the Russian Federation.

In 2017, Gazprom and French company ENGIE were the general partners of the Saint Louis and Relics of the Sainte-Chapelle exhibition in Moscow. At the exhibition, masterpieces of Gothic art associated with the age of Saint Louis were put on display, with most of them exhibited in Russia for the first time, including 13th-century stained-glass panels from

the Sainte-Chapelle and unique items from France's famous collections, such as the Louvre Museum and the National Museum of the Middle Ages. Many of the exhibits on display were never seen by the general public outside of France. The State Hermitage also contributed to the exhibition by lending splendid Limoges enamels and 13<sup>th</sup>- and early 14<sup>th</sup>-century ivories from its collection. Over 120,000 people visited the exhibition.

### SUPPORT OF SCIENCE

Gazprom actively supports development of sciences, and has founded a few Russian research NGOs and funds, in particular, the Vernadsky Nongovernmental Ecological Foundation.

Every year, Gazprom sponsors the Global Energy Prize for major discoveries, inventions and R&D products in the energy industry. In 2017, Michael Graetzel, a Swiss scientist, was awarded the prize for outstanding achievements in developing economical and efficient photocells known as Graetzel cells; they are designed to be used in cheap and powerful solar power plants. Since 2003, the prize has been conferred on 35 scientists

from 11 countries: the UK, Germany, Iceland, Canada, Russia, the United States, Ukraine, France, Sweden, Switzerland and Japan.

In 2017, Gazprom sponsored the Sirius educational center (Sochi) for the first time, providing funding for the annual science, technology and project-based educational program and festival – Festival of Science and Creative Endeavors. 2017 Sirius Project Session. The missions of the center that was opened in 2015 include discovery, development and further professional support of gifted children who displayed superior abilities in arts, sports, natural sciences, or showed themselves as achievers in engineering or literature.

### INTERACTION WITH INDIGENOUS SMALL-NUMBERED PEOPLES OF THE NORTH

Conservation of the ethnic and cultural identity of the peoples living in remote Far North areas, where Gazprom Group operates, is an important mission for the Company. Management of human rights of indigenous small-numbered peoples in the regions of presence is

in the purview of Gazprom's leadership, authorities of municipalities and NGOs.

Gazprom Group has accumulated an extensive experience interacting with local communities. The Company builds its collaboration with them within the framework of PJSC Gazprom's regional policy, in close interaction with federal and local authorities, civil society organizations and heads of northern tribes.



Gazprom is governed by the following principles of interaction with indigenous small-numbered peoples of the North:

- establishing partner relations with associations of indigenous small-numbered peoples of the North;
- equitable collaboration and mutual interest of indigenous small-numbered peoples of the North and PJSC Gazprom in addressing the challenges they are facing;
- taking into account peculiarities of economic and social development of indigenous small-numbered peoples of the North;
- involvement in addressing social challenges of indigenous small-numbered peoples of the North.

*In 2017, Gazprom Group companies allocated*

*RUB **117.5** million to the support of indigenous small-numbered peoples of the North.*

The social vector of PJSC Gazprom's regional policy stipulates improvement of living standards of local communities in the production areas, environmental well-being and involvement in the conservation of traditional habitats of indigenous small-numbered peoples of the North, which includes:

- respect of environmental legislation during construction and installation works at sites of investment projects;
- preservation of traditional economic practices and conservation of culture of indigenous small-numbered peoples of the North living in areas of PJSC Gazprom's operations.

Interests of indigenous communities of Russia's northern areas are taken into account since the very inception of every field development project in Gazprom Group. Public hearings are a mandatory element of that process. Together with local communities, the Company identifies acceptable sites for the construction and location of infrastructure facilities.

Gazprom Group enterprises enter into agreements with representatives of Northern peoples living in areas of the Company's exploration and production activities, help local

agricultural communities: indigenous residents of Russia's Far North are provided with means of practicing their traditional economies, fuel, lubricants and construction materials, equipment, fishing gear. In emergency situations the Group makes donations to aid affected families.

Taking into account interests and rights of indigenous small-numbered peoples of the North, their entitlement to traditional lifestyles and conservation of their native habitat, PJSC Gazprom, within the framework of collaboration agreements with the Yamal-Nenets Autonomous Area, the Khanty-Mansi Autonomous Area (Yugra), the Republic of Sakha, the Sakhalin Region, undertook a series of steps in 2017:

- organized workshops and round-table discussions attended by representatives of communities of indigenous small-numbered peoples of the North where production facilities are located;
- provided financial support to local authorities for implementing socially important projects related to development of indigenous small-numbered peoples of the North;
- provided financial support to national communities with the aim to conserve household practices of indigenous small-numbered peoples of the North and to promote ethnic crafts;
- provided financial support to arrangements for ethnic holidays and building a prize fund on occasion of the Reindeer Herder Day, Fisherman Day and Day of Indigenous Peoples of the World;
- was involved in conservation of traditional habitats of indigenous small-numbered peoples of the North and in providing access to vital natural resources;
- provided support to development of reindeer breeding, which is the foundation of culture and life patterns of indigenous small-numbered peoples of the North;
- made arrangements for air travels of nomads;

- arranged air delivery of foodstuffs to remote areas;
- provided financial support to ethnic communities as part of healthcare provided to representatives of indigenous small-numbered peoples of the North.

Gazprom Neft operates in the area of habitats of indigenous small-numbered peoples of the North in the Khanty-Mansi Autonomous Area (Yugra) and the Yamal-Nenets Autonomous Area. Gazprom Neft

Group has a functioning policy of interaction with indigenous small-numbered peoples of the North, Siberia and Far East; its purpose is to create conditions for sustainable development and implementation of the business strategy, while simultaneously preserving the opportunities for traditional economic practices and conserving ethnic and cultural traditions of those peoples based on constructive interaction and long-term collaboration with them.



**Gazprom Dobycha Yamburg and Yamal indigenous communities: Contact made!**

Gazprom Dobycha Yamburg LLC operates in the Taz, Nadym, Purovsky Districts of the Yamal-Nenets Autonomous Area, which are the native habitat of indigenous small-numbered peoples of the North. Every year, the enterprise enters into collaboration agreements with those municipal units and with the Yamal District where the company's prospective fields are located.

In 2017, Gazprom Dobycha Yamburg LLC donated over RUB 32 million to charitable efforts. In the Taz District, houses were built in the inter-settlement territory. The company backed up the Reindeer Herder Day and the Fisherman Day, prepared New Year gifts to children of tundra communities, boarding schools,

bought sports gear for young hockey players, backed up district branches of the Association of Indigenous Small-Numbered Peoples of the North "Yamal to Posterity!" and ethnic communities, took part in finishing the construction of a church in the Tazovsky Settlement. In the Nadym District, the company removed unauthorized landfills. For the Fisherman Day, the enterprise purchased prizes and gifts. Children of tundra communities who study at the Nyda boarding school received New Year presents. To create a conditionally accessible environment in educational institutions for children with disabilities, the company bought specialized equipment.

In the Purovsky District, equipment and gear for Paratrooper, a local youth athletic center, were purchased.

In the Yamal District, targeted assistance was provided to members of indigenous communities of the North, and festivities were organized to celebrate the 90<sup>th</sup> anniversary of the village of Yar-Sale. In 2017, Gazprom Dobycha Yamburg LLC provided targeted assistance to pay college tuition of two students originating from indigenous communities of the North and employed six natives (there are 95 employees of that category).

## DEVELOPMENT OF SPORTS



*Football for Friendship was bestowed with the best media strategy prize at the Internationalist Awards. In 2017, 64 European, Asian, African, South and North American countries took part in the Football for Friendship program.*

**165** sports facilities were built in 2017 within the framework of the Gazprom for Children program

### THE GAZPROM FOR CHILDREN PROGRAM

Gazprom is particularly dedicated to sport projects focused on the development of children and youngsters. The Gazprom for Children program is a key social project for PJSC Gazprom.

In 2017, an important date was celebrated – 10 years since the inception of the Gazprom for Children program. Thanks to the successful implementation of the program, hundreds of thousands of children and teenagers were provided with an opportunity to do sports at multifunctional and specialized facilities, go to state-of-the-art swimming-pools and skating rinks, compete in new stadiums and playgrounds. Sports facilities were built in large cities and in remote sparsely inhabited localities, where there had been no adequate conditions to practice physical culture.

Since 2007, over 1,600 state-of-the-art sports facilities have been built in the regions of presence within the framework of the Gazprom for Children program,

The 12<sup>th</sup> PJSC Gazprom 2017 Summer Spartakiada Games gathered

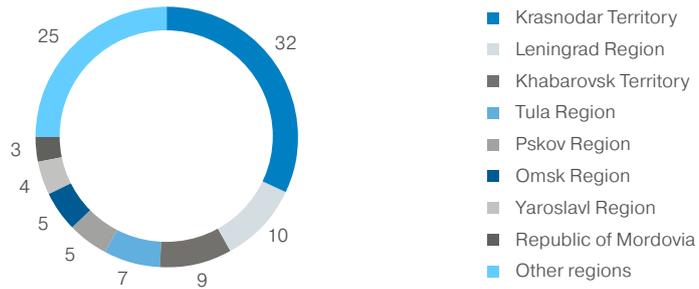
**2,500** athletes from 29 Gazprom subsidiaries based in Russia and Belarus

including 120 modern physical culture and recreational facilities where over 100,000 children engage in sports activities.

Funding under the program was provided in 29 regions of the Russian Federation, 134 cities and towns and over 80 inhabited localities in 2017. Within the framework of the program, construction of 165 sports facilities was completed in 2017: Those were 14 physical culture and recreational facilities, 151 open-air physical culture and sports facilities, including 81 school stadiums, 60 multifunctional sports grounds and 10 playgrounds.

Among the largest and most socially important facilities, a roofed sports facility with two skating rinks was commissioned into operation in the Nevsky District of St. Petersburg in 2017. Cheremushki, a physical culture and recreational facility with an ice arena in Nizhny Lomov, Penza Region, a physical culture and recreational facility with a swimming-pool in Novocherkassk, Rostov Region, and a physical culture and recreational facility with a roofed skating rink in Stroitel, Belgorod Region, have been built and started work.

Distribution of the Company's expenditure under the Gazprom for Children program, across regions of the Russian Federation, 2017, %



**Gazprom for Children in detail**

A new complex in Babushkin St., Nevsky District, St. Petersburg, houses an ice arena with two skating rinks. Thanks to that design, hockey training and figure skating exercises can take place simultaneously there. The ice arena became a home for trainees of Tamara Moskvina's Star Ice figure skating school. When the complex is open for the general public, up to 243 people can use each ice arena per shift. Moreover, there is a fitness room, aerobics and choreography rooms there. The services offered at the complex are available to everyone.

A new physical culture and recreational facility in Novocherkassk, Rostov Region, is equipped in accordance with Russian and international standards. It can be used for training, physical culture and recreational activities: swimming, basketball, volleyball, tennis, futsal, aerobics and power lifting. People with disabilities can also use the facility with ease.

**Plans.** From 2018 to 2023, within the framework of the Gazprom for Children program, 168 facilities will be built in 33 regions of the Russian Federation, including 94 capital construction projects and 74 open-air flatwork facilities (playgrounds and stadiums). Additionally, there are plans to bankroll repair and renovation of about 10 sport facilities.

## THE FOOTBALL FOR FRIENDSHIP PROGRAM

Football for Friendship is an international social program for children. It was started by the Company in 2013 and includes a series of humanitarian, sports and educational events organized in different countries around the world.

The Football for Friendship program has support of the FIFA, UEFA, Russia's Olympic Committee, football federations of different countries, children's international charity funds and the world's major football clubs. As of end-2017, the project had won 14 national and international awards in communications, social and sport initiatives. Among others, Football for Friendship won the Sabre Awards (U.S.), an international prize, and The Internationalist Awards for Innovative Digital Marketing Solutions in the category "Best Media Strategy" in 2017.

The program's missions:

- development of children's football;
- promoting youth sports and healthy lifestyles;
- nurturing tolerance, respect for other cultures and ethnicities;
- promoting friendship between children from different countries.

To achieve these goals, Gazprom organizes a series of national and international events and initiatives for children:

- International Children's Forum;
- International Street Football Tournament;
- International Day of Football and Friendship;
- International Children's Press Center;
- presentation ceremony of the Nine Values Cup.

From 2013 to 2016, the program was carried out within the framework of a sponsor contract between PJSC Gazprom and the UEFA Champions League. The final events of Football for Friendship were held successively in London, Lisbon, Berlin and Milan. In 2017, the program was organized

for the first time within the framework of a partner contract between PJSC Gazprom and FIFA (International Federation of Association Football). The fifth season of the Football for Friendship project took place in St. Petersburg, and in a new format. The participants did not represent football clubs from different countries; instead, they were divided into eight international friendship teams. Each team had eight boys and girls aged 12 to 14, including children with disabilities. Wrapping up the fifth season of the Football for Friendship project, its participants attended the finals of the 2017 FIFA Confederations Cup at the Saint Petersburg Stadium.

The Fifth International Children's Forum was timed to coincide with the finals of the 2017 FIFA Confederations Cup. The number of countries taking part in the event was up from 32 (in 2016) to 64 (in 2017). Events of the forum were covered by over 2,000 reporters of the world's major media and the Children's International Press Center where young journalists from the countries participating in the project were networking.

**Plans.** In 2018, the finals of the Football for Friendship program will be scheduled to coincide with the 2018 FIFA World Cup taking place in Russia. There are plans to expand the program's geography to 211 countries and regions. In an open drawing procedure, 32 international football friendship teams will be made. The teams will be organized according to the "football for friendship" principle, i.e. one team will have athletes of different nationalities, genders and physical capabilities. The players are 12 years old. Young coaches – football players aged 14 to 16 years from various countries – will be training the teams. 5,000 media from across the globe will be covering those events.

Traditionally, every year, the Football for Friendship program backs up the environmental initiative. In 2018, the key mission of the program will be raising awareness of the extinction of endangered animal species amongst children and adults.



### Football for Friendship by numbers

Since its inception, the program has been honored with **17** international and Russian awards in the areas of social responsibility and communications. Over five years, **400,000** people have been involved in the Football for Friendship program; they speak **43** languages and represent over **90** football teams from **64** countries (more than **100** cities). Since the program was launched, over **160** press events and more than **130** sports events and urban festivals have been organized for children and adults from all over the world.

### Football for Friendship: Friendship, equality, fairness and more

The key event of the Football for Friendship program is the International Children's Forum. Every year, Gazprom invites hundreds of young players of major football clubs from Asian, African, European, North and South American countries to take part in the competitions.

Within the framework of the forum, the International Street Football Tournament is also organized, where boys and girls aged from 12 to 14 participate.

During all days of the forum, the children are provided with accommodation, meals, transportation, escorting staff (including security employees) and round-the-clock medical aid.

Every year on April 25, within the framework of the program, all participating countries celebrate the International Day of Football and Friendship. It serves to remind young athletes of the key values of the program, which include friendship, equality, fairness, health, peace, devotion, victory, traditions and honor. On that day, friendly football games take place, which begin with the exchange of Friendship Bracelets, the program's official emblem and the symbol of tolerance, equality and healthy lifestyles. Every year, about 100,000 people take part in the festivities of the International Day of Football and Friendship.



#### Environmental football

*In order to promote the idea of protecting wildlife and to boost the interest of new generations in preservation and protection of the world's fauna within the framework*

*of the program, 32 friendship teams will be assigned special names of endangered animal species. During the program's finals, "friendship routes" will be arranged, as the project participants will be traveling by coaches using environmentally clean NGV fuel.*

## GAZPROM SPARTAKIADA GAMES

Gazprom promotes healthy lifestyles among its employees and engages them in systematic physical culture and sport exercises. For that purpose, Group enterprises organize Spartakiada Games, mass sports events, physical culture and recreational activities among employees and their family members.



In 2017, Sochi hosted PJSC Gazprom's 12<sup>th</sup> Summer Spartakiada Games (for adults and children). About 2,500 athletes from 29 Gazprom subsidiaries and entities based in Russia and Belarus competed for the prizes. Adult athletes faced off in six sports: volleyball, weight lifting, athletics, swimming, chess and football; children's teams had four sports to go head to head in: athletics, swimming, chess, football.

In total, 180 sets of awards were up for grabs, including 23 in team events and 157 in individual matches.

In 2017, for the first time within the framework of Gazprom's Spartakiada Games,

requirements of the Russian nationwide physical culture and sports program Ready for Labor and Defense were met. Representatives of Gazprom Transgaz Tchaikovsky LLC came out the winners.

PJSC Gazprom holds regional sports events. In 2017, Nadym (Yamal-Nenets Autonomous Area) hosted the 20<sup>th</sup> Spartakiada Games of executives of PJSC Gazprom Western Siberian subsidiaries, which were dedicated to the 45<sup>th</sup> anniversary of the Gazprom Dobycha Nadym LLC foundation.

The Group also regards very highly physical culture and recreational events that help preserve PJSC Gazprom's corporate traditions and values, boost physical and moral development of employees and their family members, promote healthy lifestyles. The biggest physical culture and recreational event across PJSC Gazprom subsidiaries is the competition among employees and their family members – Dad, Mom and I Are a Sporty Family.

## SUPPORT FOR SPORTS

Gazprom Group supports sports, namely Russian sport federations, sport clubs and teams in various sports.

PJSC Gazprom is a sponsor of the Russian Rhythmic Gymnastics Federation, Russian Volleyball Federation, Russian Swimming Federation, Russian Biathlon Union, Russian Canoe Federation, Federation of Billiard Sports of Russia, All Russian Federation of Dance Sport and Acrobatic Rock'n'roll. Sponsorship helped federations organize major national and international events, for instance Russia's Volleyball Championship for men's and women's teams, Russia's Kayak and Canoe Championship, Russia's Swimming Championship, international

competitions in rhythmic gymnastics Female Champions Cup – Gazprom and many other tournaments.

In 2017, the Company continued its sponsorship of the football clubs Zenit, Tom, Orenburg and Volgar, hockey clubs SKA, Avangard and Vityaz, volleyball clubs Zenit-Kazan, Zenit-St. Petersburg and Gazprom-Yugra, table tennis club Fakel-Gazprom, etc.

Since 2013, a specialized website, [Gazprom-football.com](http://Gazprom-football.com), functions. Visitors of the website can read information on how the Company supports football federations and professional football clubs, social initiatives, can take part in lotteries and win free tickets to the Champions League's

games. During the 2016/17 season, over 580,000 users from 190 countries registered on the website, which makes gazprom-football.com an integral element of the football online community.

PJSC Gazprom is an official partner of the UEFA Champions League and of the FIFA. The Company signed a new sponsor agreement with the UEFA, extending its collaboration with the UEFA Champions League for another three-year cycle (2018–2021).

Sponsorship of Group companies made large international tennis tournaments possible: women's tournament in St. Petersburg – Ladies Trophy and men's ATP tournament – St. Petersburg Open. Top ten and top twenty players of the global tennis rating take part in those events.

In the past few years, PJSC Gazprom's has provided financial support to the most important competition in horseracing – the race for the Prize of the President of the Russian Federation. Gazprom

Group's financial backing helps organize, and with success, the annual Nord Stream sailing race, and carry out other projects of the St. Petersburg Yacht Club aimed at development and promotion of sailing.

From July 17 to 22, 2017, the 2017 Silk Way international off-road rally, in which 64 crews from 35 countries participated, was held. The route of the rally-marathon, which was 9,599 km long, ran across territories of three countries: Russia, Kazakhstan and China. PJSC Gazprom, in association with the Chinese company CNPC, was the general co-sponsor of that major international project.

In 2017, PJSC Gazprom continued to provide sponsor support to activities of Russia's Olympic Committee, to help prepare national Olympic teams.

Sports bring together people from many countries and continents, and foster friendship between persons with diverging worldviews and lifestyles.

## SITES OF MILITARY GLORY



*In 2017, Gazprom allocated funding to keep 60 Eternal Flame monuments in Hero Cities and Cities of Military Glory across Russia.*

Solicitous attitude to memorials and military glory monuments is an important part of Gazprom's social projects. Within the framework of the Victory Monuments projects, continuous effort is made to preserve and restore memorial complexes, monuments of military glory, mass graves of military men and guerrillas who fought in the Great Patriotic War.

In 2017, Gazprom allocated funding on functioning of 60 Eternal Flame monuments in Russia's Hero Cities and Cities of Military Glory.

Within the framework of the Eternal Flame program, finalists of the Energy of Generations social project were able to visit war memorials in Moscow, a Hero

City. The finalists, wards of boarding schools and orphanages from different regions of Russia, visited the Moscow Kremlin, took part in an interactive tour to the Kolomenskoye museum-reserve.

Gas distribution entities of Gazprom Group tidied up and prepared for the 2017 V-Day (May 9) 1,351 Eternal Flame monuments in 1,214 inhabited localities. In 2017, employees of those entities restored memorial complexes in inhabited localities of the Bryansk, Voronezh, Smolensk, Tambov, Tula, Ulyanovsk Regions, and the Kabardino-Balkar Republic.



**Gazprom employees restore monuments**

*In 2017, Employees of Gazprom Transgaz Stavropol LLC completed repair and restoration of monuments, memorials and burial sites immortalizing the memory of those fallen in the Great Patriotic War (1941 – 1945). In total, branches of enterprises take care of 50 sites in the North Caucasus and Southern Federal Districts. Those are*

*memorial complexes in cities, obelisks, beds of honor, burials of unknown warriors in villages and farmsteads. Repair work included restoration and renovation of the monuments, beautification and landscaping of adjacent areas. Gas company employees were assisted by local residents.*

PJSC Gazprom provided funding for repair and restoration work at warrior burial sites in the Republic of Latvia.

**SUPPORT TO  
DISADVANTAGED  
GROUPS**

Gazprom Group's charity activities include both large-scale social projects and targeted aid to people in need.

Helping children, people with disabilities and other underprivileged groups, Gazprom regularly organizes large-scale events, including with engagement of its international partners. In 2017, within the framework of Imperial Capitals: St. Petersburg – Vienna, a joint large-scale social project of Gazprom and Austria's OMV, a theatrical gala show took place at the St. Petersburg Academic Philharmonic Society named after Dmitry Shostakovich. All proceeds from gala show ticket sales were donated to a charity foundation helping children with serious diseases. Within the framework of the project, three Rubens paintings from the State Hermitage collection were exhibited at the Vienna Art History Museum with the two companies' support, a Christmas charity ball Energy for Life was held at the Hofburg Palace in Vienna and was attended by over 1,000 children from disadvantaged groups.

The New Year charity ball in the Tauride Palace in St. Petersburg was the crowning event of the Imperial Capitals: St. Petersburg – Vienna project in 2017. The money raised at the charity ball were donated by the Company to the treatment of children with disabilities, to the purchase of medications, medical equipment for clinics and children's

institutions, special devices and adaptation equipment. Big donations went to benefit large and low-income families, people with disabilities.

In December 2017, Moscow hosted Gazprom's annual New Year event for children in need of social care. Over 1,000 children from foster, low-income and large families, wards of children's social institutions, including children with disabilities, attended a performance of the fairy-tale *A Magician Who Needs to Learn a Thing or Two*. The young guests were treated with traditional New Year presents.



**The Energy of Generations  
charity triathlon fosters children's  
communications**

*In 2017, Orenburg hosted the final round of the 2017 Energy of Generations charity triathlon tournament. It is a charity project of Gazprom Energo LLC focused on support to children from sponsored orphanages and boarding schools.*

*The main purpose is to nurture high moral qualities in children in need of parental care via contacts with employees of fuel and energy companies and their family members. Eight teams – from Ryazan, Stavropol, Orenburg, Novy Urengoy, Pangody Settlement, Astrakhan, Saratov and Surgut – were in the 2017 triathlon finals.*



**Orphaned teenagers from Novy Urengoy will have promising careers**

*Gazprom Dobycha Urengoy LLC implements a social project called Future Together. Starting in a Trade. The program was launched in 2013. Its purpose is to provide ongoing assistance to orphaned children and teenagers aged from 14 to 18 years without parental support. Assistance is provided in the form of social and professional guidance, coaching and training for trades, employment opportunities, including at Gazprom Dobycha Urengoy LLC. The project is implemented with support from the Novy Urengoy administration,*

*Gazprom Vocational School Novy Urengoy, multidisciplinary college, work-and-study center of the enterprise.*

The year 2017 was the starting year of the collaboration between PJSC Gazprom and Dmitry Rogachev National Research Center of Pediatric Hematology, Oncology and Immunology of the Ministry of Health of the Russian Federation. The Company bankrolled the upgrade of an MRI machine and purchase of medical equipment. In addition, the Company helped the center buy specialized medical equipment and accessories, including exercise equipment, prostheses, wheelchairs, electric elevators.

**Taking care of the people and the environment, supplying energy resources, replenishing hydrocarbon reserves, contributing to the country's well-being are the priorities of Gazprom's activities today and in the long term. Keeping *Production. Environment. People* in balance, the Group strives to respect the interests of the present and future generations.**

# APPENDIX

## APPENDIX 1. GRI TABLE

### Standard disclosures according to the GRI Guidelines

Indicator	Indicator description	Disclosure	Page
<b>GENERAL STANDARD REPORTING ELEMENTS</b>			
<b>GRI 102: General (2016)</b>			
<b>GRI 102-1</b>	Name of the organization	About Gazprom Group	17
<b>GRI 102-2</b>	Activities, brands, products, and services	About Gazprom Group Section 1. Production: Gazprom's Contribution to National Development	17–27 49–99
<b>GRI 102-3</b>	Location of the organization's headquarters	16 Nametkina St., Moscow, GSP-7, 117997, Russian Federation	–
<b>GRI 102-4</b>	Number of countries in which the organization operates and names of countries where core business operations are pursued or which are especially significant in terms of sustainable development issues covered in the report	About Gazprom Group / <i>Geography of Operations</i>	20
<b>GRI 102-5</b>	Ownership and legal form	About Gazprom Group	17
<b>GRI 102-6</b>	Markets served	About Gazprom Group / <i>Geography of Operations</i> Section 1. Production: Gazprom's Contribution to National Development	20–24 49–99
<b>GRI 102-7</b>	Scale of the organization	About Gazprom Group / <i>Key Performance Indicators</i> Section 1. Production: Gazprom's Contribution to National Development Section 3. People: Decent Living and Work Standards <i>Gazprom Group Personnel</i> See the sections "Gazprom Group Today", "Business Model" and "Gazprom Group's Position in the Global and Russian Energy Industry" of the PJSC Gazprom 2017 Annual Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf</a> . See the balance sheet in the consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS), as of December 31, 2017: <a href="http://www.gazprom.com/f/posts/12/255042/gazprom-ifs-2017-12m-en.pdf">http://www.gazprom.com/f/posts/12/255042/gazprom-ifs-2017-12m-en.pdf</a> . As of December 31, 2017, the consolidated financial statements prepared according to IFRS included indicators of the following number of organizations: subsidiaries – 324, joint operations – 7, associated organizations and joint ventures – 46.	25–26 49–99 146–151

Indicator	Indicator description	Disclosure	Page
<b>GRI 102-8<sup>(1)</sup></b>	Information on employees and other workers	About Gazprom Group Section 3. People: Decent Living and Work Standards <i>Gazprom Group Personnel</i> Appendix 2	26 146–151 214
<b>GRI 102-9</b>	Supply chain of the organization	Section 1. Production: Gazprom's Contribution to National Development / <i>Support of small and medium-sized businesses by Gazprom Group</i> Section 1. Production: Gazprom's Contribution to National Development <i>Import substitution</i> See p. 89–91, Issuer's Q1 quarterly report 2018: <a href="http://www.gazprom.ru/f/posts/01/851439/gazprom-emitent-report-1q-2018.pdf">http://www.gazprom.ru/f/posts/01/851439/gazprom-emitent-report-1q-2018.pdf</a>	87–89 94–99
<b>GRI 102-10</b>	Significant changes to the organization and its supply chain	There were no significant changes in the organization's size, structure, ownership, or changes in the supply chain during the reporting period.	–
<b>GRI 102-11</b>	Precautionary Principle or approach	About Gazprom Group / <i>Risk Management</i> Section 2. Environment: Sustainable Use of Natural Resources	40–45 101
<b>GRI 102-12</b>	Support of external initiatives	About Gazprom Group / <i>Corporate Governance</i> Section 2. Environmental: Sustainable Use of Natural Resources / <i>Environmental Sustainability Management</i>	31 106–116
<b>GRI 102-13</b>	Membership in associations and/or national and international organizations	Section 1. Production: Gazprom's Contribution to National Development See p. 135, Issuer's Q1 quarterly report 2018: <a href="http://www.gazprom.ru/f/posts/01/851439/gazprom-emitent-report-1q-2018.pdf">http://www.gazprom.ru/f/posts/01/851439/gazprom-emitent-report-1q-2018.pdf</a>	66
<b>GRI 102-14</b>	Statement from senior decision-maker	Message from Gazprom CEO	4–5
<b>GRI 102-15</b>	Description of key impacts, risks and opportunities	About Gazprom Group / <i>Sustainability Management</i> About Gazprom Group / <i>Risk Management</i>	29–30 40–45
<b>GRI 102-16</b>	Values, principles, standards, and norms of behavior	About Gazprom Group / <i>Gazprom Group Strategy</i> About Gazprom Group / <i>Corporate Culture and Corporate Ethics / Countering Corruption</i>	27 34–37
<b>GRI 102-18</b>	Corporate governance structure	About Gazprom Group / <i>Corporate Governance Structure</i> Corporate governance. See p. 190-191, PJSC Gazprom 2017 Annual Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf</a> .	32–34

<sup>(1)</sup> The personnel roster is not broken down by type of contract, type of employment, or region (and respective data are not broken down by gender) because no centralized records are kept.

Indicator	Indicator description	Disclosure	Page
<b>GRI 102-23</b>	Chair of the highest governance body	The Chair is not an executive officer	–
<b>GRI 102-25</b>	Conflicts of interest	About Gazprom Group / <i>Corporate Governance / Internal Control System / Countering Corruption</i> On its official website, PJSC Gazprom discloses information on significant facts, affiliates, transportation services, the insider information list and the Company's details: <a href="http://www.gazprom.com/investors/disclosure/facts/2017/">http://www.gazprom.com/investors/disclosure/facts/2017/</a> .	31–37
<b>GRI 102-35</b>	Remuneration policies	See p. 194-198, PJSC Gazprom 2017 Annual Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf</a> .	
<b>GRI GRI – EU1<sup>(2)</sup></b>	Installed capacity broken down by primary energy source and by regulatory regime	Section 1. Production: Gazprom's Contribution to National Development / <i>Power and Heat Generation for the People</i> See the chapter "Power Generation" in the section "Operations and Marketing," PJSC Gazprom 2017 Annual Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf</a> .	83–87
<b>GRI GRI – EU2<sup>(2)</sup></b>	Net energy output broken down by primary energy source and by regulatory regime	Section 2. Environment: Sustainable Use of Natural Resources See the chapter "Power Generation" in the section "Operations and Marketing," PJSC Gazprom 2017 Annual Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-annual-report-2017-eng.pdf</a> .	140
<b>GRI 102-40</b>	List of stakeholder groups involved in interactions with the organization	About the Report / <i>Stakeholder Engagement</i>	14
<b>GRI 102-41</b>	Percentage of employees covered by collective bargaining agreements	Section 3. People: Decent Living and Work Standards	164
<b>GRI 102-42</b>	Identifying and selecting stakeholders	About the Report	14
<b>GRI 102-43</b>	Approach to stakeholder engagement	About the Report / <i>Stakeholder Engagement</i> ; About Gazprom Group / <i>Corporate Governance</i> ; Section 1. Production: Gazprom's Contribution to National Development / <i>Engaging with stakeholders on gas supply issues</i> ; Section 1. Production: Gazprom's Contribution to National Development / <i>Gazprom's Interaction with Government Authorities on NGV Market Development</i> Section 1. Production: Gazprom's Contribution to National Development / <i>Consumer relations: responding to demand</i> Section 1. Production: Gazprom's Contribution to National Development / <i>SME relations management</i>	14–16 31 66, 69 79 86–87 87

<sup>(2)</sup> When preparing the Report, specific indicators for the sector "Electric power industry" were used to reflect specifics of the Group's energy business.

Indicator	Indicator description	Disclosure	Page
		Section 1. Production: Gazprom's Contribution to National Development / <i>SME relations management</i>	88 141–143
		Section 2. Environment: Sustainable Use of Natural Resources / <i>Gazprom Group's Stakeholder Interaction on Environmental Protection Matters</i>	151–166 176–189
		Section 3. People: Decent Living and Work Standards / <i>HR Management in Gazprom Group</i>	
		Section 3. People: Decent Living and Work Standards / <i>Gazprom Group's Social Projects</i>	
<b>GRI 102-44</b>	Key topics and concerns raised	About the Report / <i>Definition of Material Issues to Be Covered in the Report</i>	9–11 14–16
<b>GRI 102-45</b>	Entities included in the consolidated financial statements	About the Report See p. 53-55 of the consolidated financial statements prepared in accordance with the International Financial Reporting Standards (IFRS), as of December 31, 2017 (a list of major subsidiaries is given): <a href="http://www.gazprom.com/f/posts/12/255042/gazprom-ifs-2017-12m-en.pdf">http://www.gazprom.com/f/posts/12/255042/gazprom-ifs-2017-12m-en.pdf</a> .	8
<b>GRI 102-46</b>	Defining report content and topic boundaries	About the Report Appendix 3. In line with the completeness principle, the Report covers, in addition to the topics selected via stakeholder interaction and the materiality matrix, a number of additional topics that may be of interest to stakeholders. The scope of each significant topic has been defined by persons responsible for the management of respective topics	9–16 220
<b>GRI 102-47</b>	List of material topics	About the Report / <i>Definition of Material Issues to Be Covered in the Report</i>	9–13
<b>GRI 102-48</b>	Restatements of information	There were no restatements in the reporting period.	–
<b>GRI 102-49</b>	Changes in reporting	The list of material issues was revised and updated on the basis of stakeholder interaction. About the Report / <i>Definition of Material Issues to Be Covered in the Report</i> There were no significant changes of the scope versus last year.	9–11
<b>GRI 102-50</b>	Reporting period	About the Report	8
<b>GRI 102-51</b>	Date of most recent report	About the Report	8
<b>GRI 102-52</b>	Reporting cycle	About the Report	8
<b>GRI 102-53</b>	Contact points for questions regarding the report or its contents	Contacts and feedback	228

Indicator	Indicator description	Disclosure	Page
<b>GRI 102-54</b>	Claims of reporting in accordance with the GRI Standards selected by the organization	"This report has been prepared in accordance with the GRI Standards: Core option."	
<b>GRI 102-55</b>	GRI content index	Appendix 1. GRI content index	190–198
<b>GRI 102-56</b>	External assurance	The report has been approved by a professional auditor – audit firm FBK Grant Thornton. The report was endorsed by the Council of the Russian Union of Industrialists and Entrepreneurs in terms of its nonfinancial statements.	8 226 225
<b>GRI 103: Management approaches (2016)</b>			
<b>GRI 103-1</b>	Explanation of the material topic and its Boundary	About the Report / <i>Definition of Material Issues to Be Covered in the Report</i>	9–13
<b>GRI 103-2</b>	The management approach and its components	Section 1. Production: Gazprom's Contribution to National Development / <i>Sustainable development management</i> Section 1. Production: Gazprom's Contribution to National Development / <i>Corporate governance (numbers of material issues – 1, 2, 4–13)</i> Section 1. Production: Gazprom's Contribution to National Development / <i>Import Substitution Management (number of material issue – 3)</i> Section 2. Environment: Sustainable Use of Natural Resources / <i>Environmental sustainability management (numbers of material issues – 13, 20–25)</i> Section 3. People: Decent Living and Work Standards / <i>HR management в Gazprom Group (numbers of material issues – 9, 15–19)</i> Section 3. People: Decent Living and Work Standards / <i>Occupational Health, Industrial and Fire Safety Management System at Gazprom Group (number of material issue – 14)</i> No complaints about the Group's activities were submitted in the reporting period.	29 31 96 106–116 151–166 166–175
<b>GRI 103-3</b>	Evaluation of the management approach	Section 1. About Gazprom Group / <i>Corporate governance (numbers of material issues – 1, 2, 4–13)</i> Section 1. Production: Gazprom's Contribution to National Development / <i>Import Substitution Management (number of material issues – 3)</i> Section 2. Environment: Sustainable Use of Natural Resources / <i>Environmental Sustainability Management (numbers of material issues – 20–25)</i> Section 3. People: Decent Living and Work Standards / <i>HR Management at Gazprom Group (numbers of material issues – 15–19)</i> Section 3. People: Decent Living and Work Standards / <i>Occupational Health, Industrial and Fire Safety Management System at Gazprom Group (number of material issues – 14)</i>	31 96 106–116 151–166 166–175

Indicator	Indicator description	Disclosure	Page
<b>MATERIAL ISSUES</b>			
<b>GRI 201: Economic performance (2016)</b>			
-	Innovations and R&D at Gazprom Group	Section 1. Production: Gazprom's Contribution to National Development / <i>Gazprom Production Innovations</i>	90–94
<b>GRI 201-1</b>	Direct economic value generated and distributed	Appendix 2	204
<b>GRI 201-3</b>	Defined benefit plan obligations and other retirement plans	Section 3. People: Decent Living and Work Standards / <i>Corporate pension insurance of employees</i> See p. 46 of the consolidated financial statements prepared in accordance with the International Financial Reporting Standards (IFRS), as of December 31, 2017: <a href="http://www.gazprom.com/f/posts/12/255042/gazprom-ifs-2017-12m-en.pdf">http://www.gazprom.com/f/posts/12/255042/gazprom-ifs-2017-12m-en.pdf</a> .	163
<b>GRI 203: Indirect economic impacts (2016)</b>			
<b>GRI 203-2</b>	Significant indirect economic impacts	Section 1. Production: Gazprom's Contribution to National Development / <i>Gas Infrastructure Expansion and Gas Supplies to Russian Regions</i> Section 3. People: Decent Living and Work Standards / <i>Gazprom Group Social Projects</i>	59–60 176–189
<b>GRI OG: Reserves</b>			
<b>GRI OG1</b>	Volume and type of estimated proved reserves and production	About Gazprom Group Section 1. Production: Gazprom's Contribution to National Development / <i>Taking Care of Future Generations: Hydrocarbon Reserve Replacement</i>	25 80–82
<b>GRI 204: Procurement practices (2016)</b>			
<b>GRI 204-1</b>	Proportion of spending on local suppliers	Section 1. Production: Gazprom's Contribution to National Development / <i>Import Substitution</i>	94–99
<b>GRI 205: Anti-corruption practices (2016)</b>			
<b>GRI 205-3</b>	Confirmed incidents of corruption and actions taken	No incidents of corruption were detected at PJSC Gazprom in the reporting period.	–
<b>GRI 206: Anti-competitive behavior (2016)</b>			
<b>GRI 206-1</b>	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	See p. 65-68 of the consolidated financial statements prepared in accordance with the International Financial Reporting Standards (IFRS), as of December 31, 2017: <a href="http://www.gazprom.com/f/posts/12/255042/gazprom-ifs-2017-12m-en.pdf">http://www.gazprom.com/f/posts/12/255042/gazprom-ifs-2017-12m-en.pdf</a> .	
<b>GRI 302: Energy (2016)</b>			
<b>GRI 302-3</b>	Energy intensity	Section 2. Environment: Sustainable Use of Natural Resources / <i>Energy Saving and Energy Efficiency: Saving Resources to Benefit the Planet</i> See p. 44 of the PJSC Gazprom 2017 Environmental Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf</a> .	135–141

Indicator	Indicator description	Disclosure	Page
<b>GRI OG3</b>	Total amount of renewable energy generated by source	Section 2. Environment: Sustainable Use of Natural Resources / <i>Energy of the Future: Renewable and Secondary Energy Resources</i>	139–141
<b>GRI 302-4</b>	Reduction of energy consumption	Section 2. Environment: Sustainable Use of Natural Resources / <i>Energy Saving and Energy Efficiency: Saving Resources to Benefit the Planet</i>	135–141
<b>GRI 303: Water (2016)</b>			
<b>GRI 303-1</b>	Water withdrawal by source	Section 2. Environment: Sustainable Use of Natural Resources / <i>Water: Treatment and Scaling Back Consumption</i> See p. 31 of the PJSC Gazprom 2017 Environmental Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf</a> .	121–124
<b>GRI 304: Biodiversity (2016)</b>			
<b>GRI 304-2</b>	Significant impacts of activities, products, and services on biodiversity	Section 2. Environment: Sustainable Use of Natural Resources See p. 40-42 of the PJSC Gazprom 2017 Environmental Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf</a> .	101
<b>GRI 305: Emissions (2016)</b>			
<b>GRI 305-1</b>	Direct greenhouse gas emissions (scope 1)	About Gazprom Group Section 2. Environment: Sustainable Use of Natural Resources / <i>Mitigating Climate Impact</i>	26 129–135
<b>GRI 305-5</b>	Reduction of greenhouse gas emissions	About Gazprom Group Section 2. Environment: Sustainable Use of Natural Resources / <i>Mitigating Climate Impact</i>	26 129–135
<b>GRI 305-7</b>	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions	Section 2. Environment: Sustainable Use of Natural Resources / <i>Air: Prevention and Reduction of Emissions</i> See p. 19–21 of the PJSC Gazprom 2017 Environmental Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf</a> .	120–121
<b>GRI 306: Effluents and waste (2016)</b>			
<b>GRI 306-1</b>	Wastewater discharge by quality and destination	Section 2. Environment: Sustainable Use of Natural Resources / <i>Water: Treatment and Scaling Back Consumption</i> See p. 32 of the PJSC Gazprom 2017 Environmental Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf</a> .	121–124
<b>GRI 306-3</b>	Significant spills	No significant oil and oil product spills exceeding 10 tons were detected at facilities in the reporting period.	–
<b>GRI OG6</b>	Volume of flared and vented hydrocarbons	Section 2. Environment: Sustainable Use of Natural Resources / <i>Mitigating Climate Impact</i> See p. 25 of the PJSC Gazprom 2017 Environmental Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf</a> .	133–134

Indicator	Indicator description	Disclosure	Page
<b>GRI OG7</b>	Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal	See p. 35 of the PJSC Gazprom 2017 Environmental Report: <a href="http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf">http://www.gazprom.com/f/posts/60/709300/gazprom-environmental-report-2017.pdf</a> .	–
<b>GRI 307: Environmental compliance (2016)</b>			
<b>GRI 307-1</b>	Non-compliance with environmental laws and regulations	There were no nonfinancial penalties in the reporting period.	211
<b>GRI 401: Employment (2016)</b>			
	Programs and processes to ensure the availability of a skilled workforce	Section 3. People: Decent Living and Work Standards / <i>HR Management at Gazprom Group</i>	151–166
	Policies and procedures regarding occupational health and safety of the Company's personnel, employees of contractors and subcontractors	Section 3. People: Decent Living and Work Standards / <i>Industrial Safety Culture: Occupational Health, Industrial and Fire Safety</i>	166–175
<b>GRI 401-2</b>	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Section 3. People: Decent Living and Work Standards / <i>Social Policy</i> The social programs mentioned in the Report cover all employees on the Company's roster, irrespective of their form of employment.	162–163
<b>GRI 402: Labor/management relations (2016)</b>			
<b>GRI 402-1</b>	Minimal notice period regarding significant changes in the organization's operations; specify if it is defined in the collective agreement	The notice period for significant changes in working conditions is at least 2 months. The notice provisions are included in the General Collective Agreement.	
<b>GRI 403: Occupational health and safety (2016)</b>			
<b>GRI 403-2<sup>(3)</sup></b>	Types and rates of injuries, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Section 3. People: Decent Living and Work Standards / <i>Gazprom Group's activities to improve working conditions and industrial safety</i>	173–175 216
<b>GRI 403-3</b>	Workers with high incidence or high risk of diseases related to their occupation	Section 3. People: Decent Living and Work Standards / <i>Gazprom Group's activities to improve working conditions and industrial safety</i>	173–175
<b>GRI 403-4</b>	Health and safety topics covered in formal agreements with trade unions	Health and safety topics are covered by the 2016–2018 General Collective Agreement entered into by PJSC Gazprom and its subsidiaries.	
<b>GRI 404: Training and education (2016)</b>			
<b>GRI 404-1<sup>(4)</sup></b>	Average hours of training per year per employee*	Section 3. People: Decent Living and Work Standards / <i>Personnel Training and Development</i>	156–157

<sup>(3)</sup> The rates and the number accidents with fatalities are not broken down by gender and by regions; the rate of lost days is not specified (including by gender and by regions) because no centralized records are kept.

<sup>(4)</sup> No gender breakdown is given because no centralized records are kept.

Indicator	Indicator description	Disclosure	Page
<b>GRI 404-2</b>	Programs for upgrading employee skills and transition assistance programs	Section 3. People: Decent Living and Work Standards / <i>Personnel Training and Development</i>	155–158
<b>GRI 406: Non-discrimination (2016)</b>			
<b>GRI 406-1</b>	Incidents of discrimination and corrective actions taken	The Group did not detect any cases of discrimination in the reporting period.	–
<b>GRI 407: Freedom of association and collective bargaining (2016)</b>			
<b>GRI 407-1</b>	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	The Group did not detect any violations of human rights of freedom of association and collective bargaining in the reporting period.	–
<b>GRI 411: Rights of indigenous and small-numbered peoples (2016)</b>			
<b>GRI 411-1</b>	Incidents of violations involving rights of indigenous peoples	The Group did not detect any violations of rights of indigenous and small-numbered peoples in the reporting period.	–
<b>GRI OG: Evaluation of respect for human rights</b>			
<b>GRI OG9</b>	Operations affecting interests of indigenous and small-numbered peoples and in which specific engagement measures are in place	Section 3. People: Decent Living and Work Standards / <i>Interaction with Indigenous Small-Numbered Peoples of the North</i>	179–181
<b>GRI 413: Local communities (2016)</b>			
<b>GRI 413-2</b>	Operations with significant actual and potential negative impacts on local communities	No significant actual or potential negative impact on local communities was detected in the reporting period.	179–181
<b>GRI OG10</b>	Number and description of significant conflicts with local communities and indigenous peoples	No significant conflicts with local communities and indigenous peoples were recorded in the reporting period.	–
<b>GRI 415: State policy (2016)</b>			
<b>GRI 415-1</b>	Political contributions	In accordance with the Corporate Ethics Code, Gazprom does not make payments to the benefit of political parties, organizations or their representatives, and does not take part in political activities.	–
<b>GRI 419: Socioeconomic compliance (2016)</b>			
<b>GRI 419-1</b>	Non-compliance with laws and regulations in the social and economic area	No such penalties were imposed in the reporting period.	–

## APPENDIX 2. ADDITIONAL INDICATORS OF GAZPROM GROUP'S ACTIVITIES

### Electric power exports, 2014–2017, billion kWh

Country	2014	2015	2016	2017
<b>Finland:</b> from the buses of the Svetogorsk hydropower plant (part of the cascade of the Vuoksa hydropower plants, Leningrad Region) via the 110 kV Imatra-1 line; from the buses of the Kaitakoski hydropower plant (part of the Paz cascade, Murmansk Region) via the 110 kV LITERS-82 line. During the high-water period, peak electricity supply equals up to 70 MW	0.379	0.538	0.577	0.758
<b>Norway:</b> from the buses of the Borisoglebsk hydropower plant (part of the Paz cascade, Murmansk Region) via the 154 kV LITERS-225 line. Peak electricity supply can be as high as 56 MW, but in the normal operating mode, power equals 28 MW	0.107	0.095	0.059	0.104
<b>TOTAL</b>	<b>0.486</b>	<b>0.633</b>	<b>0.636</b>	<b>0.861</b>

Contemplated supply volumes to Finland and Norway are estimated to be 0.57 billion kWh in 2018.

### The share of Gazprom Group's gas exports<sup>(1)</sup> in gas consumption of the main consuming countries in Western and Central Europe, 2014–2017, %

Country	2014	2015	2016	2017
<b>WESTERN EUROPE (INCL. TURKEY)</b>				
Germany	48.0	53.5	53.6	55.6
Turkey	54.1	54.6	51.5	52.4
Italy	34.1	35.2	33.9	30.8
UK	13.4	14.5	20.5	19.1
France	17.4	22.2	23.8	25.4
<b>CENTRAL EUROPE</b>				
Poland	54.1	51.9	60.4	53.3
Hungary	61.9	63.2	54.9	64.7
Czech Republic	61.4	51.7	51.5	64.1
Slovakia	100.0	75.3	71.1	93.0
Bulgaria	94.4	96.1	94.2	95.9
<b>OVERSEAS, TOTAL<sup>(2)</sup></b>	<b>30.2</b>	<b>31.3</b>	<b>32.9</b>	<b>34.2</b>

<sup>(1)</sup> PJSC Gazprom's overseas gas sales under contracts of Gazprom Export LLC, including volumes sold within the framework of gas auctions and under direct contracts of GAZPROM Schweiz AG.

<sup>(2)</sup> The indicator is calculated for all European countries, including Turkey and excluding FSU.

Sources: IEA, PJSC Gazprom

**Personnel of PJSC Gazprom main subsidiaries**

Indicator	2014	2015	2016	2017 <sup>(1)</sup>
Personnel roster as of year-end, thousand people	233.3	235.4	237.4	235.6
Hired in a year, thousand people	33.9	29.5	28.6	26.6
Quit in a year, thousand people	29.0	27.4	26.7	28.4
Staff turnover, %	1.9	1.4	1.3	1.3

<sup>(1)</sup> To enforce Clause 1.29 of PJSC Gazprom's 2017 Program for Improvement of Operating Efficiency and Cost-Cutting approved by Order No. 883 of December 30, 2016, of PJSC Gazprom, the total personnel roster is to be optimized by at least 1%.

**Personnel structure, Gazprom Group, 2014–2017, %**

Indicator	2014	2015	2016	2017
Personnel roster	100.0	100.0	100.0	100.0
Executives, of which:	13.7	13.8	13.8	13.9
men in total roster (of all executives)	10.4 (76)	10.6 (77)	10.5 (76)	10.5 (76)
women in total roster (of all executives)	3.3 (24)	3.2 (23)	3.3 (24)	3.4 (24)
Specialists and other employees, of which:	31.0	31.5	31.7	31.5
men in total roster (of all specialists)	17.7 (57)	18.3 (58)	18.7 (59)	18.1 (57)
women in total roster (of all specialists)	13.3 (43)	13.2 (42)	13.0 (41)	13.4 (43)
Workers, of which:	55.3	54.7	54.5	54.6
men in total roster (of all workers)	43.0 (78)	43.4 (79)	42.5 (78)	42.1 (77)
women in total roster (of all workers)	12.3 (22)	11.3 (21)	12.0 (22)	12.5 (23)

Spending on exploration (excl. UGS) in 2014–2017, incl. VAT, RUB million

	2014	2015	2016	2017
<b>Licensed blocks of PJSC Gazprom, incl.:</b>	<b>46,577.7</b>	<b>80,092.1</b>	<b>68,701.6</b>	<b>54,361.8</b>
in the Russian Federation	43,121.2	66,026.3	58,303.9	52,870.8
overseas	3,456.5	14,065.8	10,397.7	1,491.1
<b>Subsidiary limited liability companies, incl.:</b>	<b>18,400.2</b>	<b>16,568.8</b>	<b>13,214.4</b>	<b>11,260.7</b>
in the Russian Federation	18,400.2	16,568.8	13,214.4	11,260.7
overseas	–	–	–	–
<b>TOTAL</b>	<b>64,977.9</b>	<b>96,660.9</b>	<b>81,915.9</b>	<b>65,622.5</b>
<b>Gazprom Neft Group<sup>(1)</sup>, incl.:</b>	<b>24,100.7</b>	<b>21,746.6</b>	<b>9,731.8</b>	<b>21,076.1</b>
in the Russian Federation	22,208.3	19,551.1	7,434.6	18,505.9
overseas	1,892.4	2,195.5	2,297.2	2,570.2
<b>TOTAL, Gazprom Group</b>	<b>89,078.6</b>	<b>118,407.5</b>	<b>91,647.8</b>	<b>86,698.7</b>

(1) Excluding companies investments in which are classified as joint operations.

Structure of exploration drilling in the Russian Federation, 2017, %

Ural Federal District	44.4
Siberian Federal District	24.9
Volga Federal District	3.2
Far Eastern Federal District	15.4
Southern Federal District and North Caucasus Federal District	3.0
Continental shelf	9.1

Hydrocarbon exploration of Gazprom Group in the Russian Federation, 2015–2017

Indicator	Total	Incl.:	
		in the Far East and Eastern Siberia	offshore
Exploration drilling, thousand meters	85.9	22.7	7.8
Completely constructed exploratory wells, units	36	5	4
incl. producing ones	31	2	3
2D seismic tests, thousand linear km	–	–	–
3D seismic tests, thousand km <sup>2</sup>	18.7	2.9	12.7
Funding of exploration (incl. VAT), RUB billion	82.6	16.1	39.0
Discovered fields	4	1	1
Discovered deposits	47	1	–

**Hydrocarbon exploration overseas, 2015–2017<sup>(1)</sup>**

Indicator	2015	2016	2017
<b>EXPLORATION DRILLING, thousand meters:</b>			
Gas business	16.8	0.3	–
Oil business	11.5	9.4	18.4
<b>COMPLETELY CONSTRUCTED EXPLORATORY WELLS, units:</b>			
Gas business	2	4	–
Oil business	2	4	8
incl. producing ones:			
gas business	1	3	–
oil business	1	4	5
<b>2D SEISMIC TESTS, thousand linear km:</b>			
Gas business	–	0.5	–
Oil business	–	1.0	–
<b>3D SEISMIC TESTS, thousand km<sup>2</sup></b>			
Gas business	0.3	0.04	–
Oil business	1.1	0.8	1.2
<b>FUNDING OF EXPLORATION (INCL. VAT), RUB billion:</b>			
Gas business	14.1	10.4	1.5
Oil business	2.2	2.3	2.6

<sup>(1)</sup> When building consolidated natural indicators for exploration conducted by Gazprom Group in foreign countries, indicators under projects in which Group subsidiaries have operator functions were taken into account.

**PJSC Gazprom's shareholding structure, %**

Shareholder	As of December 31, 2016	As of December 31, 2017
The Russian Federation represented by the Federal Agency for State Property Management	38.37	38.37
AJSC Rosneftgaz <sup>(1)</sup>	10.97	10.97
JSC Rosgazifikatsiya <sup>(2)</sup>	0.89	0.89
ADR holders <sup>(3)</sup>	26.86	25.20
Other registered persons	22.91	24.57

<sup>(1)</sup> As of December 31, 2016 and as of December 31, 2017, the cumulative stake in PJSC Gazprom directly or indirectly controlled by the Russian Federation equals 50.23% and is secured by a 100% of the Russian Federation in JSC Rosneftgaz, which also holds a 74.55% stake in JSC Rosgazifikatsiya.

<sup>(2)</sup> As of December 31, 2016 and as of December 31, 2017, the cumulative stake in PJSC Gazprom directly or indirectly controlled by the Russian Federation equals 50.23% and is secured by a 100% of the Russian Federation in JSC Rosneftgaz, which also holds a 74.55% stake in JSC Rosgazifikatsiya.

<sup>(3)</sup> The issuing bank of ADRs for PJSC Gazprom stock is the Bank of New York Mellon.

**Gazprom Group economic indicators, 2014–2017**

Indicator	2014	2015	2016	2017
Russia's GDP, RUB billion	79,200	83,387	86,149	92,037
Total value added, RUB billion	3,221	3,356	3,077	3,374
Share in Russia's GDP, %	4.1	4.0	3.6	3.7
Capital expenditures in Russia, RUB billion	13,903	13,897	14,749	15,967
Capital investments <sup>(1)</sup> , RUB billion	1,262	1,641	1,369	1,406
Share in Russia's total capital investments, %	9.1	11.8	9.3	8.8
Taxes and other duties paid into Russia's budgets at all levels, incl.:	2,063	1,947	1,966	2,534
customs duty, RUB billion	804	694	618	664
MET, RUB billion	561	599	602	884
income tax, RUB billion	213	105	96	228
property tax, RUB billion	86	110	120	149
Nominal value of dividends per share <sup>(2)</sup> , RUB	7.20	7.20	7.89	8.04
Dividends on state-owned stock <sup>(3)</sup> , RUB billion	86	86	94	96
Gazprom's total payments to Russia's budgets at all levels, RUB billion	2,149	2,032	2,060	2,630
Russia's oil and gas tax revenues, RUB billion	7,434	5,863	4,844	5,972
Russia's consolidated budget revenues, RUB billion	26,766	26,922	28,182	31,047
Share in oil and gas revenues of Russia's federal budget, RUB billion	1,365	1,293	1,220	1,548
Share in Russia's oil and gas tax revenues, %	18.4	22.1	25.2	25.9
Share in Russia's consolidated budget revenues, %	8.0	7.5	7.3	8.5

(1) According to the cash-flow report of the consolidated financial statements prepared in accordance with the IFRS.

(2) Amount of dividend per share paid on the basis of previous year's performance.

(3) PJSC Gazprom's dividend attributable to the government and legal entities controlled by the government.

**Direct economic value generated and distributed in 2014–2017**

Indicator	2014	2015	2016	2017
<b>DIRECT ECONOMIC VALUE GENERATED</b>				
Sales revenue	5,589,811	6,073,318	6,111,051	6,546,143
Net income (loss) from trading operations without actual delivery	-22,510	3,704	3,382	-16,352
Financial income (interest income)	66,983	112,165	93,494	83,721
Share of net profit of associates and joint ventures	46,051	106,560	82,872	126,940
Profit (loss) from disposal of available-for-sale financial assets	-915	9,121	1,059	782
<b>Total direct economic value generated</b>	<b>5,679,420</b>	<b>6,304,868</b>	<b>6,291,858</b>	<b>6,741,234</b>
<b>DIRECT ECONOMIC VALUE DISTRIBUTED</b>				
Operating expenses (excluding impairment and other allowances, amortization and translation differences), incl.:	3,714,956	4,145,883	4,620,539	5,115,417
social expenses	46,429	32,485	35,516	34,461
payroll	516,778	590,981	641,036	682,060
incl. post-employment benefits	31,317	35,557	50,961	48,522
taxes other than income tax	775,826	805,132	900,397	1,246,059
other operating expenses	2,375,923	2,717,285	3,043,590	3,152,837
Financial expenses (interest expenses)	44,749	66,857	71,556	53,332
Current income tax expense	121,343	102,223	218,113	241,817
Dividend payments to shareholders <sup>(1)</sup>	176,691	171,621	186,099	196,059
<b>Total direct economic value distributed</b>	<b>4,057,739</b>	<b>4,486,584</b>	<b>5,096,307</b>	<b>5,606,625</b>
<b>Economic value retained</b>	<b>1,621,681</b>	<b>1,818,284</b>	<b>1,195,551</b>	<b>1,134,609</b>

<sup>(1)</sup> The Declared Dividend Indicator from PJSC Gazprom's yearly consolidated financial statements.

**Gas sales of Gazprom Group in Russia, 2015–2017**

	2015	2016	2017
Sales volumes, bcm	221.2	214.9	229.9
Average selling price (net of VAT), RUB/1,000 cubic meters	3,641.3	3,815.5	3,808.3
Net sales (net of VAT), RUB billion	805.6	819.9	875.7

**Gas sales Gazprom Group in FSU countries, 2015–2017**

	2015	2016	2017
Sales volumes, bcm	40.3	33.2	35.0
Average selling price (including customs duties), USD/1,000 cubic meters <sup>(1)</sup>	194.2	153.6	158.4
Average selling price (including customs duties), RUB/1,000 cubic meters	11,911.0	10,263.1	9,237.0
Net sales (excluding customs duties), RUB billion	429.7	309.7	292.8

<sup>(1)</sup> Based on the average annual RUB-USD exchange rate.

**Overseas gas sales of Gazprom Group, 2015–2017**

	2015	2016	2017
Sales volumes, bcm	184.4	228.3	242.0
Average selling price (including excise and customs duties), USD/1,000 cubic meters <sup>(1)</sup>	245.6	176.0	200.2
Average selling price (including excise and customs duties), RUB/1,000 cubic meters	15,057.3	11,763.3	11,670.5
Net sales (excluding excise and customs duties), RUB billion	2,165.5	2,140.0	2,221.2

<sup>(1)</sup> Based on the average annual RUB-USD exchange rate.

Overseas gas sales under Gazprom Export LLC contracts<sup>(1)</sup>, 2014–2017, bcm

	2014	2015	2016	2017
<b>Total</b>	<b>146.605</b>	<b>158.560</b>	<b>178.278</b>	<b>192.244</b>
<b>Western Europe</b>	<b>117.920</b>	<b>130.052</b>	<b>146.221</b>	<b>155.965</b>
Austria	3.949	4.405	6.078	9.136
Germany	38.701	45.314	49.832	53.440
Italy	21.681	24.418	24.689	23.811
France	7.095	9.704	11.471	12.257
Switzerland	0.296	0.287	0.308	0.334
Netherlands	3.509	2.382	4.218	4.650
Finland	3.111	2.756	2.534	2.360
Turkey	27.330	27.015	24.755	29.034
Greece	1.745	1.982	2.676	2.927
UK	10.091	11.117	17.912	16.263
Denmark	0.412	0.672	1.748	1.752
<b>Central and Eastern Europe</b>	<b>28.685</b>	<b>28.508</b>	<b>32.057</b>	<b>36.279</b>
Czech Republic	4.760	4.205	4.536	5.795
Slovakia	4.385	3.806	3.690	4.591
Poland	9.096	8.915	11.070	10.470
Bulgaria	2.788	3.112	3.179	3.327
Hungary	5.331	5.869	5.537	5.795
Romania	0.328	0.176	1.478	1.190
Serbia	1.358	1.678	1.749	2.119
Bosnia and Herzegovina	0.161	0.202	0.224	0.245
Croatia	–	–	–	2.077
Slovenia	0.432	0.483	0.520	0.607
Macedonia	0.046	0.062	0.074	0.063

<sup>(1)</sup> Including volumes sold within the framework of gas auctions, but excluding volumes sold under direct contracts of GAZPROM Schweiz AG.

Volumes of overseas Gazprom Group portfolio LNG sales, 2014–2017, million BTU<sup>(1)</sup>

	2014	2015	2016	2017
Argentina	41,106,666	16,178,574	19,703,171	–
Egypt	–	3,417,600	3,415,673	–
India	–	18,670,569	22,742,199	9,911,553
Spain	–	–	–	6,459,152
China	6,633,380	6,604,157	3,374,830	29,426,835
Kuwait	2,953,290	3,302,940	3,290,560	16,945,230
Malaysia	6,513,303	–	–	–
Mexico	–	–	6,519,570	–
UAE	–	–	6,532,551	3,145,740
South Korea	36,193,511	26,480,466	3,324,750	13,235,029
Thailand	–	–	–	3,307,565
Taiwan (China)	–	9,882,660	26,006,510	19,820,160
Japan	49,164,207	78,072,387	78,549,220	56,900,585
Supplies, FOB	17,082,562	6,998,912	3,015,033	–
<b>Total</b>	<b>159,646,919</b>	<b>169,608,265</b>	<b>176,474,067</b>	<b>159,151,850</b>
<b>incl. LNG sales from the Sakhalin II project</b>	<b>53,075,050</b>	<b>86,049,604</b>	<b>59,443,050</b>	<b>72,894,365</b>

<sup>(1)</sup> The table quotes original data in million BTU according to information of Gazprom Marketing & Trading Ltd. for reporting purposes; for the conversion of LNG volumes from million BTU into million tons, an index equal to  $21 \times 10^{-9}$  is used, and for the conversion into bcm, an index of  $28 \times 10^{-9}$  is used.

Volumes of overseas Gazprom Group portfolio LNG sales, 2014–2017, million tons

	2014	2015	2016	2017
Argentina	0.86	0.34	0.41	–
Egypt	–	0.07	0.07	–
India	–	0.39	0.48	0.21
Spain	–	–	–	0.14
China	0.14	0.14	0.07	0.62
Kuwait	0.06	0.07	0.07	0.36
Malaysia	0.14	–	–	–
Mexico	–	–	0.14	–
UAE	–	–	0.14	0.07
South Korea	0.76	0.56	0.07	0.28
Thailand	–	–	–	0.07
Taiwan (China)	–	0.21	0.55	0.42
Japan	1.03	1.64	1.65	1.19
Supplies, FOB	0.36	0.15	0.06	–
<b>Total</b>	<b>3.35</b>	<b>3.56</b>	<b>3.71</b>	<b>3.34</b>
incl. LNG sales from the Sakhalin II project	1.11	1.81	1.25	1.53

Gazprom Group's share<sup>(1)</sup> in gas supplies to overseas markets, 2014–2017 (actual) and 2018–2025 (outlook), %

	Actual	IHS	PIRA
2014	30.2	–	–
2015	31.5	–	–
2016	33.1	–	–
2017	34.2	–	–
2018	–	29.9	31.2
2019	–	28.8	30.4
2020	–	28.6	30.6
2021	–	28.6	31.0
2022	–	29.2	30.8
2023	–	30.7	31.4
2024	–	32.1	31.6
2025	–	33.9	32.2

(1) PJSC Gazprom's overseas gas sales under Gazprom Export LLC contracts, incl. volumes sold within the framework of gas auctions and under direct contracts of GAZPROM Schweiz AG.

Sources: IHS, PIRA

**Sales of NGV fuel abroad, 2014–2017, million tons**

Gazprom Group subsidiary having filling stations on its books	Countries where filling stations are operated	Gas sales from filling stations, total across the Company			
		2014	2015	2016	2017
Gazprom NGV Europe GmbH	Germany	5.28	5.73	7.46	7.3
	Czech Republic <sup>(1)</sup>	0.27	0.95	1.10	1.1
	Poland	0.38	1.88	2.91	2.4
NIS a.d. Novi Sad	Serbia	–	–	0.68	1.5

<sup>(1)</sup> Being on the books of GAZPROM NGV Europe GmbH (NGVE), those CNG filling stations were leased to VEMEX, within the framework of operating lease agreements, and VEMEX, in turn, is in charge of Russian natural gas sales, as the operator of those CNG filling stations.

**Indicators of long-term development prospects of the NGV fuel market in the Russian Federation, 2020–2035**

Indicator	2020	2025	2030	2035
CNG demand, million cubic meters	1,426	1,725	2,065	2,444
LNG demand, thousand tons	153	2,676	4,473	7,022
incl. in the targeted segment of long-distance motor vehicles, thousand tons	75	1,304	1,635	1,945
Number of gas filling infrastructure facilities (CNG filling stations, cryogenic filling stations, multi-fuel filling stations)	348	607	782	845

**Gazprom Group crude oil and gas condensate sales, 2015–2017, million tons**

	2015	2016	2017
Russia	5.3	5.9	4.3
incl. Gazprom Neft Group	3.9	4.4	2.8
Overseas	9.8	17.1	21.6
incl. Gazprom Neft Group	8.6	13.6	19.3
Former USSR countries	1.9	1.7	1.7
incl. Gazprom Neft Group	1.9	1.7	1.7
<b>TOTAL</b>	<b>17.0</b>	<b>24.7</b>	<b>27.6</b>
incl. Gazprom Neft Group	<b>14.4</b>	<b>19.7</b>	<b>23.8</b>

**Electric power and heat sales by generating companies of Gazprom Energoholding LLC, 2014–2017**

	2014	2015	2016	2017
<b>Electric power sales, billion kWh</b>	<b>163.181</b>	<b>154.929</b>	<b>164.388</b>	<b>161.058</b>
PJSC Mosenergo	58.871	56.349	60.858	60.251
PJSC OGK-2	74.361	69.611	72.939	68.228
PJSC TGC-1	29.509	28.969	30.591	32.579
PJSC MOEK	0.440	0	0	0
<b>Heat sales<sup>(1)</sup>, thousand Gcal</b>	<b>116,632.70</b>	<b>111,190.20</b>	<b>118,393.09</b>	<b>116,307.95</b>
PJSC Mosenergo	19,537.50	16,999.10	9,564.00	5,315.04
PJSC OGK-2	6,787.80	6,187.60	6,452.35	6,354.37
PJSC TGC-1	24,467.40	23,507.70	24,984.60	24,938.20
PJSC MOEK	65,840.00	64,495.80	77,392.14	79,700.33

<sup>(1)</sup> Data include TSK Mosenergo.

**Number of patents held by subsidiaries and affiliated companies, including patents generating economic benefits, 2014–2017**

	2014	2015	2016	2017	Total patents on files, as of end-2017
Patents received by PJSC Gazprom	35	30	26	29	424
Patents received by subsidiaries and affiliated companies	183	175	179	202	1,918
Patents excluded from files	122	98	174	158	–

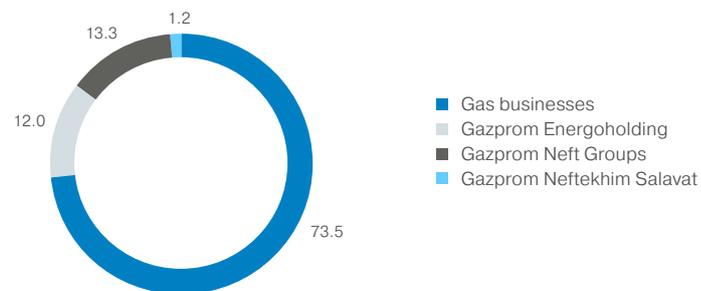
**Economic benefits from patent utilization, 2014–2017**

	2014	2015	2016	2017
Number of utilized patents held by PJSC Gazprom subsidiaries and affiliated companies	351	356	406	427
incl. patents generating economic benefits	140	130	127	114
Economic benefits generated from utilization of performing patents, RUB million	3,120.4	6,112.3	7,080.0	7,741.7

**Penalties (fines) imposed/paid for violations of environmental legislation requirements, 2014–2017, RUB million**

	2014	2015	2016	2017
<b>Gazprom Group</b>	<b>16.29/17.68</b>	<b>26.22/21.42</b>	<b>39.32/23.68</b>	<b>15.76/11.41</b>
Gas business companies	4.88/11.27	11.44/7.27	20.12/11.86	6.07/5.04
Gazprom Neft Group	10.05/5.35	11.66/10.80	10.90/9.92	6.62/3.71
Gazprom Energoholding	1.25/0.96	2.85/3.09	6.21/1.64	2.96/2.31
Gazprom Neftekhim Salavat	0.11/0.11	0.27/0.27	2.08/0.26	0.11/0.34

**Share of Gazprom Group companies in generating total air emissions in 2017, %**



**Key natural gas saving measures during gas transmission via trunk pipelines, 2017, %**

Cutting gas consumption for process needs of linear part of pipelines, gas distribution stations	41.0
Optimization of operating modes of gas transmission system process facilities	19.8
Improvement of technical condition of gas compressors through repairs	10.6
Renovation and upgrade of CS processing equipment	19.4
Cutting gas losses at process facilities of CS's, linear part of gas trunklines, gas distribution stations	5.6
Other measures	3.6

**Key electric power saving measures in gas trunklines, 2017, %**

Optimization of operating modes of electric equipment	40.8
Organizational and technical measures	25.4
Improvement of the technical condition of electric equipment through repairs	15.4
Use of variable-speed drives and soft start of electric motors	8.1
Other measures	10.3

The outcome of implementing of the energy saving and energy efficiency improvement program, 2014–2017

	2014	2015	2016	2017	2014	2015	2016	2017
	Fuel, thousand tons of reference fuel				Incl. gas, thousand tons of reference fuel			
<b>PJSC MOSENERGO</b>								
Plan	518.8	772.6	534.9	308.3	508.4	757.2	524.2	302.3
Actual	838.1	821.0	956.8	900.9	822.3	797.2	933.3	885.8
<b>PJSC TGC-1</b>								
Plan	18.4	21.4	12.7	10.4	15.9	18.2	10.6	10.4
Actual	11.0	12.5	16.8	11.2	10.1	12.2	15.0	11.1
<b>PJSC OGK-2</b>								
Plan	40.0	113.0	42.0	24.0	25.9	74.3	30.1	17.2
Actual	43.0	40.1	76.0	23.0	26.1	21.4	27.9	13.6
<b>PJSC MOEK</b>								
Plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Actual	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
<b>Total, Gazprom Energoholding</b>								
Plan	577.2	907.0	589.6	342.8	550.1	849.7	564.9	329.8
Actual	892.1	873.7	1 049.6	935.3	858.5	830.8	976.1	910.7
	Electric power, million kWh				Heat energy, thousand Gcal			
<b>PJSC MOSENERGO</b>								
Plan	189.1	451.2	33.3	11.0	9.6	20.0	123.1	0.0
Actual	281.1	419.3	392.8	565.3	5.5	14.1	46.1	87.6
<b>PJSC TGC-1</b>								
Plan	1.6	1.7	0.1	0.3	0.0	0.0	0.2	0.1
Actual	1.6	7.0	0.3	0.6	0.0	0.0	0.2	0.1
<b>PJSC OGK-2</b>								
Plan	34.0	41.0	21.0	12.6	29.0	77.0	29.0	0.0
Actual	35.0	67.0	105.7	22.1	31.0	60.0	47.7	7.4
<b>PJSC MOEK</b>								
Plan	0.0	0.5	0.0	0.0	166.7	86.9	40.9	20.6
Actual	0.1	0.5	0.0	0.0	157.8	89.5	92.1	79.5
<b>Total, Gazprom Energoholding</b>								
Plan	224.8	494.4	54.4	23.9	205.3	184.0	193.1	20.7
Actual	317.8	493.8	498.8	588.0	194.3	163.5	186.0	174.6

## TABLE FOR THE SECTION "PEOPLE: DECENT LIVING AND WORK STANDARDS"

### Gazprom Group employee roster, by age, 2017, thousand people

Company	Below 30 years	From 30 to 50 years	Over 50 years	Of which:	
				Women over 55 years	Men over 60 years
PJSC Gazprom	2.2	18.1	5.9	0.2	0.2
Production, transportation, processing and underground gas storage subsidiaries	34.9	143.6	57.1	2.4	2.2
Other subsidiaries and entities	34.9	119.5	53.4	8.2	7.4
<b>TOTAL</b>	<b>72.0</b>	<b>281.2</b>	<b>116.4</b>	<b>10.8</b>	<b>9.8</b>

### Full-time and part-time employees, people

Roster, as of Dec. 31, 2017	Full-time employees	Part-time employees, according to employment legislation
469,574	465,507	4,067

### Personnel of Group companies registered in the Russian Federation and abroad, people

Roster, as of Dec. 31, 2017	Personnel of companies registered in the Russian Federation	Personnel of companies registered outside of the Russian Federation
469,574	443,356	26,218

Generally, Gazprom Group companies enter into fixed-term employment contracts with heads of companies and their deputies, and in other cases specified in the Labor Code of the Russian Federation.

The percentage of employees that have entered into fixed-term employment contracts is insignificant in Gazprom Group's personnel roster.

**Information on the number of industrial accidents and incidents across Gazprom Group, 2014–2017**

Companies	2014	2015	2016	2017
<b>COMPANIES TO WHICH THE UO&amp;ISMS IS APPLICABLE</b>				
Accidents	8	12	9	5
Incidents	53	43	30	21
<b>GAZPROM NEFT GROUP</b>				
Accidents	0	1	2	0
Incidents	3,387	2,512	2,385	2,183
<b>GAZPROM ENERGOHOLDING</b>				
Accidents	1	0	1	0
Incidents	223	196	176	129

Source: information of Gazprom Gazobezopasnost LLC, PJSC Gazprom Neft, Gazprom Energoholding LLC.

**Information on occupational health and industrial safety spending across Gazprom Group, 2014–2017, RUB million**

Companies	2014	2015	2016	2017
<b>COMPANIES TO WHICH THE UO&amp;ISMS IS APPLICABLE</b>				
Occupational health	10,337	11,062	10,819	10,795
Industrial safety	3,248	4,977	7,113	11,452
<b>GAZPROM NEFT GROUP</b>				
Occupational health	751	905	1,291	1,592
Industrial safety	2,580	4,559	5,868	5,964
<b>GAZPROM ENERGOHOLDING</b>				
Occupational health	1,103	1,285	1,438	1,467
Industrial safety	415	373	522	649

Source: information of Gazprom Gazobezopasnost LLC, PJSC Gazprom Neft, Gazprom Energoholding LLC.

**Data on work-related injuries and occupational diseases across Gazprom Group, 2014–2017**

Rate	2014	2015	2016	2017
<b>Fatality injury frequency rate (FIFR)</b> (measure of fatalities as a result of accidents / man-hours worked × 1,000,000)				
Companies to which the UO&ISMS is applicable	0.0357	0.0119	0.0080	0.0112
Gazprom Neft Group	0.023	0.021	0.031	0.009
Gazprom Energoholding	0.028	–	0.016	0.016
<b>Lost time injury frequency rates (LTIFR)</b> (measure of injuries as a result of accidents where lost time was involved / man-hours worked × 1,000,000)				
Companies to which the UO&ISMS is applicable	0.18	0.18	0.16	0.11
Gazprom Neft Group	0.53	0.47	0.40	0.33
Gazprom Energoholding	0.21	0.20	0.30	0.25
<b>Occupational disease rate (ODR)</b> (number of incident cases of occupational diseases / man-hours worked × 1,000,000)				
Companies to which the UO&ISMS is applicable	0.086	0.032	0.060	0.045
Gazprom Neft Group	0.012	0	0.031	0.009
Gazprom Energoholding	0.014	0	0.016	0
<b>Lost day rate (LDR)</b> (number of days lost as a result of accidents / man-hours worked × 1,000,000)				
Companies to which the UO&ISMS is applicable	3.11	11.08	12.51	8.38
Gazprom Neft Group	12.0	2.1	5.3	9.3
Gazprom Energoholding	11.1	9.7	21.1	16.4

Source: information of Gazprom Gazobezopasnost LLC, PJSC Gazprom Neft, Gazprom Energoholding LLC.

**Information on the number of persons who were injured or died in accidents, 2014–2017**

Companies	2014	2015	2016	2017
<b>COMPANIES TO WHICH THE UO&amp;ISMS IS APPLICABLE</b>				
Number of persons injured <sup>(1)</sup>	87	102	77	61
incl. fatalities	17	7	4	6
<b>GAZPROM NEFT GROUP</b>				
Number of persons injured	45	43	38	36
incl. fatalities	2	2	3	1
<b>GAZPROM ENERGOHOLDING</b>				
Number of persons injured	15	13	19	16
incl. fatalities	2	0	1	1

<sup>(1)</sup> On the basis of an internal probe, one case in 2015 and one in 2016 were recognized unrelated with production. Hence more accurate data compared to those previously released in PJSC Gazprom's Annual Report.

Source: information of Gazprom Gazobezopasnost LLC, PJSC Gazprom Neft, Gazprom Energoholding LLC.

## CONSUMPTION OF FUEL AND ENERGY RESOURCES

### Consumption of gas for internal needs, PJSC Gazprom and its principal subsidiaries, 2014–2017, bcm

Indicator	2014	2015	2016	2017
Internal process needs of the gas transmission system and UGS	33.2	33.2	32.3	37.8

### Total consumption of fuel and energy resources, Gazprom Neft, Upstream Unit, 2014–2017

Indicator	2014	2015	2016	2017
Electric power consumption, million tons of reference fuel	2.12	2.21	2.17	2.14
Heat energy consumption, thousand tons of reference fuel	38	35	38	40
Gas consumption, million tons of reference fuel	628	770	609	732

### Consumption of internally and externally produced fuel and energy resources, Gazprom Neft, Upstream Unit, 2014–2017

Indicator	2014	2015	2016	2017	
Electric power consumption (purchase + generation), million MWh	6.17	6.41	6.29	6.06	
Heat energy consumption (internal production, purchase from third-party suppliers)	thousand GJ	1,065	982	997	1,124
	thousand Gcal	254	234	237	268

### Purchased electric power and heat energy, Gazprom Neft, Upstream Unit, 2014–2017

Indicator	2014	2015	2016	2017	
Purchased electric power (excluding transferred volumes), million MWh	5.18	5.36	5.22	4.88	
Purchased heat energy (excluding transferred volumes)	thousand GJ	117	96	113	97
	thousand Gcal	28.4	22.9	26.7	23.1

**Changes in electric power consumption per 1 ton of produced fluid, Gazprom Neft, Upstream Unit, 2014–2017**

Indicator	2014	2015	2016	2017
Specific electric power consumption per 1 ton of produced fluid, kWh/ton	28.94	28.66	28.91	28.98

**Total consumption of fuel and energy resources, Gazprom Neft, Downstream Unit, 2014–2017**

Indicator	2014	2015	2016	2017
Electric power consumption, thousand tons of reference fuel	1,124	1,151	1,171	1,115
Heat energy consumption, thousand tons of reference fuel	1,467	1,463	1,458	1,415
Gas consumption, thousand tons of reference fuel	2,885	2,851	2,864	2,944

**Consumption of purchased fuel and energy resources, Gazprom Neft, Downstream Unit, 2014–2017**

Indicator	2014	2015	2016	2017	
Purchased electric power (excluding transferred volumes), million MWh	3.26	3.34	3.40	3.24	
Purchased heat energy (excluding transferred volumes)	million GJ	16.6	16.1	15.2	15.5
	million Gcal	3.94	3.82	3.62	3.70

**Heat energy purchase and production, Gazprom Neft, Downstream Unit, 2014–2017**

Indicator	2014	2015	2016	2017
Purchased heat energy, thousand Gcal	4,805	4,683	4,477	4,521
Produced heat energy, thousand Gcal	5,918	6,009	6,194	5,822

**Changes in electric power consumption per 1 ton of produced fluid, Gazprom Neft, Downstream Unit, 2014–2017**

Indicator	2014	2015	2016	2017
Specific electric power consumption per 1 ton of produced fluid, kWh/ton	134.6	131.5	136.8	143.0

**Consumption of fuel and energy resources, Gazprom Energoholding, 2014–2017**

Indicator	2014	2015	2016	2017
Total electric power consumption, billion kWh	10.3	9.8	10.3	10.3
Total heat energy consumption, million Gcal	7.3	5.9	4.7	4.5
Specific energy consumption for internal needs, %	7.4	7.4	7.3	7.4
across coal-dust heat power plants	9.1	9.0	9.3	9.3
across gas and oil burning heat power plants	7.5	7.6	7.5	7.0
across hydropower plants	0.8	0.7	0.7	0.7
Heat fuel utilization factor, %	62.3	63.4	59.2	59.6
across coal-dust heat power plant	44.1	44.6	43.0	43.3
across gas and oil burning heat power plant	64.5	65.1	62.0	62.5

### APPENDIX 3. PRINCIPLES OF REPORT PREPARATION

1. Sustainability context. The Report represents well-balanced information on Gazprom's activities in sustainable development.
2. Materiality. The Report covers material issues, topics and indicators of the economic, environmental and social impact of Gazprom's activities and operations. Significance of the information in the Report is identified on the basis of evaluation of Gazprom's performance in the reporting period by its leadership and stakeholders' opinions.
3. Stakeholder inclusiveness. Thanks to Gazprom's systemic approach to stakeholder engagement, the Report covers information that is of relevance to stakeholders.
4. Completeness. The Report represents information on all vectors of Gazprom's activities in sustainable development during the reporting period. The information is represented in accordance with GRI Standards and the GRI Oil and Gas Sector Supplement.
5. Balance. The Report includes both information on Gazprom's achievements and references to areas where certain processes need to be improved.
6. Comparability. The economic, environmental and social outcomes of Gazprom's operations and activities in the reporting period are juxtaposed with the Company's performance in previous years and its targets. The comparison allows stakeholders to evaluate Gazprom's performance in those areas.
7. Accuracy. Gazprom strives to accurately record its performance in order to enable stakeholders to make objective evaluation. The Report uses both qualitative descriptions and quantified information based on financial statements and statistical reports.
8. Timeliness. The Report supplies stakeholders with relevant information on Gazprom's operations and activities in the reporting period.
9. Clarity. Information in the Report is represented in a lucid form, comprehensible for the general public: highly technical terminology is used only where appropriate; terms and abbreviations are explained in a glossary. Information that requires special knowledge is omitted from the Report. To visualize information, various tables, diagrams, charts, infographics are used in the Report.
10. Reliability. The Report represents reliable, ascertainable and verifiable information. Gazprom's Sustainability Report has been approved independently by FBK Grant Thornton and has received public endorsement of the Russian Union of Industrialists and Entrepreneurs, an NGO.

#### APPENDIX 4. GLOSSARY OF ABBREVIATIONS AND CODE NAMES USED IN THE REPORT

Terms and abbreviations	Description
ADR	American Depository Receipt
AEPS	Automated Electronic Procurement System
APG	Associated petroleum gas
APR	Asia-Pacific Region
bcm	billion cubic meters
BoD	Board of Directors
boe	barrel of oil equivalent
BTU	British thermal unit
CCPTS	Continuing Corporate Professional Training System
CDP	Carbon Disclosure Project
CHP	Combined heat and power
CIS	Commonwealth of Independent States
CNG	Compressed natural gas
CNPC	China National Petroleum Corporation
CO2	Carbon dioxide
Company	PJSC Gazprom
CPMB	Central Procurement Management Body
CS	Compressor station
Downstream Unit	Crude oil refining, marketing and distribution of petroleum products (Gazprom Neft)
EASEE-gas	European Association for the Streamlining of Energy Exchange – gas
EBITDA	Earnings before interest, taxes, depreciation and amortization
EHS&CP	Environment, health, safety and civil protection
EIA	Environment impact assessment
EMS	Environmental Management System
ETP-GPB	Electronic Trading Platform
EU	European Union
FASIE	Foundation for Assistance to Small Innovative Enterprises
FIFA	International Federation of Association Football
FIFR	Fatality injury frequency rate
FOB	Free on board
Former USSR countries	Countries in the territory of the former USSR, excl. the Russian Federation
FSU	Former Soviet Union
Gazprom, Gazprom Group, Group	A group of companies consisting of PJSC Gazprom (parent company) and its subsidiaries

Terms and abbreviations	Description
Gazprom Energoholding	Gazprom Energoholding LLC and companies consolidated under its management (PJSC Mosenergo, PJSC MOEK, PJSC TGC-1 and PJSC OGC-2)
Gazprom Neft Group, Gazprom Neft	PJSC Gazprom Neft and its subsidiaries
Gazprom Neftekhim Salavat	Gazprom Neftekhim Salavat LLC and its subsidiaries
GDP	Gross Domestic Product
Gcal	gigacalorie
GCF	Gas-and-condensate field
GCU	Gas compressor unit
GDO	Gas distribution organization
GGC	Global Gas Center
GHG	Greenhouse gas
GJ	gigajoule
GPE	Geological prospecting and exploration
GPP	Gas processing plant
GRF	Gas recovery factor
GRI	Global Reporting Initiative
GTS	Gas transmission system
GW	gigawatt
GWP	Global warming potential
HR	Human resources
IBC	International Business Congress
IEA	International Energy Association
IFRS	International Financial Reporting Standards
IGU	International Gas Union
IHS	IHS Markit Ltd
ISO	International Organization for Standardization
JSC	Joint stock company
kg	kilogram
KhMAA	Khanty-Mansi Autonomous Area
KPI	Key performance indicator
kV	kilovolt
kW	kilowatt
kWh	kilowatt hour
LDR	Lost day rate
LLC	Limited liability company
LNG	Liquefied natural gas
LTDP	Long-Term Development Program

Terms and abbreviations	Description
LTIFR	Lost time injury frequency rates
LWD	Logging While Drilling
M&E	Materials and equipment
MARPOL	International Convention for the Prevention of Pollution from Ships
MBA	Master of Business Administration
mcm	million cubic meters
mmt	million metric tons
MW	Megawatt
MWh	Megawatt hour
NGO	Nongovernmental organization
NGV	Natural gas vehicle
ODR	Occupational disease rate
OGCF	Oil and gas condensate field
OHSAS	Occupational Health and Safety Assessment Series
OJSC	Open joint stock company
PB	Performance benchmark
PIRA	PIRA Energy Group, Inc.
PJSC	Public joint stock company
PJSC Gazprom and its principal subsidiaries	PJSC Gazprom and its gas production, transportation, processing and underground storage subsidiaries: Gazprom Dobycha Yamburg LLC, Gazprom Dobycha Urengoy LLC, Gazprom Dobycha Nadym LLC, Gazprom Dobycha Noyabrsk LLC, Gazprom Dobycha Orenburg LLC, Gazprom Dobycha Astrakhan LLC, Gazprom Pererabotka LLC, Gazprom Dobycha Krasnodar, Gazprom Transgaz Ukhta LLC, Gazprom Transgaz Surgut LLC, Gazprom Transgaz Yugorsk LLC, Gazprom Transgaz Saint Petersburg LLC, Gazprom Transgaz Moscow LLC, Gazprom Transgaz Tomsk LLC, Gazprom Transgaz Tchaikovsky LLC, Gazprom Transgaz Yekaterinburg LLC, Gazprom Transgaz Stavropol LLC, Gazprom Transgaz Makhachkala LLC, Gazprom Transgaz Nizhny Novgorod LLC, Gazprom Transgaz Saratov LLC, Gazprom Transgaz Volgograd LLC, Gazprom Transgaz Samara LLC, Gazprom Transgaz Ufa LLC, Gazprom Transgaz Kazan LLC, Gazprom Transgaz Krasnodar LLC, OJSC Gazprom Transgaz Belarus, Gazprom UGS LLC; and OJSC Vostokgazprom and its subsidiaries, Gazprom Dobycha Shelf Yuzhno-Sahalinsk LLC, OJSC KamchatGazprom
PRMS	Petroleum Resources Management System
QMS	Quality Management System
R&D	Research and development
Report	Gazprom Group's Sustainability Report
RMS	Risk Management System
ROIP	Remaining oil in place
RUB	Russian ruble
Sakhalin Energy	Sakhalin Energy Investment Company Ltd.

Terms and abbreviations	Description
SDG	UN Sustainable Development Goals
SDPP	State District Power Plant
SECA	Sulphur Emission Control Area
SME	Small and medium-sized enterprises
STI	Strategic Target Indicator
STO Gazprom	Gazprom corporate standard
TAML	Technology Advancement for Multi Laterals
tcm	trillion cubic meters
tmt	thousand metric tons
UEFA	Union of European Football Associations
UGS	Underground gas storage
UGSS	Unified Gas Supply System
UIS	Unified Information System
UN	United Nations
UO&ISMS	Unified Occupational and Industrial Safety Management System
Upstream Unit	Exploration and production unit (Gazprom Neft)
VAT	Value-added tax
WWF	World Wildlife Fund
YaNAA	Yamal-Nenets Autonomous Area

**APPENDIX 5.**

**ASSURANCE OF THE RUSSIAN UNION OF INDUSTRIALISTS AND ENTREPRENEURS**



Russian Union of Industrialists and Entrepreneurs

# CERTIFICATE

of Public Endorsement  
of a Corporate Non-Financial Report

## GAZPROM GROUP SUSTAINABILITY REPORT 2017

has received public endorsement  
by the RSPP Council on Non-Financial Reporting

A detailed opinion of the RSPP Council regarding public endorsement of Gazprom Group Sustainability Report 2017 has been sent to the Company, which may publish it without amendment and use it both for corporate purposes and for the purposes of stakeholder engagement.

Registration number 123.01.05.01.17

RSPP President



A. Shokhin

Moscow, 2018



**APPENDIX 6.**  
**APPROVAL FROM FBK GRANT THORNTON**



**INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT ON THE GAZPROM GROUP'S SUSTAINABILITY REPORT 2017 [TRANSLATION FROM RUSSIAN ORIGINAL]**

*To the management of PJSC «GAZPROM».*

We have undertaken a limited assurance engagement of the accompanying Gazprom Group's Sustainability Report 2017 (hereinafter referred to as the Report).

**Responsibility of PJSC «GAZPROM» for the Report**

PJSC «GAZPROM» is responsible for the preparation of the Report in compliance with the requirements of GRI Sustainability Reporting Standards (hereinafter referred to as Standards) to the report prepared in accordance with the Core option. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the Report that is free from material misstatement, whether due to fraud or error.

**Our Independence and Quality Control**

We have complied with the independence and other ethical requirements of the Rules of Independence of the Auditors and Audit Organizations and The Code of Professional Ethics of the Auditors, which are in accordance with 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, and we have fulfilled our other ethical responsibilities in accordance with these requirements

The firm applies International Standard on Quality Control 1, Quality Control for Firm that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

**Our Responsibility**

Our responsibility is to express a limited assurance conclusion on the Report based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information. That standard requires that we plan and perform this engagement to obtain limited assurance about whether the Report is free from material misstatement.

A limited assurance engagement undertaken in accordance with this standard involves assessing the compliance of the Report with the requirements of Standards to the report prepared in accordance with the Core option. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included inquiries, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we have performed the following procedures:

- Interviewing the management and employees of companies of Gazprom Group and obtaining documentary evidence;
- Participation in the dialogues and public presentation of the Report, study of minutes of public dialogues;
- Study of information available on the websites of companies of Gazprom Group related to their activities in the context of sustainable development;

TRANSLATION NOTE: Our report has been prepared in Russian and in English. In all matters of interpretation of information, views or opinions, the Russian version of our report takes precedence over the English version.

1 из 2



- Study of public statements of third parties concerning economic, environmental and social aspects of the Gazprom Group activities, in order to check validity of the declarations made in the Report;
- Analysis of non-financial reports of companies working in the similar market segment for benchmarking purposes;
- Selective review of documents and data on the efficiency of the management systems of economic, environmental and social aspects of sustainable development in Gazprom Group;
- Study of the existing processes of collection, processing, documenting, verification, analysis and selection of data to be included into the Report;
- Analysis of information in the Report for compliance with the requirements of Standards to the report prepared in accordance with the Core option.

The procedures were performed only in relation to data for the year ended 31 December 2017.

The evaluation of reliability of the information on performance in the Report was conducted in relation to compliance with the requirements of Standards to the report prepared in accordance with the Core option and information referred to in the section of the Report «Annex 1. GRI Content Index». In respect to the quantitative performance indicators the conformity assessment to external and internal reporting documents provided to us was performed.

The procedures were not performed in relation to forward-looking statements; statements expressing the opinions, beliefs and intentions of PJSC «GAZPROM» as the parent company of Gazprom Group to take any action relating to the future; as well as statements based on expert opinion.

The procedures were performed in relation to the Russian version of the Report, which includes information to be published in a hard-copy form as well as in digital form on the PJSC «GAZPROM» website.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the Report has been prepared, in all material respects, in accordance with the requirements of Standards to the report prepared in accordance with the Core option.

#### Limited Assurance Conclusion

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Report has not complied, in all material aspects, with requirements of GRI Sustainability Reporting Standards to the report prepared in accordance with the Core option.

FBK, LLC

Practitioner  
Partner

acting under Power of Attorney No. 101/17 of October 2, 2017  
The Russian Federation, Moscow, September 14, 2018



V.Y. Skobarev

TRANSLATION NOTE: Our report has been prepared in Russian and in English. In all matters of interpretation of information, views or opinions, the Russian version of our report takes precedence over the English version.

2 из 2

## **CONTACTS AND FEEDBACK**

Should you have any questions regarding the Gazprom PJSC Sustainability Report, please contact PJSC Gazprom's division responsible for the common information policy.

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