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2017
YEAR OF ECOLOGY
IN THE RUSSIAN FEDERATION

Rational Approach

Environmental Responsibility Rating of Oil&Gas Companies in Russia 2016

Organizers:

CREON

WWF
SAVE NATURE TOGETHER!

Partner:

NATIONAL RATING AGENCY

With support from:

MINISTRY OF ENERGY
OF RUSSIAN FEDERATION

Rational Approach

Environmental Responsibility Rating
of Oil & Gas Companies in Russia

2016

ADDRESS

In front of you is the third Environmental Responsibility Rating of Oil and Gas Companies in Russia. The pilot rating was compiled in 2014 as the result of cooperative initiative of CREON group of Oil & Gas market analysts and WWF Russia with participation of the National Rating Agency. The pilot rating goal was to provide an unbiased and comparable data on environmental responsibility of participants and the impact of Russian Oil & Gas industry players on the environment. General public access to this information ultimately promotes environmental risks management quality resulting in decreased environmental impact of Oil & Gas industry.

Two years have passed after the first rating had been published and today we can safely state that the project has been a success. The rating is recognized in the industry, which was proven with the meeting of the rating organizers and representatives of Oil & Gas sector that took place on July 5, 2016. The event, dedicated to the rating methodology adjustments, gathered employees of 10 companies who introduced over 50 different initiatives and suggestions.

This year the rating methodology has undergone through certain adjustments. In particular, the criterion that stimulates companies to establish and develop programs for biodiversity preservation in the areas of operation will now be accounted for in the final rating results, whereas previously it was applied in the test status only. Furthermore, the criterion covering greenhouse emissions dynamics has become quantifiable value and, thus, has been transferred from Section 1 (Environmental Management) to Section 2 (Environmental Impact). In addition, the criterion that evaluates the level of public disclosure of incidents with considerable social and environmental impact and of pending environmental conflicts has been expanded — from now on the rating also takes into account whether rated companies undertake corresponding recovery and conflict mitigation measures. We also introduced a new framework criterion — indicator of whether "green office" principles are incorporated in environmental policies of rated companies.

The elevated rating recognition and efficiency is further supported with improved public availability of information on rated companies. During the first year only 3-4 companies publicly disclosed corresponding reports with respect to the range of quantitative rating indicators, yet today over ten of rating participants share this information. New quantifiable values improve calculations reliability of industry averages that represent overall environmental impact of Oil & Gas segment. The goal of each responsible company is to further improve average industry values.

This rating is of special significance given that next year was declared the Year of Ecology in Russia. In 2017, the participating companies have an additional stimulus to improve their indicators as compared to the previous year.

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Head of CREON Group

Evgeny Shvarts
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Viktor Chetverikov
President, NRA

RATING ORGANIZERS

RATING ORGANIZERS:

CREON GROUP OF COMPANIES

The leading analysis and advisory group in oil & gas, petrochemical, and related industries in the Russian Federation and CIS countries.
CREON mission is to promote the dynamic development of Russian petrochemical industry and to assist oil & gas and petrochemical companies in improving the business performance.

WORLD WILDLIFE FUND (WWF) RUSSIA

One of the largest national nature conservation organizations, WWF Russia is a part of international WWF network that unites around 5 million supporters and operates in over than 100 countries of the world.
WWF mission is to prevent the growing degradation of the natural planet environment and to achieve harmony between man and nature. The main goals of the organization are to conserve biodiversity and decrease ecological footprint.

RATING PARTNERS:

NATIONAL RATING AGENCY (NRA)

National Rating Agency is one of the leaders among its peers in Russia. NRA focuses on developing individual credit ratings in both financial and nonfinancial sectors. *The Agency takes notable participation in implementation of socially important projects and research/analysis programs in the wide array of industry-specific areas.*

UNDP / GEF / MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT OF THE RUSSIAN FEDERATION

The comprehensive project financed by GEF. Russian Ministry of Natural Resources is the national executive agency for the project. *The project covers a range of initiatives aimed at improving Russian energy sector organizational efficiency in order to minimize the negative impact on biodiversity and to roll out the project experience and achievements throughout Russia in the future.*

AWARD CEREMONY PARTNERS:

CREON Capital S.a.r.l.

The managing company and unlimited partner of Direct Investment Fund (total volume over 100 million euro) CREON Energy Fund SICAV-SIF, established in 2016 and focused on investments in projects of chemical sector at the primary stage, growing and developed companies in Russia and CIS countries, as well as in ecological projects of green economy and alternative energy.

AIG

AIG is one of the international insurance titans. Over 90 million clients worldwide entrust AIG with ensuring their businesses safety and protection. The company has been present in Russia for 22 years now and is offering its clients a large range of property and personal insurance services. For further details, please visit www.aig.ru

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Environmental Responsibility Rating
of Oil & Gas Companies in Russia

2016

RATING RESULTS

Final position	Company	Final rating point	Point change as compared to 2015 results	Rating 2015 final position
1	Sakhalin Energy (Sakhalin-2)	1,8593	+ 0,3371	▲ 3
2	Gazprom	1,7201	+ 0,1814	2
3	Surgutneftegaz	1,6830	+ 0,1005	▼ 1
4	LUKOIL	1,6527	+ 0,2790	▲ 5
5	Salym Petroleum Development	1,6376	+ 0,2932	▲ 7
6	Exxon Neftegaz Limited (Sakhalin-1)	1,6302	+ 0,5672	▲ 9
7	NOVATEK	1,4063	+ 0,4396	▲ 12
8	Gazprom Neft	1,3795	+ 0,3593	▲ 10
9	Rosneft	1,3555	– 0,0014	▼ 6
10	Zarubezhneft	1,2397	– 0,1825	▼ 4
11	Irkutsk Oil Company (INK)	1,2217	+ 0,3328	▲ 14
12	Total PPP	1,1831	+ 0,1905	▼ 11
13	Tatneft	1,0539	– 0,1953	▼ 8
14	Bashneft	0,8076	– 0,1082	▼ 13
15	Transneft	0,6386	+ 0,1571	15
16	Tomskneft VNK	0,4733	+ 0,0423	16
17	Slavneft	0,4627	+ 0,0688	17
18	Alliance-NNK	0,2934	+ 0,0106	18
19	Russneft	0,2328	– 0,0265	19
20-21	Neftisa-Belkamneft	0,1481	– 0,0371	20
20-21	Arcticgas	0,1481	0	21

ABOUT THE RATING

RATING OBJECTIVE

Rating objective is to facilitate rational use of hydrocarbon resources, protect environment and run socially responsible business in Russia.

RATING TARGETS

1. **To identify key indicators of environmental activities** for oil & gas companies in Russia. The Rating makes it possible to create an immersive quantified database to be used for calculation of industry average indicators related to discharges, emissions, and wastes.
2. **To compare main stakeholders in the oil & gas sector** by the following criteria:
   - the company's level of environmental impact per production unit
   - the extent of transparency and availability of ecologically significant information
   - the quality of eco-management in the company (compliance of activities with corporate and national environmental policies, best standards and practices)
   - the frequency of violating environmental legislation in project execution areas by the company
   - the efficiency of mineral resources, consumption.
3. **To make record of the year-over-year changes** in the above-listed indicators.

FUNDAMENTAL PRINCIPLES OF THE RATING

- The companies are rated based on the criteria formulated first of all in the Environmental Standards for Operations of Oil and Gas Companies Acting in Russia.*
- The Methodology is subject to discussion with all the interested parties. Scheduled Rating methodology open review was held by WWF Russia on July 5, 2016. Regular and distance consultations were held with the interested parties to improve the Rating's methodology over the months that followed the open review.
- The evaluation is carried out in all segments — starting from E&P to processing, values are indicated for production and processing combined, as publicly available corporate reports are very rarely given in detailed segments. The target for the future is to persuade participating companies to provide better level of environmental data details.
- The Rating is based on publicly available information about activities of companies in the Russian Federation. *Availability in public domain is understood as being accessible to public in the form of annual business or socio-ecological reports, including reports on environmental protection measures (including regional). Also, for the purpose of this rating, any information is deemed to be publicly available if it is displayed on the official Internet sites of the relevant companies (including subsidiaries) with the necessary inclusion of references to the relevant pages in the site menu, or if it is given through interviews of the companies' official representatives for federal or regional media.*
- The calculation of the Rating is performed by the professional rating agency which is selected in a tender competition. In 2016, National Rating Agency (www.ra-national.ru) was chosen upon consensus decision by WWF and CREON.
- The companies to be included in the Rating are selected based on the volume of oil and natural gas production. The lower limit was set to 1.5 mln tons.
- The Rating is published once a year.

* *Environmental Standards for Operations of Oil and Gas Companies Acting in Russia. — Moscow, 2004. http://www.wwf.ru/resources/publ/book/109*

OIL AND GAS COMPANIES included in the rating

21 companies were included in the Rating. Companies are listed in the table below with estimated hydrocarbon production volumes for 2015 in comparison with the same for 2014.

	Company	Oil & Condensate production, *mln tons*		Change to 2014, *%*
		2014	2015	
1	Rosneft	190,9	**189,2**	▼ *99,1*
2	LUKOIL	86,6	**85,6**	▼ *98,9*
3	Surgutneftegaz	61,4	**61,6**	▲ *100,3*
4	Gazprom Neft	33,6	**34,3**	▲ *102,0*
5	Tatneft	26,5	**27,2**	▲ *102,7*
6	Bashneft	17,9	**19,9**	▲ *111,0*
7	Slavneft	16,2	**15,4**	▼ *95,0*
8	Gazprom	16,2	**16,9**	▲ *104,8*
9	Tomskneft VNK	9,9	**9,9**	100,0
10	Russneft	8,6	**7,4**	▼ *86,0*
11	Exxon Neftegaz Limited (Sakhalin-1)	7,6	**8,3**	▲ *109,2*
12	Salym Petroleum Development	6,5	**6,1**	▼ *93,8*
13	Sakhalin Energy (Sakhalin-2)	5,3	**5,1**	▼ *96,2*
14	NOVATEK	4,3	**4,7**	▲ *109,3*
15	Irkutsk Oil Company (INK)	4,0	**5,2**	▲ *130,0*
16	Zarubezhneft	3,2	**3,2**	100,0
17	Alliance-NNK	2,33	**2,32**	▼ *99,5*
18	Neftisa-Belkamneft	6,9	**6,8**	▼ *98,0*
19	Arcticgas	1,97	**7,43**	▲ *377,1*
20	Total PPP	1,48	**1,51**	▲ *102,1*
21	Transneft	479*	**480***	▲ *100,2*

* *total throughput*

Source: Central Control Administration of the Fuel and Energy Complex

RATING METHODOLOGY
(including 2016 changes)

Certain changes were introduced in Rating Methodology in 2016. The current report is published with account for these changes.

The Rating consists of three sections:

- Environmental Management
- Environmental Impact
- Disclosure / Transparency

Section 1:
Environmental Management

assesses the quality of eco-management in the company. Criteria included in this section are in most cases substantially more rigid compared to Russian legislation on environmental protection. However, these criteria correspond to the best global standards and practices in oil and gas business.

Section 2:
Environmental Impact

evaluates the scale of impact of oil and gas companies on the environment. In particular, the damage level is revealed for air, water and land during the implementation of projects as well as the ecological performance of the industrial operations. In most cases the criteria are based on components of state statistical reporting in the field of environmental protection. This Section includes quantitative values that are being transformed to qualitative scale by comparing to industry average indicators for every criterion. The industry average indicators, when not available from official sources, are calculated as an arithmetic mean value for companies participating in the Rating. For comparative analysis across the companies, the data are used per production unit by dividing gross indicators by relevant volumes of hydrocarbon production, transportation and processing.

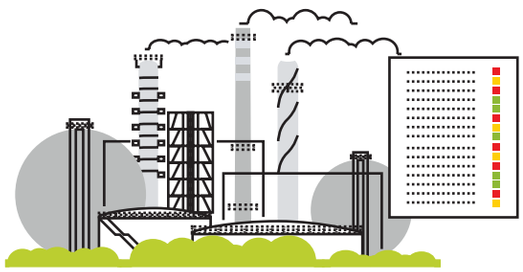
Section 3:
Disclosure / Transparency

evaluates the extent of companies' readiness to disclose information with respect to environmental impact of their industrial activities. Historically, Russian oil and gas business was considered as a rather non-transparent community not least because of the unwillingness to publish environmental data. The recent trend is a growing transparency of the companies.

RATING CALCULATION

The Rating is calculated as follows.

I **Each company is assigned color flags for each of criteria — Red, Yellow or Green.**
When a criterion is not relevant for the given company (for example, the company does not produce fuel or does not operate in the territories of Small Indigenous Peoples of the North), no flag is assigned. In such cases, companies are required to present proof of being irrelevant to criteria. When the information related to the criterion is not available in public domain, red flag is assigned.



II **At the next stage, points are assigned for every criterion.** Red flag counts as 0 points, Yellow as 1 point, and Green as 2 points. For each section, companies are assigned an arithmetic mean of their points for criteria in the corresponding section. *In this calculation, only those criteria that have been assigned color flags are taken into account, i.e. criteria that are not relevant for the given company, are not included in the calculation. As a result, every company is assigned final points for Environmental Management Section, Environmental Impact Section and Transparency Section. Final points vary from 0 to 2.* At this stage, the leaders are chosen in each of the following areas: Management, Operations, and Information.

III **The final Rating is then calculated for each company by averaging three values assigned in the previous stages.**

1 ENVIRONMENTAL MANAGEMENT

Section 1 **position**	**Company**	Section 1 **rating point**	**Point change** as compared to 2015 results	**Rating 2015 final position**
1	Sakhalin Energy (Sakhalin-2)	**2**	0	1
2-6	Gazprom	**1,8571**	+ 0,0793	2
2-6	Surgutneftegaz	**1,8571**	+ 0,1904	3-4
2-6	LUKOIL	**1,8571**	+ 0,3015	5
2-6	Salym Petroleum Development	**1,8571**	+ 0,7460	▲ 8-11
2-6	Exxon Neftegaz Limited (Sakhalin-1)	**1,8571**	+ 0,8571	▲ 12-13
7	Gazprom Neft	**1,7143**	+ 0,4921	▼ 6
8-9	Rosneft	**1,5714**	– 0,0953	▼ 3-4
8-9	Total PPP	**1,5714**	+ 0,5714	▲ 12-13
10-11	Zarubezhneft	**1,2857**	+ 0,0635	▼ 7
10-11	NOVATEK	**1,2857**	+ 0,1746	8-11
12	Irkutsk Oil Company (INK)	**1,1429**	+ 0,5873	▲ 16
13	Tatneft	**1**	– 0,1111	▼ 8-11
14	Bashneft	**0,8571**	– 0,2540	▼ 8-11
15-16	Transneft	**0,5714**	– 0,2064	▼ 14
15-16	Tomskneft VNK	**0,5714**	– 0,0953	15
17	Slavneft	**0,4286**	– 0,0158	17
18-19	Russneft	**0,1429**	– 0,1904	18
18-19	Alliance-NNK	**0,1429**	+ 0,0318	▲ 19-20
20-21	Neftisa-Belkamneft	**0**	– 0,1111	▼ 19-20
20-21	Arcticgas	**0**	0	21

LIST OF RATED CRITERIA

1.1 Presence of quantitative efficiency indicators in the company's environmental management system certified under ISO 14001 or other relevant standard

Certification under ISO 14001 is voluntary, but is becoming increasingly popular with oil and gas companies worldwide. Availability of a certified environmental management system indicates that the company is giving priority to systematic approach to handling environmental protection issues.

- **Environmental Management System is in place** in the company's main production outlets **and its quantitative indicators are included** in the company's public documents;
- **Environmental Management System is in place** in the company's main production outlet **or its quantitative indicators are included** in the company's public documents;
- **Environmental Management System is not in place** in the company's main production outlets.

1.2 Company's environmental policy (or other formalized corporate documents) includes:

- Requirements to additional risk assessment in environmentally sensitive areas.
- Commitments to reduce landscape fragmentation and disturbed land area.
- Commitments to protect animal migration routes.
- Requirements to Strategic Environmental Assessment (SEA) in major infrastructure projects, if any.
- Prohibited hunting and fishing by personnel, including contractors, in the company areas of operations.
- Requirement to perform a comprehensive assessment of environmental impact (EIA) beginning from the phase of construction and up to the phase of abandonment and cleanup within the bounds of the project and its related projects.
- Willingness to avoid work in specially protected natural areas (SPNAs), their buffer zones, and World Natural Heritage (WNH) sites.
- Commitments in respect of pipeline integrity.
- Commitments and/or practices of promoting/introducing "green office" principles in the company offices.
- Requirements of heightened environmental friendliness of the company's means of transportation (including means of transportation operated by its contractors).
- Requirements to extend the company's environmental standards onto its contractors.

These environmental policy requirements are only voluntary for observance by the oil and gas companies. These requirements are not enshrined in the Russian law, but were proposed by the environmental protection community in the "Joint requirements of the public environmentalist organizations for the oil and gas companies" (http://www.wwf.ru/resources/publ/book/109) Compliance with the requirements included in a criterion points to the company's heightened attention to environmental protection matters.

Positive answers: More than 7 | 4-7 | Less than 4

1.3 A Policy, or any other document approved by the company, on relations with indigenous small-numbered peoples of the North

Important indicator of the company's social and environmental responsibility is minimization of its impact on the local peoples, preservation of their approaches to nature management, lifestyle and traditions of the ethnic minorities of the North.

- **Yes**
- **No separate document in place,** but care for ethnic minorities mentioned
- **No mentioning**

1.4 Energy efficiency program

The topic of energy efficiency is presently widely discussed on both national and global levels. Company's efforts directed at reduced energy consumption indicate its commitment to the preservation of the planet's non-renewable resources and reduction of toxic emissions.

- Quantitative indicators of energy efficiency **show positive dynamics** compared to the previous year figures;
- Quantitative indicators **showing the implementation** of an energy efficiency program are available;
- **No** quantitative indicators are available to show results of energy efficiency program implementation

1.5 Presence of the following components in the biodiversity preservation programs in the company's areas of operation:

- Fund allocations for biodiversity preservation measures.
- Presence of an approved list of indicative species in the areas of company's activities.
- Public availability of results of researches performed in the area of biodiversity preservation.
- Presence of study and/or monitoring programs for indicative species.
- Mechanisms of involvement of interested parties in discussing programs targeted at biodiversity preservation (discussing methods, approaches, results, etc.).

Russia is one of the world's richest countries in terms of biodiversity, and preservation of these riches is our common goal. Companies, which are fully aware of their environmental impact in the areas of presence, are running effective programs aimed at preserving diversity of flora and fauna.

Positive answers: More than 3 2-3 Less than 2

1.6 Wildlife rescue section in Oil Spill Contingency Plans (OSCPs) and/or Oil Spill Emergency Response Plan (OSERP)

The inclusion of wildlife rescue section in OSCPs is an internationally accepted practice of responsible oil and gas companies, which is only beginning to come to the Russian business environment. The importance of this component is that wildlife rescue is not ignored during combating emergency situations.

Yes

Partially (limited to specific projects or subsidiaries)

Not present at all

1.7 Voluntary insurance of environmental risks

Voluntary insurance against environmental risks guarantees payment of reimbursements to people suffering from adverse effects of the company's business and contributes to more responsible safety approaches on the part of the oil and gas companies.

Presence of a corporate system of voluntary insurance against environmental risks is rated;

Voluntary insurance against environmental risks in respect **of individual projects or individual subsidiaries**;

Absence of voluntary insurance against environmental risks.

2 ENVIRONMENTAL IMPACT

Section 2 **position**	**Company**	Section 2 **rating point**	**Point change** as compared to 2015 results	**Rating 2015 final position**
1	Sakhalin Energy (Sakhalin-2)	**1,8**	+ *0,9*	▲ 11-12
2	Exxon Neftegaz Limited (Sakhalin-1)	**1,7**	+ *0,4*	▲ 7
3-4	Surgutneftegaz	**1,6364**	0	3-4
3-4	Gazprom	**1,6364**	− *0,0909*	▼ 1
5	NOVATEK	**1,6**	+ *0,7*	▲ 11-12
6	LUKOIL	**1,5455**	+ *0,091*	6
7	Salym Petroleum Development	**1,5**	− *0,2*	▼ 2
8	Irkutsk Oil Company (INK)	**1,3**	+ *0,3*	▲ 10
9-10	Rosneft	**1,2727**	+ *0,0909*	9
9-10	Tatneft	**1,2727**	− *0,3637*	▼ 3-4
11	Total PPP	**1,2**	0	▼ 8
12	Zarubezhneft	**1,1**	− *0,5*	▼ 5
13	Gazprom Neft	**1,0909**	+ *0,3636*	13
14	Transneft	**0,9**	+ *0,5667*	▲ 15
15	Bashneft	**0,4545**	− *0,1819*	▼ 14
16-18	Slavneft	**0,1818**	0	16-18
16-18	Tomskneft VNK	**0,1818**	0	16-18
16-18	Alliance-NNK	**0,1818**	0	16-18
19-21	Russneft	**0**	0	19-21
19-21	Neftisa-Belkamneft	**0**	0	19-21
19-21	Arcticgas	**0**	0	19-21

LIST OF RATED CRITERIA

2.1 Emission rates of pollutants into the atmosphere

Emission of pollutants into the atmosphere is one of the main indicators of environmental impact by the oil and gas companies. Moreover, such emissions directly influence global climate changes.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.2 Emission rates of greenhouse gases into the atmosphere

Measurement of direct and indirect greenhouse emissions is not required under the applicable Russian law. Voluntary monitoring of emissions and implementation of programs aimed at their reduction demonstrates company's conscientious approach to reducing its contribution to anthropogenic influence on the global climate.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.3 Associated gas utilization

Associated petroleum gas (APG) is an extremely valuable feedstock. Until recently, the problem of its utilization was very acute. In 2009, the Russian government set APG flaring limit at 5% and imposed serious economic stimuli for its utilization.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.4 Discharge rate of wastewater into surface water bodies

Wastewater discharge into surface water bodies is extremely detrimental to the environment. It is difficult to overestimate the importance of this issue. Zeroing the amounts of such discharges is not only the requirement of the Russian law, but is also a significant factor pointing to the commitment of an oil and gas company to the cause of environmental protection.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.5 Water consumption for the company's own needs

Oil and gas production companies need a lot of water for their production needs. The task of socially and environmentally responsible water consumption is on the agenda.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.6 **Ratio of the amount of utilized and disposed off wastes** (including by third parties) **to the amount of wastes being handled** (amount of wastes present as of the beginning of the year + amount of wastes generated during the year + amount of wastes received from other enterprises)

Waste management is an important element of the company's business. Environmentally responsible companies are seeking to minimize wastes and their maximum utilization.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.7 Ratio of polluted areas as of the year's end to the year's beginning

Zeroing polluted areas is a must for any oil and gas business. In case of an accident, polluted areas must be promptly cleaned up and the degree of pollution must be reduced to allowable levels.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.8 Rate of pipeline accidents leading to spills of oil, condensate or oil products

Regrettably, oil spills from pipelines is a frequent occurrence in Russia. Reducing these accidents to zero is the industry's commitment both to the law and the public.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.9 Amounts of oil, condensate and oil products spilled as the result of accidents and leaks

This criterion allows appraising oil and gas companies simultaneously in two respects: the efficiency of accident prevention and emergency response.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.10 The proportion of excess charges in the total payments for adverse environmental impact (ratio of charges for excess emissions, discharges, and waste disposal to the total environmental charges for the reporting year)

The amount of excess environmental charges is a measure of the company's compliance with the applicable environmental laws and regulations.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.11 The proportion of cleaner fuel (Euro 4-5 high-octane gasoline, Class 4-5 diesel, gas motor fuel, and biofuel) in the total volume of fuel production

Growing quality and environmental friendliness of motor fuels is a global trend. This indicator is a measure of the companies' willingness to keep pace with progress and with the world leading fuel producers.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

2.12 Power generation from renewable energy sources (RES), including for own needs

In view of the need to reduce environmental impacts (including to prevent climate changes) the issue of power generation from renewable sources is particularly acute. This indicator has been included in the environmental rating in order to stimulate companies to work in this direction.

- **Value is equal or better** than industry average.
- **Value is worse** than industry average.
- **Data is not** publicly **available**.

3 DISCLOSURE / TRANSPARENCY

Section 3 **position**	**Company**	Section 3 **rating point**	**Point change** as compared to 2015 results	**Rating 2015 final position**
1	Sakhalin Energy (Sakhalin-2)	**1,7778**	+ 0,1111	1
2	Gazprom	**1,6667**	+ 0,5556	▲ 6-8
3-5	Surgutneftegaz	**1,5556**	+ 0,1112	▼ 2-3
3-5	Salym Petroleum Development	**1,5556**	+ 0,3334	▲ 4-5
3-5	LUKOIL	**1,5556**	+ 0,4445	▲ 6-8
6-9	Zarubezhneft	**1,3333**	− 0,1111	▼ 2-3
6-9	Gazprom Neft	**1,3333**	+ 0,3333	▲ 9-11
6-9	Exxon Neftegaz Limited (Sakhalin-1)	**1,3333**	+ 0,4444	▲ 12-13
6-9	NOVATEK	**1,3333**	+ 0,4444	▲ 12-13
10-11	Rosneft	**1,2222**	0	▼ 4-5
10-11	Irkutsk Oil Company (INK)	**1,2222**	+ 0,1111	▼ 6-8
12	Bashneft	**1,1111**	+ 0,1111	▼ 9-11
13	Tatneft	**0,8889**	− 0,1111	▼ 9-11
14-15	Total PPP	**0,7778**	0	14
14-15	Slavneft	**0,7778**	+ 0,2222	▼ 15-16
16	Tomskneft VNK	**0,6667**	+ 0,2223	▲ 17-20
17-18	Alliance-NNK	**0,5556**	0	▼ 15-16
17-18	Russneft	**0,5556**	+ 0,1112	17-20
19-21	Neftisa-Belkamneft	**0,4444**	0	▼ 17-20
19-21	Arcticgas	**0,4444**	0	▼ 17-20
19-21	Transneft	**0,4444**	+ 0,1111	21

LIST OF RATED CRITERIA

3.1 Presence of non-financial reporting in compliance with the GRI (Global Reporting Initiative) requirements

GRI is the most widely used standard of non-financial reporting in which environmental performance *indicators are consistently disclosed.*

- Yes, GRI application level A / comprehensive.
- Yes, GRI application level B or C / core.
- Not present at all.

3.2 Third party confirmation (verification) of non-financial reporting

Third party confirmation (verification) of the submitted non-financial information as well as the appraisal of the company's use of the GRI system (including its reporting principles). This is a voluntary procedure, but it helps boost confidence of interested parties in respect of the information disclosed by a company.

- **Professional verification** *(based on professional standards ISAE 3000, AA1000AS)* **and verification based on the opinion of interested parties** *(including public opinion).*
- **Professional verification** *(based on professional standards ISAE 3000, AA1000AS)* **or verification based on the opinion of interested parties** *(including public opinion).*
- **No third party verification is available or no reporting is available** in accordance with GRI requirements.

3.3 Public access to Environmental Impact Assessment (EIA) via the Internet throughout the project's lifecycle for those active projects, which are required to pass State Environmental Expert Review

Environmental Impact Assessment is the main document on the preparatory phase of an oil and gas project showing the degree of the project's potential negative impact on the environment. Accessibility of Environmental Impact Assessment allows public involvement in decision-making aimed to minimize project's environmental impact.

- **Yes, with feedback** mechanism.
- **Yes, without feedback** mechanism.
- **Not present at all.**

3.4 Public access to OSCPs and OSERP (in part of environmental impact) including mandatory publication on the Internet

Oil spills have a very negative impact on the environment. Public assess to OSCPs and OSERP makes it possible for broad public to take part in making decisions on emergency prevention and emergency response.

- **Yes, with feedback** mechanism.
- **Yes, without feedback** mechanism.
- **Not present at all.**

3.5 Informing the public about accidents and mitigation measures thereof in respect of accidents having significant environmental impact, causing major damages and arousing loud public discussions, including those caused by contractor activities

Russia's oil and gas companies are only beginning to understand the importance of informing public of industrial accidents. Public acknowledgement of responsibility for damages caused to people and environment is an indicator of the company's social and environmental awareness maturity.

- **Reliable data available or no major accidents during the reporting period.**
- **Fragmentary data**.
- **Data missing or unreliable**.

3.6 Informing the public of environment-related conflicts and measures taken to resolve them within the areas of the company's operation, including its subcontractors

Environment-related conflict is a conflict between an operating company and environment-caring structures, which can be government authorities, media, local population, environment watchdogs, etc. on issues related to environmental safety during preparatory work or business activities. Disclosure of information on such conflicts indicates the company's serious intentions for dialog with the public.

- **Reliable data available or no environment-related conflicts during the reporting period.**
- **Fragmentary data**.
- **Data missing or unreliable**.

3.7 Established procedure in place for processing public complaints

Company's transparency, its willingness to cooperate with public on various matters, including environmental protection, is indicative of a civilized approach to business.

- **Yes, with feedback mechanism and procedure.**
- **Yes, without feedback mechanism or a procedure.**
- **Not present at all.**

3.8 Public availability of information regarding criteria 1-7 of Section 1 for the reporting period at the website or in the publicly accessible information sources

These criteria indicate the level of company's openness in the field of environmental management (Section 1).

Positive answers: More than 80% 50-80% Less than 50%

3.9 Public availability of information regarding criteria 1-12 of Section 2 for the reporting period at the website or in the publicly accessible information sources

These criteria indicate the level of company's openness in the field of environmental impact (Section 2)..

Positive answers: More than 80% 50-80% Less than 50%

Analysis
for Environmental Responsibility Rating of Oil & Gas Companies — 2016

RATING PARTICIPANTS TRANSPARENCY LEVEL: International Standards and Feedback

Traditionally, the basic principle of the rating compilation is that exclusively publicly available information is used. Therefore, the focus was primarily on the completeness and quality of environmental information disclosed. Rating organizers note that the business transparency level of Russian Oil & Gas companies increases every year both with respect to the number of disclosed environmental protection aspects, and in terms of quality of the latter. The participating companies cooperate with rating organizers extensively at the rating preparation stages. Thus, in August-November 2016, **15 out of 21** rated companies accepted the rating organizers' suggestion to disclose additional information on environmental responsibility or submit corresponding comments.

This year, two different levels of business transparency on the matter were singled out:

- **Sufficient level of business transparency**
  Majority of rated companies (15 of 21 participants) fall within this level. These companies publish environmental responsibility reports and disclose information on implemented environmental management system and environmental impact from their operations in the special sections of their official sites. Nine companies *(Rosneft, Lukoil, Gazprom Neft, Tatneft, Bashneft, Gazprom, Sakhalin Energy, NOVATEK,* and *Zarubezhneft)* publish non-financal reports, which comply with international GRI (Global Reporting Initiative) standards. Another six companies *(Surgutneftegaz, Exxon NL, Salym Petroleum, Irkutsk NK, Transneft,* and *Total PP)* publish environmental reports in accordance with internal corporate standards rather than following GRI requirements.
- **Insufficient level of business transparency**
  6 of 21 rating participants that do not publish non-financial reports and only disclose very limited information on environmental aspects of their operations at their official sites fall within this level. Namely, these companies are *Slavneft, Tomskneft VNK, Russneft, Alliance/NNK, Neftisa-Belkamneft*, and *Arcticgas*.

The best known global voluntary international standard of non-financial reporting is **Global Reporting Initiative** *(GRI)*. **GRI G4** guidelines was published in May 2013. As opposed to the previous version, this guidelines established only two levels of compliance with GRI recommendations: basic and expanded. Whereas at the moment of first rating compilation only one Russian oil & gas company published sustainable development report with account for GRI G4 requirements, by the end of 2015, however, a total of nine Russian oil & gas companies implemented GRI G4 standards. All these companies publish reports that meet basic level of compliance requirements. Expanded level reports are not yet being published by any company.

QUANTITATIVE CRITERIA: Range and Dynamics

The Rating is based on 2015 data and the organizers managed to collect corresponding values for nearly all criteria from at least 10 companies, which is enough to establish and analyze average values (see table below).

Environmental Impact — Average Quantified Values based on 2015 data

Criteria *(UoM)*	**Number of companies** that disclosed related data	**Average value** for rated companies	**Minimum value** for rated companies	**Maximum value** for rated companies
Specific gross emissions of air pollutants *(kg/toe)*	14	2,09	0,01	4,5
Specific gross emissions of greenhouse gases *(kg/toe)*	11	48,14	0,05	164,69
APG utilization rate *(%)*	14	85,9	47,5	99,38
Specific volume of polluted water discharged to surface water bodies *($м^3$ / toe)*	13	0,05	0	0,34
Specific water withdrawal for own company needs *($м^3$ / toe)*	14	1,85	0,008	11,22
Ratio of utilized and decontaminated waste to total waste turnover	13	0,84	0,01	1,4
Polluted land area ratio for end to start of the reporting year	12	0,17	0	0,98
Specific pipeline leaks (resulting in oil, condensate and oil products spilled) rate *(ea/ 1k km of pipeline)*	13	22,9	0	150
Specific amount of oil, condensate and oil products spilled as result of accidents and leaks *(kg/toe)*	14	0,06	0	0,8
Share of excess charges in total payments for adverse environmental impact *(%)*	8	25,94	0	75
Share of environmentally friendly fuel *(% in total fuel production volume)*	10	99,24	94,78	100
RES share *(% of total energy production)*	10	0,53	0	5

Source: NRA calculations based on data published by the participating companies.

As changes have been made to calculation methods with respect to certain criteria, and considering that selection structure has been amended, the three-year dynamics can be followed only for some of quantified rating values. Most of them are getting better. In particular, pollutants emission volumes are decreasing, whereas APG utilization ratio is growing (see table).

Among other indicators with definitely positive three-year dynamics are the Share of environmentally friendly fuel (absolute majority of rated companies have this value at or about 100%) and RES share (every year more and more companies report that RES share is becoming significantly above zero).

Dynamics for some of the rating criteria is controversial. Thus, for instance, the average 2015 water withdrawal value somewhat increased after noticeable fall in 2014 (from 1.04 to 1.85 m^3/toe). On the contrary, the average pipeline leaks rate went down after surge in 2014 (from 41,46 to 22,9 ea/ one thousand kilometers).

It should be noted that changes in quantified criteria could be caused by both perfection of corporate environmental policies, and by expansion of rated companies' selection.

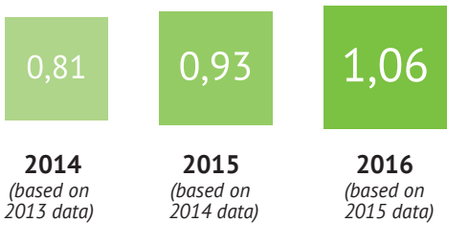
RATED COMPANIES POSITIONS:
Leaders push forward, runner-ups follow the lead

Environmental Responsibility Rating of Oil & Gas Companies based on 2015 data is characteristic of the following key results:

1. **Sustainable growth of average environmental responsibility and transparency of the majority of rated companies**

Three-year dynamics of average rating point value is the unambiguous proof of the statement: the first rating had this value at 0.83, the second rating – at 0.81, and the third one – at 1.06 (two points scale).

Average Value for Rated Companies



This trend is further supported by the fact that the absolute majority of rated companies (14 of 21) had had their rating point improved within the reporting year.

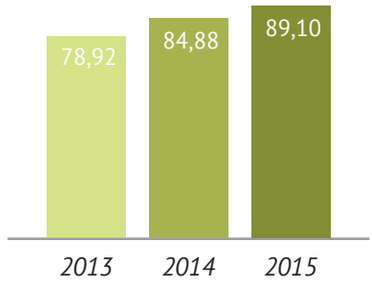
2. **Changes in top three positions**

Rating top three are the same companies, however their positions within the leading pool have changed. *Sakhalin Energy* now holds the very first position (third position last year), *Gazprom* remains the runner-up, while *Surgutneftegaz* (the rating leader last year) shifted to the third position. At the same time, all three top rating companies improved their environmental responsibility and transparency levels as compared with last year, and yet Sakhalin Energy demonstrated the fastest pace of improvement among the three leaders.

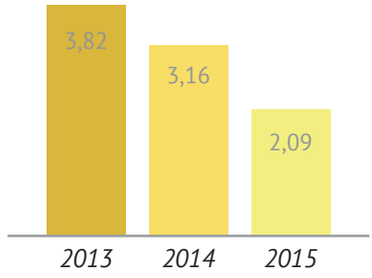
3. **Several companies are getting closer to the leaders thanks to groundbreaking growth**

NOVATEK showed the most positive rating dynamics (+5 positions or +0.4396 points in the year), and the same goes for *Exxon NL* (+3 positions or +0.5672 points in the year). *LUKOIL* and *Salym Petroleum* are now also right at the leaders' backs. The above companies have strengthened their positions not only due to disclosing additional information on environmental management policies, but also because of notable improvements in environmental impact mitigation dynamics. It can be safely asserted that each of the mentioned companies is becoming more transparent and environmentally responsible.

APG Utilization Ratio, *%*



Specific Emitions of Air Pollutants, *kg/toe*



Specific Water Withdrawal, *м³/toe*