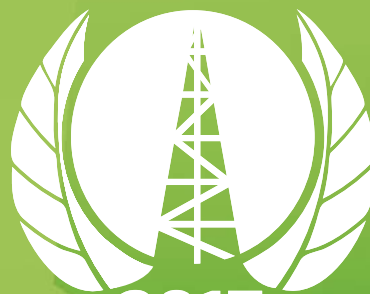




2017
YEAR OF ECOLOGY
IN RUSSIA



2017

Rational
Approach

Environmental Responsibility
RATING
of Oil & Gas Companies in Russia
2017

Organizers



Partner



With support from



MINISTRY OF ENERGY
OF RUSSIAN FEDERATION

Rating Organizers

We are proud to present the booklet with the results of the Annual Environmental Responsibility Rating of Oil & Gas companies. In the course of four years this joint project of CREON Group, the premier Russian provider of advisory services to the Oil & Gas, Petrochemicals, Chemicals and related industries, and World Wide Fund for Nature (WWF) of Russia (with the participation of the National Rating Agency) has developed to be the reliable source of the comprehensive and consistent information regarding the oil and gas industry impact to the environment and massively contributed to creation of the platform for dialogue between corporate experts and representatives of interested parties supporting containment of respective environmental risks.

Improved availability of the information about rated companies further represents the increased rating influence and efficiency. During the first rating year the respective reports containing certain quantitative indicators were publicly available for only three-four companies, nowadays they are available for more than ten-thirteen companies. Impressive selection range bolsters rating accuracy with respect to calculation of the industry mean average indicators that reflect the joint impact of the industry participants on the environment.

This year a few changes were introduced into the rating methodology. In particular, the criterion related to the eco-friendly fuel share was eliminated, as all the rated companies brought this ratio high on to 100%. The following new evaluation criteria were tentatively included as well:

- a) criteria related to Oil Recovery Index improvement programs;
- b) criteria estimating RES energy generation processes research, development, and implementation;
- c) criteria reflecting involvement of interested parties in OSR trainings performance and analysis;
- d) criteria estimating public availability of operational environmental monitoring reports.

Certain clarifications were introduced into a number of criteria following discussions with rated companies. Due to the unsubstantiated disappearance of some data (previously considered in the rating) from public domain, the rating organizers reserved the right to reduce the final rating score of respective companies.

The list of the rating participants has also changed: thus, this year the companies Bashneft and Total left the rating, meanwhile the companies Dulisma, Novy Potok (New Flow) and KTK joined the list.

The rating significance is confirmed in the Development Concept of the Public Non-Financial Reporting, enacted on May 05, 2017 by the Russian Federation Government Order. According to this document ".../ the most commonly used instruments of the independent external evaluation in the field of the sustainable development, corporate responsibility and public non-financial reporting, conducted at the initiative of the third party include the following: indexes, ratings, rankings — evaluation of the organizations activities results which is performed on the basis of the formalized methodology/..."

The rating of the year 2017 contributes to the efficiency and results of the Ecology Year in Russia, as the oil and gas industry is both the main driver of the country economy development, and one of the major sources of impact on environment in Russia.



Fares Kilzie
Head of CREON Group



Evgeny Shvarts
Director of Conservation Policy,
WWF Russia, PhD



Viktor Chetverikov
President, NRA

Rating Organizers:



CREON GROUP OF COMPANIES

Leading Russian advisory and investment group working in oil & gas, petrochemical and related industries, project management and information analytics.

CREON Group mission is to promote the dynamic development of Russian and the CIS countries 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)

One of the leading rating agencies in Russia. NRA is involved in socially important projects and provides research analysis in the wide range of economic segments: macroeconomics, banks, insurance, oil & gas, investment potential of Russian regions etc. NRA has a client base of over 400, with over 1000 companies participating in various information projects of the Agency.



UNDP/GEF/MNRE Project
"Mainstreaming biodiversity conservation into Russia's energy sector policies and operations"

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

One of the world leaders in the insurance market. Over 90 million clients entrust AIG with protection of their businesses. The Company has been working in the Russian market for 23 years now and offers its clients a wide range of services for property insurance, liability and financial risks insurance. For details, please visit www.aig.ru

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Rational
Approach

Environmental Responsibility Rating
of Oil & Gas Companies in Russia

Rating Results

Final Position	Company	Final Rating Point	Rating Position in 2016
1	Sakhalin Energy (Sakhalin-2)	1,8558	1
2	Exxon Neftegaz Limited (Sakhalin-1)	1,7739	▲ 6
3	Surgutneftegaz	1,582	3
4	Salym Petroleum Development	1,5786	▲ 5
5	Zarubezhneft	1,5757	▲ 10
6	Gazprom	1,5430	▼ 2
7	Gazprom Neft	1,5270	▲ 8
8	LUKOIL	1,4896	▼ 4
9	Irkutsk Oil Company	1,3276	▲ 11
10	Rosneft	1,2942	▼ 9
11	CPC	1,1963	—
12	NOVATEK	1,0328	▼ 7
13	Transneft	0,7852	▲ 15
14	Tatneft	0,6899	▼ 13
15	Slavneft	0,4201	▲ 17
16	Russneft	0,3276	▲ 19
17	Tomskneft VNK	0,2804	▼ 16
18-19	New Stream	0,2328	—
18-19	Neftisa	0,2328	▲ 20-21
20-21	Arcticgas	0,1481	20-21
20-21	Dulisma	0,1481	—
22	NNK	0,0741	▼ 18

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:

- 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.
- 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.
- To make record of the year-over-year changes** in the above-listed indicators.

Fundamental Principles of the Rating:

- The rating is performed on the basis of the criteria specified, first and foremost, in the Joint Environmental Requirements of the Public Interest Environmental Groups to the Oil and Gas Companies (https://new.wwf.ru/upload/iblock/4ac/oil_demands.pdf).
- The rating methodology shall be discussed with all the interested parties. Face-to-face and distance consultations dedicated to improving rating methodology are held annually with the rating participants.
- The rating is calculated considering all the segments: production, processing and transportation.
- The rating is based on the data related to the companies operation in the Russian Federation, available in public domain. *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 provided through interviews of the companies' official representatives for federal or regional media.*
- The rating calculation shall be performed by the professional rating agency, which is chosen on the basis of tender.
- List of the companies for the rating is defined by the volume of production, refinery and transportation of oil, gas condensate and oil products. The lower borderline is represented by the volume of oil and gas condensate production equivalent to 1.5 mln tons per year, and the transportation volume of 30 mln tons per year, the refinery volume of oil, gas condensate and oil products of 8 mln tons per year.
- The rating is performed on the annual basis. This allows for estimation of the oil & gas companies environmental indicators dynamics.

Oil & Gas Companies, Included in the Rating

A total of 22 companies were selected for participation in the Rating. The table showcases respective company titles and reference data on production volume (■), transported/shipped volume* (■), processed volume (■) in 2016.

Company	Production / transported/shipped / processed volume in 2016, mln tones		
1 Rosneft	211,1 91,46	■	■
2 LUKOIL	83 41,81	■	■
3 Surgutneftegaz	61,85 18,53	■	■
4 Gazprom Neft	37,76 31,19	■	■
5 Tatneft	28,69	■	
6 Gazprom	17,38 5,31	■	■
7 Slavneft	15 14,94	■	■
8 Tomskneft VNK	9,56	■	
9 Exxon Neftegas Limited (Sakhalin-1)	8,97	■	
10 Arcticgas	8,08	■	
11 NOVATEK	8,04 6,92	■	■
12 Russneft	7	■	
13 Neftisa	6,92	■	
14 Irkutsk Oil Company	6,68	■	
15 Salym Petroleum Development	6,17	■	
16 Sakhalin Energy (Sakhalin-2)	5,5	■	
17 Zarubezhneft	3,21	■	
18 NNK	2,29 4,72	■	■
19 Dulisma	1,53	■	
20 Transneft	483,4	■	■
21 New Stream	9,3	■	
22 KTK	35	■	

* through main pipelines

Structure of the Rating



The Rating consists of three sections:

- Environmental Management
- Environmental Impact
- Disclosure Information

Section 1:



Environmental Management

assesses the quality of eco-management in the companies. The criteria included in this section are in most cases substantially more rigid compared to the 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 environmental media (air, water and land) during the implementation of projects as well as the ecological performance level of the industrial companies. In most cases the criteria are based on components of state statistical reporting in the field of environmental protection (the data sources are represented by the 2-TP reports (water, air, wastes and land), 4-OS reports (costs and payments), reflecting the companies environmental impact as a result of the economic activities performing at the respective licensed areas.

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:



Information Disclosure

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

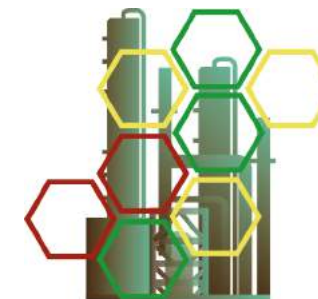
The Rating is calculated as follows.

1 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), 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.

2 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.

In order to avoid disappearance or replacement of the data which were used for the ratings calculations of the previous years, the arrangers suggested the following motivating solution of the problem. The retrospective evaluation of each company rated in the previous 3 years will be performed during the regular data collection. In case the data from the public domain disappeared or were replaced, the company will be asked to provide explanations on the reasons. If an adequate explanation is provided (for example, the new web-site, new methodology, the data which were not considered previously), the amended data will be taken into account. If the reply is not adequate or lacking, the red levels will be assigned to the criteria where the data of the previous years had disappeared or had been replaced. Thus, total section rating (and overall rating as well) will go down for the companies which failed to explain disappearance or replacement of previously published data on their web-sites.

3 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	Rating Position in 2016
1	Sakhalin Energy (Sakhalin-2)	2	1
2-5	Gazprom	1,8571	2-6
2-5	Surgutneftegaz	1,8571	2-6
2-5	Salym Petroleum Development	1,8571	2-6
2-5	Exxon Neftegaz Limited (Sakhalin-1)	1,8571	2-6
6-7	Gazprom Neft	1,7143	7
6-7	LUKOIL	1,7143	▼ 2-6
8-9	Zarubezhneft	1,5714	▲ 10-11
8-9	Rosneft	1,5714	8-9
10	Irkutsk Oil Company	1,2857	▲ 12
11	NOVATEK	1,1429	10-11
12-13	Transneft	1	▲ 15-16
12-13	CPC	1	—
14	Tatneft	0,7143	▼ 13
15	Slavneft	0,5714	▲ 17
16-17	Tomskneft VNK	0,2857	▼ 15-16
16-17	Russneft	0,2857	▲ 18-19
18-19	Neftisa	0,1429	▲ 20-21
18-19	New Stream	0,1429	—
20-22	NNK	0	▼ 18-19
20-22	Arcticgas	0	20-21
20-22	Dulisma	0	—

0 1 2

List of Rated Criteria

1.1 Presence of quantitative efficiency indicators in the environmental management system (EMS) (as per the Standard 14001/GOST R ISO and others)

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 outlets **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 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" (https://new.wwf.ru/upload/iblock/4ac/oil_demands.pdf) 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

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.

- **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



2 Environmental Impact

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.
- Presence of study and/or monitoring programs for indicative species.
- Public availability of results of researches performed in the area of biodiversity preservation.
- 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 OSCP 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
- **Voluntary insurance** against environmental risks in respect of individual projects or individual subsidiaries
- **Absence of voluntary insurance** against environmental risks

Section 2 Position	Company	Section 2 Rating Point	Rating Position in 2016
1	Exxon Neftegaz Limited (Sakhalin-1)	1,9091	▲ 2
2	Sakhalin Energy (Sakhalin-2)	1,7895	▼ 1
3	CPC	1,7	—
4	Salym Petroleum Development	1,5455	▲ 7
5	Gazprom Neft	1,5333	▲ 13
6	LUKOIL	1,4211	6
7	Irkutsk Oil Company	1,3636	▲ 8
8	Surgutneftegaz	1,3333	▼ 3-4
9	Zarubezhneft	1,2667	▲ 12
10	Rosneft	1,2	9-10
11	Gazprom	1,1053	▼ 3-4
12	NOVATEK	1,0667	▼ 5
13-14	Transneft	0,8	▲ 14
13-14	Tatneft	0,8	▼ 9-10
15	Russneft	0,3636	▲ 19-21
16	Slavneft	0,1333	16-18
17-22	New Stream	0	—
17-22	Tomskneft VNK	0	16-18
17-22	NNK	0	16-18
17-22	Neftisa	0	19-21
17-22	Arcticgas	0	19-21
17-22	Dulisma	0	—

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.

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.

2.3 Associated petroleum gas utilization (APG)

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.

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.

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.

2.6 Ratio of the amount of the utilized and disposed (including by third parties) wastes 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 wasters 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.

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.

2.8 Rate of pipeline accidents leading to spills of oil, condensate, oil products and oilfield water

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.

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.

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)

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.

2.11 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.

For all criterias of the Section 2 reflections in the Rating are following:

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

3 Disclosure and Transparency

Section 3 Position	Company	Section 3 Rating Point	Rating Position in 2016
1	Zarubezhneft	1,8889	▲ 6-9
2	Sakhalin Energy (Sakhalin-2)	1,7778	▼ 1
3	Gazprom	1,6667	▼ 2
4-5	Exxon Neftegaz Limited (Sakhalin-1)	1,5556	▲ 6-9
4-5	Surgutneftegaz	1,5556	3-5
6-9	Salym Petroleum Development	1,3333	▼ 3-5
6-9	Gazprom Neft	1,3333	6-9
6-9	LUKOIL	1,3333	▼ 3-5
6-9	Irkutsk Oil Company	1,3333	▲ 10-11
10	Rosneft	1,1111	10-11
11-12	NOVATEK	0,8889	▼ 6-9
11-12	CPC	0,8889	—
13-18	New Stream	0,5556	—
13-18	Tatneft	0,5556	13
13-18	Slavneft	0,5556	14-15
13-18	Tomskneft VNK	0,5556	16
13-18	Neftisa	0,5556	▲ 19-21
13-18	Transneft	0,5556	▲ 19-21
19-20	Arcticgas	0,4444	19-21
19-20	Dulisma	0,4444	—
21	Russneft	0,3333	—
22	NNK	0,2222	▼ 17-18

0 1 2

List of rated Criteria

3.1 Non-financial reporting is in compliance with the international requirements (such as GRI or IPIECA)

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, either GRI application level B or C** ("core") or reporting is in compliance with IPIECA/API/IOGP requirements for oil and gas sector
- **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 reporting 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 non-financial reporting is available

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 the State Environmental Export 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.

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 access to OSCPs and OSERP makes it possible for broad public to take part in making decisions on emergency prevention and emergency response.

For criterias 3.3-3.4 reflections in the Rating are following:

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

3.5 Informing the public about emergencies/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.

3.6 Informing the public of major accidents / 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 major accidents / environment-related conflicts** during the reporting period
- **Fragmentary data**
- **Data missing or unreliable**



Analytics

for the Environmental Responsibility Rating of Oil and Gas Companies

Rating Participants

The 2017 rating included a total of 22 oil and gas companies operating in Russia and ensuring about 97% of the oil and condensate production as well as the major share of hydrocarbons processing and transportation in the country. Reference information on the companies is provided in the table below:

Company	Publicly traded (listed)	Foreign equity stakes (≥10%)	Government's stake (≥10%)	Level of disclosure
Rosneft	Yes	Yes (BP)	Yes	High
Lukoil	Yes	No	No	High
Surgutneftegaz	Yes	No	No	Average
Gazprom Neft	Yes	No	Yes	High
Tatneft	Yes	No	Yes	High
Gazprom	Yes	No	Yes	High
Slavneft	No	No	Yes	Low
Tomskneft VNK	No	No	Yes	Low
Exxon NL (Sakhalin-1)	No	Yes (Exxon)	No (Production Sharing Agreement Sakhalin-1)	High
Arctic Gas	No	No	Yes	Low
NOVATEK	Yes	Yes (Total)	No	High
RussNeft	Yes	No	No	Low
Neftisa	No	No	No	Low
Irkutsk Oil Company	No	No	No	Average
Salym Petroleum	No	Yes (Shell)	Yes	Average
Sakhalin Energy (Sakhalin-2)	No	Yes (Shell, Mitsui, Mitsubishi)	Yes (Production Sharing Agreement Sakhalin-2)	High
Zarubezhneft	No	No	Yes	High
NNK	No	No	No	Low
Dulisma	No	No	No	Low
Transneft	Yes	No	Yes	Average
New Stream	No	No	No	Low
CPC	Yes	Yes	Yes	Average

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, with either 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).

3.9 Public availability of information regarding criteria 1-11 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).

For criterias 3.8-3.9 reflections in the Rating are following:

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

Test Mode in 2017

(below criteria will not be included in Rating 2017 calculations)

Criteria added to Section 1:

1.8* Oil recovery rate increase program

- Quantitative indicators of oil recovery rate increase program implementation **demonstrate positive dynamics** as compared with previous year
- Oil recovery rate increase **program in place**
- No oil recovery rate increase **program** in place

1.9* RES processes research, development, and implementation in place (including for internal use)

- **Corporate-wide program** established for RES processes research, development, and implementation
- **Separate projects** dedicated to RES processes research, development, and implementation in place
- No ongoing RES processes research, development, and implementation

Criteria added to Section 3:

3.10* Involvement of general public stakeholders in holding and reviewing team-headquarters emergency training exercises, comprehensive response training and other OSR exercises

- **Established corporate procedures for involvement** of general public stakeholders in holding and reviewing team-headquarters emergency training exercises, comprehensive response training and other OSR exercises are in place
- General public stakeholders are **involved in separate** team-headquarters emergency **training exercises**, comprehensive response training and other OSR exercises
- General public stakeholders **are not involved** in separate team-headquarters emergency training exercises, comprehensive response training and other OSR exercises

3.11* Public access to industrial environmental monitoring reports including mandatory publication on the Internet

- Yes, for the majority of large scale projects
- Yes, for separate projects
- No

Since the rating's underlying principle is the use of information exclusively from the public domain, the data collection process puts particular emphasis on the completeness and quality of environmental disclosures. There are three levels of corporate disclosures (see the table above):

- **High.** The company annually publishes non-financial reports in line with the international reporting standards and discloses ecologically significant environmental information in the media and on the corporate website.
- **Average.** The corporate website contains a fairly informative special section dedicated to the environmental policy and environmental protection issues; however, the company refrains from publishing any sustainability and ecology reports.
- **Low.** The corporate website either completely lacks a special section dedicated to environmental issues, or such section is not informative and contains only general environmental protection statements.

There is a positive trend indicating an increasing number of companies actively collaborating with the rating organizers. Thus, more than a half of rated companies responded to the suggestion to disclose additional information on environmental responsibility in the course of the first stage of data collection and analysis.

Environmental Insurance as a Criterion of Oil & Gas Companies' Environmental Responsibility Rating

One of the criteria that is considered within the framework of environmental responsibility rating is the availability of the company's environmental insurance policy. This type of insurance, on the one hand, introduces an additional participant in the assessment of environmental risks — an insurance company, and, on the other hand, guarantees the adequacy of financial resources to compensate for damage and eliminate the consequences of emergency situations. However, the specifics of this type of insurance, as well as the fact that the environmental insurance market in Russia emerged not so long ago, leaves many questions regarding the need to purchase a separate environmental insurance policy. Below the main arguments for having such a policy and its fundamental advantages are discussed.

- **Toughening of the legislative regime of environmental responsibility.** The primary incentive for buying an environmental insurance policy, both in Russia and abroad, is a strict liability regime within the framework of environmental legislation and stringent enforcement regime. It is important to remember that legal entities, whose business is associated with increased danger to others, bear strict or absolute liability under the law, i.e. the victims or competent state authorities do not have to prove in court the guilt of the company who owns the facility causing the pollution (Art. 1079 of the Civil Code of the Russian Federation). The introduction, in 2017, of the institution of historical pollution at the legislative level, the large-scale development of the regulatory and legal framework for obtaining comprehensive environmental permits, and the introduction of the best available technologies, coupled with initiatives to move from a compensatory system to a natural indemnification of damage to the environment, indicate a fundamental change in the attitude of the state towards environmental issues.
- **Ensuring the financial stability of the company in the event of a catastrophic loss.** Basically, in the case of a significant monetary claim for compensation of damage, the issues related to substantial financial resources required to make the payment to cover massive losses will be resolved.
- **Exclusion of environmental damage under other types of insurance.** Some consumers of insurance services mistakenly believe that the general liability insurance policy covers damage to the environment, whereas in fact it only provides coverage for third party bodily injury and property damage resulting from sudden and accidental pollution. An environmental impairment liability (EIL) insurance policy is used to close this coverage gap. Its' basic scope of coverage includes off-site clean-up costs, including the claims from state authorities; costs for third party bodily injury and property damage as a result of pollution; compensation for biodiversity damage; mitigation expenses. In addition, unlike general liability policies, an EIL policy, as a rule, does not

exclude the risks of gradual pollution. Also, the costs of cleaning up the insured's industrial territory from pollution (on-site clean-up costs) at the request of the competent authorities may be covered — as a rule, such requests are justified by the threat of migration of pollutants from an insured's territory to the territory of a third party. Compensation of environment damage resulting from transportation of hazardous cargos, may also be available, as well as coverage of the insured's business interruption caused by environmental pollution. Legal expenses, including defence costs, are also covered by such an insurance policy. It is important to remember that Federal Law No. 225, dated July 27, 2010, on Compulsory Insurance of Civil Liability of the Owner of a Hazardous Object for Inflicting Damage as a Result of an Accident at the Hazardous Object, directly excludes damage to the environment from the scope of coverage.

- **Access to the additional services of the insurance company.** Firstly, the holder of an impairment liability insurance policy gets access to the expertise of the underwriters of the insurance company when it comes to risk assessment, including the possibility of involving risk engineers to identify vulnerabilities and provide recommendations for developing tools regarding risk control. Secondly, this is an opportunity to liaise with consulting companies to establish a remediation plan and subsequent implementation of such plan. Thirdly, the policy may provide for the possibility of compensating the costs for services rendered by companies in the field of crisis management, when competent and prompt communication with the media, state authorities, and victims is required.
- **Joint and several responsibility of the project owner and the contractor under the law.** According to p. 2, Art. 77 of the Federal Law No. 7, dated January 10, 2002, on Environmental Protection, damage to the environment caused by a legal entity or individual entrepreneur is subject to compensation by the project owner and (or) legal entity or individual entrepreneur. Thus, the project owner's policy covers claims filed against the project owner, including those connected with the works performed by the contractor.
- **Competitive advantage over other business entities.** Any business entity holding an environmental impairment liability insurance policy has significant advantages over its competitors. The availability of such a policy reflects the conscious attitude of the business entity towards environmental responsibility, which, in turn, shapes the customer's understanding of the proper level of corporate governance in the counterparty's company.

According to the banking and financial services holding company Wells Fargo, the demand for environmental risk insurance rises from 20 to 30% annually*, which is due to an increase in the number of claims and losses. The significant losses in the oil and gas industry are related to the operation of oil pipelines, oil storage facilities (including underground facilities), loading and unloading activities at oil terminals, wastewater discharge at oil refineries, drilling operations, and exploitation of oil and gas wells.

The issues of environmental safety today are much more critical for oil and gas companies than for other industries. This is caused by such factors as the gradual advancement of oil and gas projects to remote areas of the Far North and Siberia, where, in the event of an environmental accident, the measures to eliminate adverse consequences will be challenging due to the surrounding circumstances, and the use of new methods of oil production that can have fatal effect upon the environment. It is essential to understand that, no matter how environmentally efficient the technology of the enterprise is, no matter how modern the system of environmental management is, or whatever environmental responsibility rating is assigned to the company, there are still circumstances beyond our control that can lead to serious adverse consequences. The management of any company should realise that even businesses with robust corporate governance are susceptible to such losses.

Environmental Disclosure Dynamics

The 2017 rating calculation was based on a broader scoring system for section II than in previous years. The indicators were calculated not only in relation to the production volume, but also to the processing and transportation of raw hydrocarbons. As a result, all companies scored a little bit less than in the previous years. However, most companies demonstrated an increased environmental responsibility and transparency, confirmed by a continuous reduction in the number of zero (red flag, no data) points by companies with medium or high level of disclosure – from 34% in 2014 to 19% in 2017.

* <https://wjfs.wellsfargo.com/insights/clientadvisories/Documents/WCS-1780103-WFI-2016-PC-Mkt-Outlook-WIP-FNL-PG-NoCrops.pdf>

One of the most remarkable examples is Zarubezhneft, JSC, annually increasing the number of disclosed criteria and, therefore, steadily improving its performance in the Environmental Management and Transparency sections. As a result, the company became the Transparency leader in 2017.

Another example is Exxon NL (Sakhalin-1), continuously rising from the 16th place in 2014 to 9th place in 2015, 6th place in 2016 and reaching the 2nd place this year.

Sharing Information on Accidents and Controversial Ecological Situations

The greatest resistance to disclosure among the oil and gas companies is caused by the criterion reflecting public awareness of accidents and controversial ecological situations. The criterion wording is adjusted annually in line with the suggestions from the rating participants. Regular reviews on dispute (conflict) situations and accidents/incidents prepared by WWF Russia on a quarterly basis and supported by SIDA project — <https://new.wwf.ru/what-we-do/green-economy/obshchestvennyy-ekologicheskiy-kontrol-deyatelnosti-neftegazovykh-kompaniy/> — became a step forward in the dialogue with the companies and rating development. Before WWF publishes the reviews in the public domain, the companies are given a chance to share clarifying information for possible corrections in the drafted document. Therefore, we create an unbiased database which is used to evaluate public awareness of accidents and controversial ecological situations. As a result, there is hope that the rating and public oversight will help to address one of the most sensitive issues concealed by the oil and gas companies with more efficiency.

Tested Criteria

This year four new criteria have been tested; however, the obtained results were not factored into the final rating calculation. At the same time, the results confirmed adequacy of the criteria wordings promoting their incorporation into the next year's key rating criteria.

Quantitive Environmental Impact Indicators

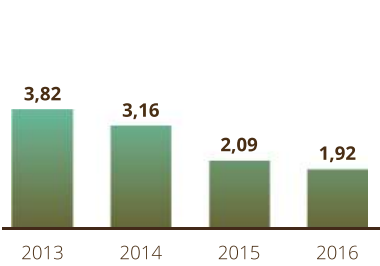
This is the first time since the rating inception in 2014 the publicly available quantitative data for Section II have been enough to ensure separate calculation of certain specific values for the production, transportation and processing of raw hydrocarbons. As a result, the Section II average have been calculated based on the specific values for three segments of the hydrocarbons lifecycle as opposed to previous years when the average for the Section included only the production-related specific values. This is also the first time the 2016 Quantitative Criteria Charts for the rating participants are presented in the Appendix to this brochure.

It should be noted that the variation of data for some indicators (e.g. specific GHG emissions, specific volume of polluted water discharged, specific rate of pipeline accidents, and specific amount of oil spilled as a result of accidents) among the companies is several orders of magnitude. There is obviously the need to continue the dialogue with both oil and gas companies and regulating authorities to find out the reasons for the considerable data variation.

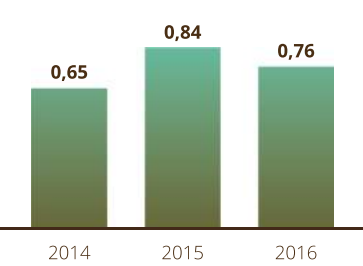
Year-on-Year Dynamics of Industrial Averages

Considering the changes introduced into the individual criteria calculation methodology and sample structure, not all quantitative indicators of the rating allow objective tracking of their four-year dynamics. The year-on-year dynamics of the industrial averages based on the 2014-2017 rating results is provided for the criteria where the collected statistical sample is sufficient and data are homogeneous.

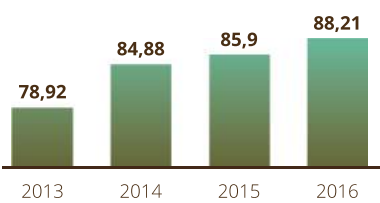
Specific emissions of air pollutants per ton of hydrocarbons produced, kg/toe



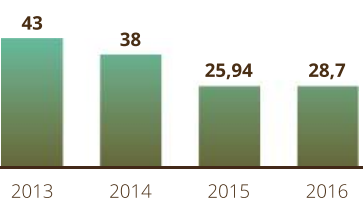
Ratio of disposed and decontaminated waste to waste generation



APG utilization, %



Share of excess charges, %



Some industrial average values show positive dynamics. In particular, there is a continuous four-year reduction of specific emissions of air pollutants and growth in the APG utilization rate. At the same time, the positive year-on-year dynamics for this criterion declared by almost all rated companies contradicts the remote sensing data (space imagery with subsequent data interpretation). A recent study showed that, starting from 2014, Russia has seen a significant growth in the APG combustion volumes also continuing through 2016 — https://new.wwf.ru/upload/iblock/84a/png_2017_web.pdf. This inconsistency indicates an urgent need to verify reliability of APG utilization records and reporting in Russia.

Overall, as the rating evolves, the growing number of companies disclosing the quantitative environmental impact indicators improves reliability of the industrial averages for the said criteria and their dynamics.

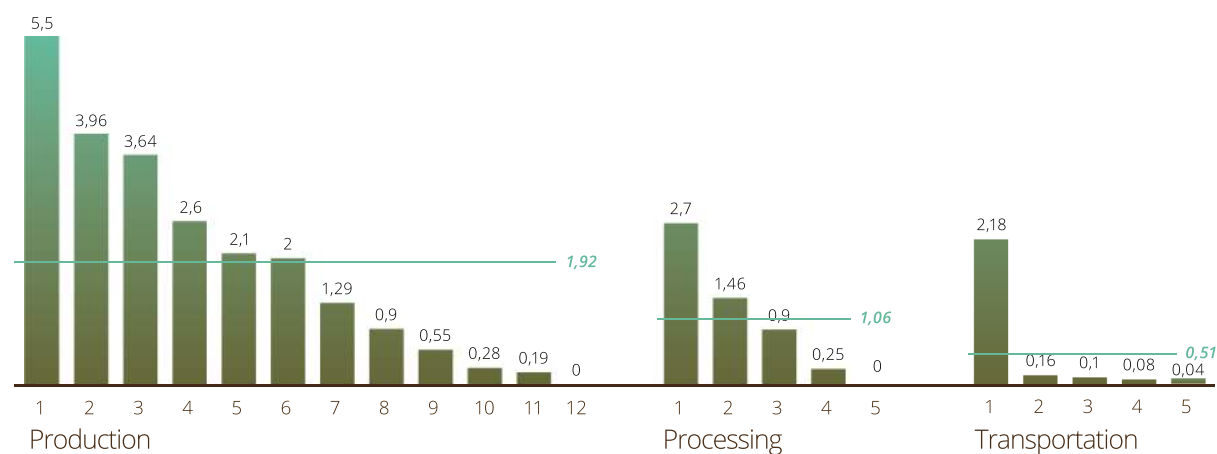
Quantitative Criteria Charts

of the Environmental Responsibility Rating of Oil & Gas Companies (2016)

Note. Each bar of the charts represents a company. The companies are numbered separately for each bar chart based on the "maximum to minimum" principle.

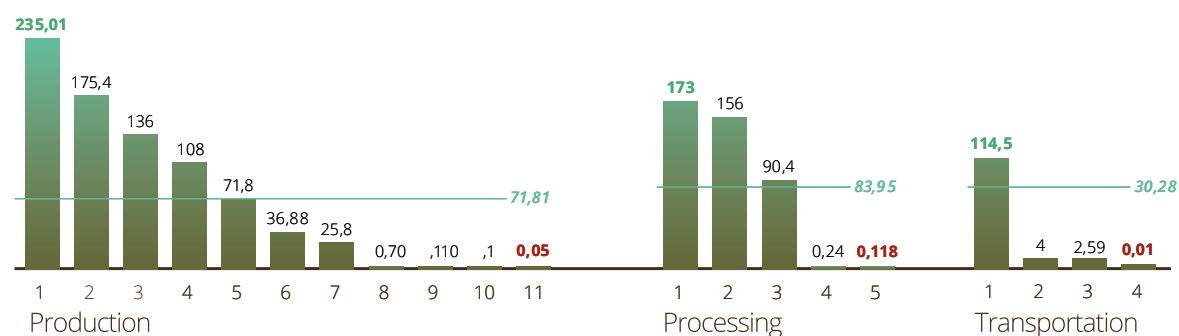
Criterion 2.1

Specific gross emissions of air pollutants, kg / ton of oil equivalent



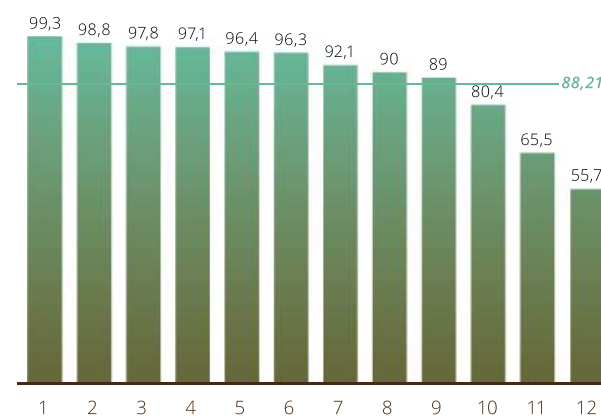
Criterion 2.2

Specific gross emissions of GHG, kg / ton of oil equivalent



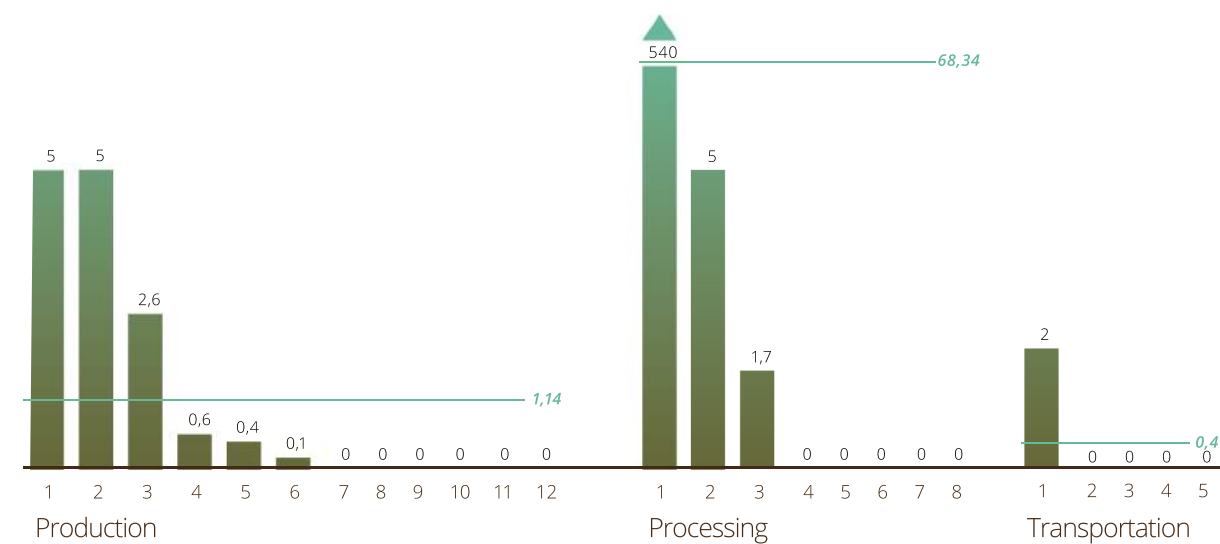
Criterion 2.3

APG utilization rate, %



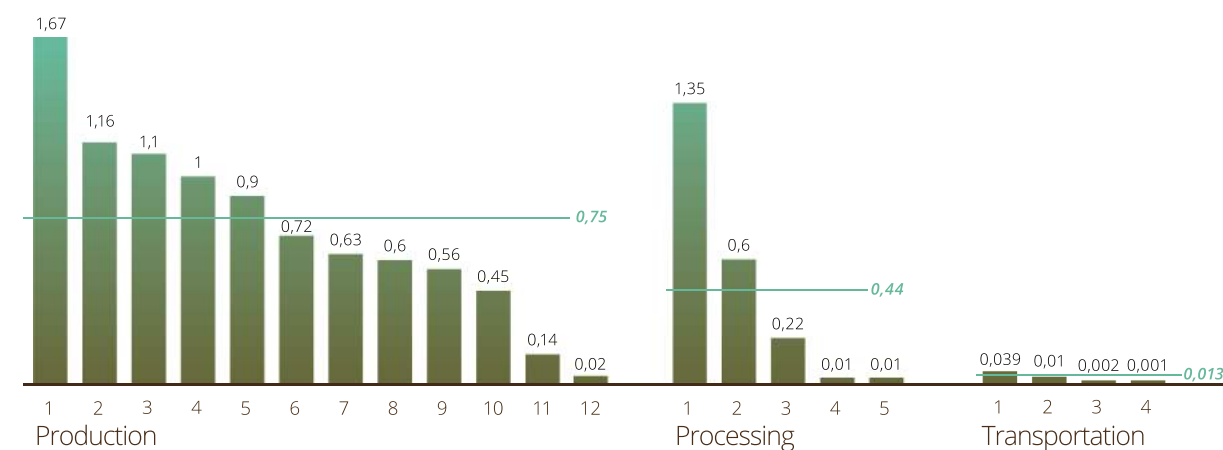
Criterion 2.4

Specific volume of polluted water discharged to surface water bodies, m³ / ttoe



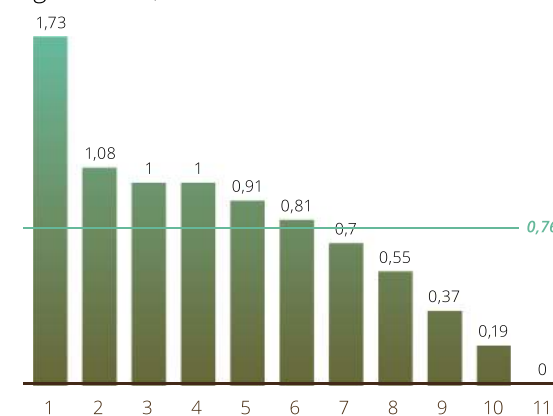
Criterion 2.5

Specific fresh water withdrawal, m³ / toe



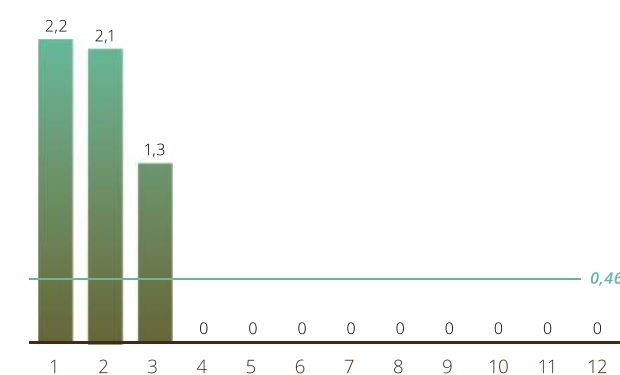
Criterion 2.6

Waste decontamination and disposal, ratio of disposed and decontaminated waste to waste generation, t / t

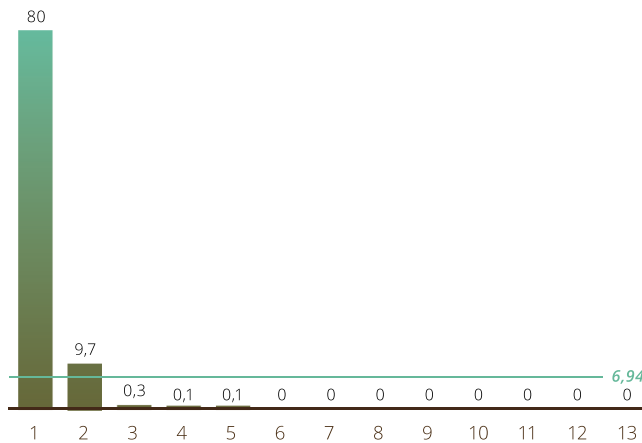


Criterion 2.7

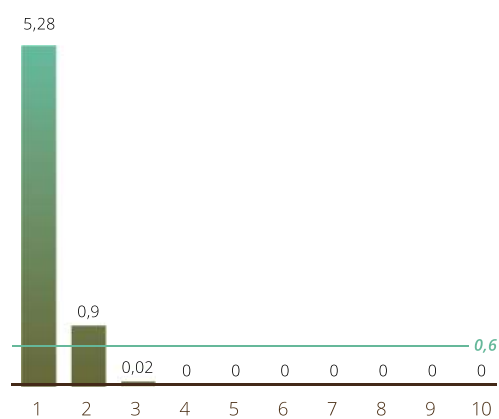
Land pollution dynamics, polluted land area ratio for the beginning to end of the reporting year, ha / ha



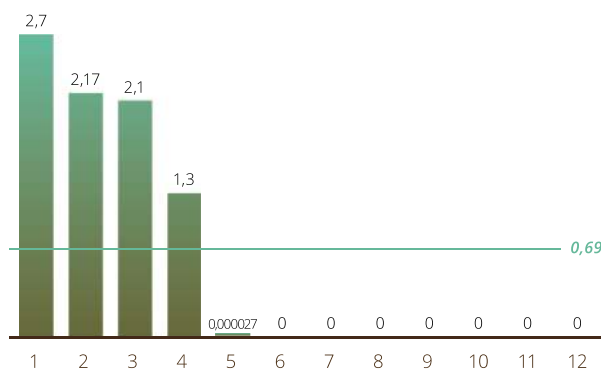
Criterion 2.8
Specific rate of pipeline accidents,
accidents / 1 thousand km of pipelines



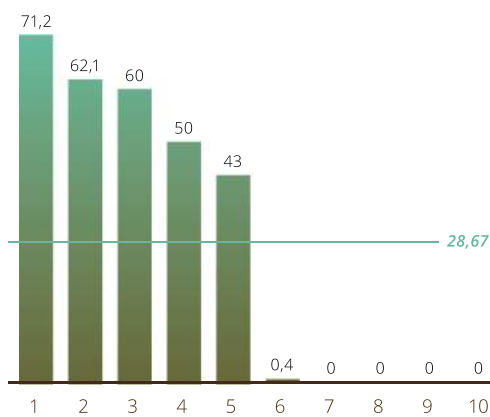
Criterion 2.11
Power generation from RES,
% of total power generation



Criterion 2.9
Oil spilled as a result of accidents,
kg / ttoe



Criterion 2.10
Share of excess charges,
% of total environmental payments



Rational Approach

Environmental Responsibility Rating
of Oil & Gas Companies in Russia



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