













In 2014, WWF Russia in partnership with CREON Group and with assistance of NRA developed methodology of the first Environmental Transparency Rating of Oil & Gas Companies Operating in Russia. Ever since the major Russian oil&gas companies have been annually rated based on the afore methodology.

This year is the first anniversary of our project. In five years the rating has not only promoted significantly oil & gas corporate environmental information transparency and disclosure, but also made it possible to assess the scope of ecological footprint of the rating participants as well as their environmental responsibility.

We take pride in that we have been contributing to improvement of nonfinancial reporting integrity of the leading Russian industry thus fostering execution of the Public Nonfinancial Reporting Development Concept adopted by Russian Government Executive Order dated May 5, 2017. The Rating topicality is high as further sustained by the Ministry of Economic Development of the Russian Federation that initiated development of the List of Key (Basic) Public Nonfinancial Reporting Indicators — the document reflects the majority of quantitative indicators from our ratings.

The project continues to expand, and in 2017 CREON Capital together with WWF Russia and UNEP have completed the first Kazakhstan Rating based on Russian findings. This pilot project has also proven successful.

Weaving Russian and Kazakhstan experience together, a new project started in 2018—the global rating aimed at evaluation of current transparency of environmental indicators among 32 world leading oil and gas companies. The respective memorandum of understanding between WWF Russia and CREON Capital was signed during St. Petersburg International Economic Forum 2018. The global rating will both result in decreased environmental risks and oil&gas ecological footprint worldwide, and promote diversification of energy production sources as well as global switch over to nonfossils.

Our combined efforts have demonstrated that ratings are efficient tool for promotion of public expectations when it comes to oil&gas industry environmental responsibility. All our projects are supported by the Ministry of Energy of the Russian Federation, the Ministry of Natural Resources and Ecology of the Russian Federation, UNDP, and UNEP.

Fares Kilzie Head of CREON Group

Evgeny Shvarts
Director of Conservation Policy,
WWF Russia PhD

Viktor Chetverikov President, NRA



Rating Organizers:

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.

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.

Award Ceremony Partner:



CREON Capital S.a.r.l.

The managing company and unlimited partner of Direct Investment Fund (total raised capital exceeds 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.



WORLD WILDLIFE FUND (WWF) RUSSIA

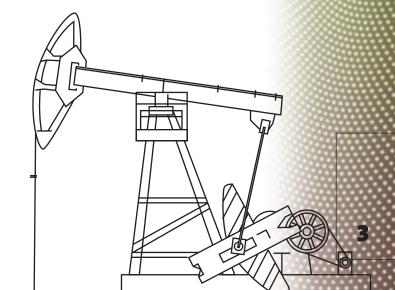
One of the largest national nature conservation organizations, WWF Russia is a part of international WWF network that unites around 5 million supporters and operates in over than 100 countries of the world.

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.



THE UNITED NATIONS ENVIRONMENT PROGRAMME (UN Environment)

Leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment.



Contents

| Address | 2 |
|----------------------------|----|
| Rating Organizers | 3 |
| Rating Results | 5 |
| About the Rating | 6 |
| Structure of the Rating | 8 |
| 1 Environmental Management | 10 |
| 2 Environmental Impact | 13 |
| 3 Information Disclosure | 16 |
| Analytics | 19 |
| Appendix | 24 |

A comprehensive database providing for <u>unbiased assessment</u> of industry discharges, emissions and wastes average values has emerged in 5 years of Rating evolution

Rating Results



| Final Position | Company | Final Rating Point | Final Rating Point in 2017 |
|----------------|---------------------------------|--------------------|-------------------------------|
| 1 | Sakhalin Energy (Sakhalin-2) | 1,7225 | 1 |
| 2 | Zarubezhneft | 1,7003 | A 5 |
| 3 | Exxon Neftegaz Ltd (Sakhalin-1) | 1,6709 | ▼ 2 |
| 4 | LUKOIL | 1,6496 | ▲ 8 |
| 5 | Surgutneftegaz | 1,6370 | ▼ 3 |
| 6 | Gazprom | 1,5475 | 6 |
| 7 | Rosneft | 1,5046 | 1 0 |
| 8 | Salym Petroleum Development | 1,5013 | ▼ 4 |
| 9 | Gazprom Neft | 1,4722 | ▼ 7 |
| 10 | CPC | 1,3333 | ▲ 11 |
| 11 | Tatneft | 1,0795 | ▲ 14 |
| 12 | INK | 0,9524 | ▼ 9 |
| 13 | NOVATEK | 0,9259 | ▼ 12 |
| 14 | Transneft | 0,6825 | ▼ 13 |
| 15 | New Stream | 0,3540 | ▲ 18–19 |
| 16 | Dulisma | 0,2694 | ▲ 20-21 |
| 17 | Tomskneft VNK | 0,2370 | 17 |
| 18 | Arcticgas | 0,1953 | ▲ 20-21 |
| 19 | Slavneft | 0,1843 | ▼ 15 |
| 20 | NNK (Neftegazholding) | 0,1630 | ▲ 22 |
| 21 | Neftisa | 0,1439 | ▼ 18–19 |
| 22 | Russneft | 0,0720 | ▼ 16 |

About the Rating

Rating Objective:

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

Basic Principles of the Rating:

- 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 operation 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.

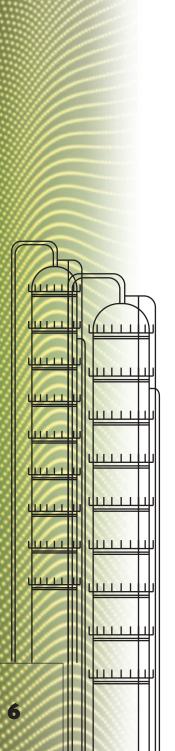
Basic Principles of the Rating:

- The Rating is based on the criteria specified, first and foremost, in the Environmental Standards for Operations of Oil and Gas Companies developed by Russian Nongovernmental Nature Conservation Organizations (wwf.ru/upload/iblock/Oaa/serihblokgr_eng.pdf).
- The Rating methodology is open to the public. Face-to-face and distant consultations dedicated to improving rating methodology are held annually with all interested parties.
- The Rating is calculated considering all oil and gas development segments: production, processing and transportation.
- The Rating is based on the data available in the public domain in Russian language only.

 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 at regional level). 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 and contractors) with the necessary inclusion of references to the relevant pages on the site map, or if it is provided through interviews of the companies' official representatives for federal or regional media.
- The Rating calculation is performed by a professional rating agency, which is chosen on tender basis.
- List of the rated companies 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 and gas companies environmental indicators dynamics.



Companies included in the Rating account for up to

97% of Russia's oil and gas condensate production.

Thus, the Rating provides for a <u>comprehensive assessment</u> of the environmental issues in the industry



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 <u>production</u>, <u>transported/shipped</u> and <u>processed</u> volumes in 2017.

| | Company | Production / transported (shipped) / processed volume in 2017, mln t | | |
|----|---------------------------------|--|-----|--|
| 1 | Rosneft | 209,3 / 90,63 | | |
| 2 | LUKOIL | 81,7 / 43,22 | | |
| 3 | Surgetneftegaz | 60,54 / 18,19 | | |
| 4 | Gazprom Neft | 39,5 / 28,95 | _ | |
| 5 | Tatneft | 28,94 | | |
| 6 | Gazprom | 17,43 / 23,96 | _ | |
| 7 | Slavneft | 14,3 /15,48 | = | |
| 8 | Exxon Neftegaz Ltd (Sakhalin-1) | 9,2 | _ | |
| 9 | Tomskneft VNK | 9,16 | _ | |
| 10 | Arcticgas | 7,87 | _ | |
| 11 | NOVATEK | 7,67 / 6,94 | = | |
| 12 | Russneft | 7,02 | - | |
| 13 | Neftisa | 6,77 | _ | |
| 14 | INK | 6,68 | - | |
| 15 | Salym Petroleum Development | 6,14 | - 1 | |
| 16 | Sakhalin Energy (Sakhalin-2) | 5,81 | - | |
| 17 | Zarubezhneft | 3,03 | - | |
| 18 | NNK (Neftegazholding) | 2,11 / 4,67 | = | |
| 19 | Dulisma | 1,63 | - | |
| 20 | Transneft | 477,5 | | |
| 21 | New Stream | 14,47 | _ | |
| 22 | KTK | 55,1 | | |

Structure of the Rating

The Rating consists of three sections: Environmental Management, Environmental Impact, and Disclosure of 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 damage level for 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 2-TP reports (water, air, wastes, and land), 4-OS reports (costs and payments), reflecting the environmental impact from activities executed by companies in 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, when not available from official sources, is calculated as an arithmetic mean value for companies participating in the Rating. For comparative analysis across the companies, specific values are calculated by dividing gross indicators by relevant volumes of hydrocarbon production, transportation and processing.



Section 3:

Disclosure of Information

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.

Criteria 3.5 and 3.6 are assessed as follows. Each environmental-related conflict or an accident from the review of environmental-related conflicts and accidents in Russian oil and gas companies (published quarterly by WWF Russia) is assessed according to the availability of the information about it in the public domain. If there is no information on a reviewed situation, the criterion is colored <u>red</u>. If a company comments on at least one of the reviewed situations, the criterion is colored <u>yellow</u>. If a company provides information and comments on several reviewed situations, the criterion is colored <u>green</u>. Also, if neither environmental-related conflicts nor accidents were found in the public domain, the criterion is also colored <u>green</u>.



Rating Calculation

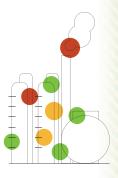
- 1. Each company is assigned color flags for each of criteria Red, Yellow or Green. When a criterion is not relevant for a given company (for example, the company does not process hydrocarbons), no flag is assigned. In such cases, companies are required to present proof of being irrelevant to criteria. When the information related to the criterion is not available in the public domain, red flag is assigned.
- 2. At the next stage, points are assigned for every criterion and companies are rated in each section. 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 a 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 Disclosure of Information 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 following motivating solution of the problem has been suggested. 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.

After preliminary calculation of the Rating, the company profiles are made public with the status "Preliminary Results" and are sent to the companies for data correction and update. Final company profiles will become available to the public after the Rating results annunciation.

The Rating organizers reserve the right to apply penalties (up to exclusion from the Rating calculations) in case of proved violations by a company in the field of human rights (e.g. claims or negative assessment by the Human Rights Council).







The amount of unavailable data for rated criteria reduced by half in 2018 as compared to 2014 (from 34% to 18%)

Environmental Management





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 or 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 handing 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

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

- requirements to additional risk assessment in environmentally valuable areas*;
- commitments to reduce landscape fragmentation and disturbed land area when developing new territories;
- commitments to protect animal migration routes:
- requirements to assess cumulative environmental impact from several companies 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, World Natural Heritage (WNH) sites and International Wetlands (Ramsar);
- commitments in respect to 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.

* Environmentally valuable areas include specially protected natural areas (SPNAs), their buffer zones, World Natural Heritage (WNH) sites, International Wetlands (Ramsar sites), Important Bird Areas, Arctic region, intact forests etc.

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" (wwf.ru/upload/iblock/0aa/serihblokgr_eng.pdf). Compliance with the requirements included in a criterion points to the company's heightened attention to environmental protection matters.

Number of positive answers: • more than 80% • 50-80% • less than 50%

1.3 Documented information on engagement with local communities leading traditional way of life (e.g. indigenous small-numbered peoples of the North).

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

- official document is in place (e.g. policy) and local communities leading traditional way of life are supported
- official document is in place (e.g. policy) or local communities leading traditional way of life are supported
- not present

1.4 Energy efficiency program

The topic of energy efficciency 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.

- 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 conservation programs in the company's areas of operation:

- fund allocations for biodiversity conservation measures;
- approved list of indicative species in the areas of company's activities;
- study and/or monitoring programs for indicative species;
- public availability of results of researches performed in the area of biodiversity conservation;
- mechanisms of involvement of interested parties in discussing programs targeted at biodiversity conservation (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.

Number of positive answers:: ● more than 60% ● 40-60% ● less than 40%

1.6 Wildlife rescue section in official documents on oil spill preparedness and response

The inclusion of wildlife rescue section in OSCPs is an internationally accepted practice of responsible oil and gas companies, which is only starting to arise within 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

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

1.8 Oil recovery rate increase program

Residual oil accounts on average for more than a half of initial oil-in-place. Therefore, increasing oil recovery rate is an important task for oil companies.

- quantitative indicators of oil recovery rate increase program implementation demonstrate positive dynamics as compared with previous year
- oil recovery rate increase program is in place
- no oil recovery rate increase program in place

In 2014, only 3 companies had the wildlife rescue section in their OSCP. By 2018, this number grew to 9





Environmental Impact

| Section 2 Position | Company | Section 2 Rating point | Section 2 Rating point in 2017 |
|---------------------------|---------------------------------|-------------------------------|--------------------------------|
| 1 | CPC | 1,8889 | A 3 |
| 2 | Exxon Neftegaz Ltd (Sakhalin-1) | 1,8182 | ▼ 1 |
| 3 | Sakhalin Energy (Sakhalin-2) | 1,7368 | ▼ 2 |
| 4 | Gazprom | 1,6842 | ▲ 11 |
| 5–6 | Zarubezhneft | 1,5455 | A 9 |
| 5–6 | Salym Petroleum Development | 1,5455 | ▼ 4 |
| 7 | Surgutneftegaz | 1,4667 | ▲ 8 |
| 8 | INK | 1,4545 | ▼ 7 |
| 9 | LUKOIL | 1,4211 | ▼ 6 |
| 10 | Tatneft | 1,3636 | ▲ 13-14 |
| 11-12 | Rosneft | 1,3333 | ▼ 10 |
| 11-12 | Gazprom Neft | 1,3333 | ▼ 5 |
| 13 | NOVATEK | 1 | 12 |
| 14 | Transneft | 0,6667 | 13-14 |
| 15-18 | New Stream | 0,3636 | ▲ 17-22 |
| 15-18 | Tomskneft VNK | 0,3636 | ▲ 17-22 |
| 15-18 | Arcticgas | 0,3636 | ▲ 17-22 |
| 15-18 | Dulisma | 0,3636 | ▲ 17-22 |
| 19 | NNK (Neftegazholding) | 0,2667 | ▲ 17–22 |
| 20 | Neftisa | 0,1818 | ▲ 17-22 |
| 21 | Russneft | 0,0909 | ▼ 15 |
| 22 | Slavneft | 0,0667 | ▼ 16 |

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 environmantal 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 Russia government set APG flaring limit at 5% and imposed considerable 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 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 ensure 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 spils from pipelines is a frequent occurence 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

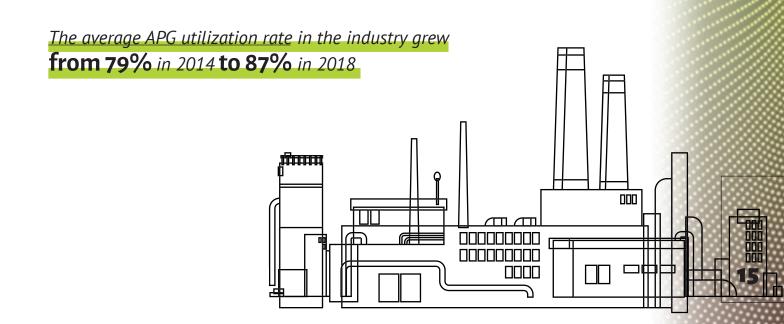
The amount of excess environmental charges is a measure of the company's compliance with the applicable environmental laws and regulations.

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 criteria 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



Information Disclosure

| Section 3 Position | Company | Section 3 Rating point | Section 3 Rating point in 2017 |
|---------------------------|---------------------------------|-------------------------------|---------------------------------------|
| 1 | LUKOIL | 1,7778 | ▲ 6-9 |
| 2-4 | Zarubezhneft | 1,5556 | ▼ 1 |
| 2–4 | Sakhalin Energy (Sakhalin-2) | 1,5556 | ▼ 2 |
| 2-4 | Rosneft | 1,5556 | 1 0 |
| 5–6 | Surgutneftegaz | 1,4444 | ▼ 4-5 |
| 5–6 | Exxon Neftegaz Ltd (Sakhalin-1) | 1,4444 | ▼ 4-5 |
| 7-9 | Salym Petroleum Development | 1,3333 | 6–9 |
| 7-9 | Gazprom | 1,3333 | ▼ 3 |
| 7-9 | Gazprom Neft | 1,3333 | 6–9 |
| 10 | CPC | 1,1111 | ▲ 11–12 |
| 11 | Tatneft | 1 | ▲ 13–18 |
| 12-13 | INK | 0,7778 | ▼ 6-9 |
| 12-13 | NOVATEK | 0,7778 | ▼ 11–12 |
| 14 | Transneft | 0,6667 | ▲ 13–18 |
| 15 | New Stream | 0,5556 | 13-18 |
| 16 | Dulisma | 0,4444 | ▲ 19–20 |
| 17–19 | Tomskneft VNK | 0,2222 = | 13-18 |
| 17–19 | Arcticgas | 0,2222 = | ▼ 19-20 |
| 17–19 | NNK (Neftegazholding) | 0,2222 = | ▲ 22 |
| 20 | Slavneft | 0,1111 | ▼ 13-18 |
| 21–22 | Neftisa | 0 | ▼ 13–18 |
| 21–22 | Russneft | 0 | ▼ 21 |

In 2014, only 7 companies published <u>EIA</u> at their <u>websites</u>. By 2018, the number of such companies grew to 12



List of Rated Criteria

3.1 Non-financial reporting in the field of sustainable development or environmental report is in compliance with the international requirements (such as GRI or IPIECA)

Non-financial reporting following international requirements allows consistent disclosure of environmental performance indicators.

- GRI application level Comprehensive or IIRF full
- either GRI application **level Core or IIRF partial or** reporting is in compliance with **IPIECA/API/IOGP** requirements for oil and gas sector
- not present

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 reporting is available in accordance with international requirements

3.3 Public access to documentation on environmental impact assessment (e.g. EIA) throughout the project's lifecycle for those active projects, which are required to pass the 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 projects' environmental impact.

for majority of projectsfor some projectsnot present

3.4 Access to OSCPs and OSERP (in part of environmental impact) in the public domain

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.

- with feedback mechanismwithout feedback mechanismnot present
- 3.5 Informing the public (through the company website) 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 (through the company website) of environment-related conflicts and measures taken to resolve them within the areas of the company's operation, including its subcontractors

Environment-related conflicts are defined as situations with the past, present or future environmental impact which:

- 1. Lead to inspections from regulatory authorities and are reflected on their web sites;
- 2. Lead to protest movements from local communities;
- 3. Are discussed in mass media:
- 4. Are discussed by influential public organizations (such as Greenpeace, Public Chamber, WWF, Pechora Savior Committee etc).

Disclosure of information on such conflicts indicates the company's serious intentions for dialog with the public.

For criteria 3.5-3.6 reflections in the Rating are following:

- reliable data at the company website is available or no major accidents / no environment-related conflicts during the reporting period
- fragmentary data at the company website
- 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.

- with feedback mechanism and procedure
- with either a feedback mechanism or a procedure
- not present

3.8 Stakeholder engagement in holding and reviewing team-headquarters emergency training exercises, comprehensive response training and other OSR exercises

Stakeholder engagement in holding and reviewing emergency training exercises, comprehensive response training and other OSR exercised allows the general public to assess company's readiness for oil spills.

- established corporate procedures for stakeholder engagement in holding and reviewing teamheadquarters emergency training exercises, comprehensive response training and other OSR exercises are in place
- stakeholders are engaged in separate team-headquarters emergency training exercises, comprehensive response training and other OSR exercises
- **stakeholders are not engaged** in any team-headquarters emergency training exercises, comprehensive response training and other OSR exercises

3.9 Access in the public domain to industrial environmental monitoring reports including quantitative results reflecting state of the art and dynamics

Industrial environmental monitoring allows to continuously keep track and timely respond to negative environmental impact as a result of industrial activities. Availability of industrial environmental monitoring results enables to assess company's effectiveness in minimizing current environmental impact.

• for majority of large-scale projects • for separate projects • no

Test mode in 2018

(below criteria will not be included in Rating 2018 calculations)

Availability of information on the total length of pipelines exploited by the company beyond its service life

- histogram of pipeline age exploited by the company is available in the public domain
- information on the total length of pipelines exploited by the company beyond its service life is available in the public domain
- information is not present



Analysis for Environmental Responsibility Rating of Oil & Gas Companies — 2018

Rating Participants

A total of **22 oil and gas companies** operating in Russia and providing for about 97% of oil & gas condensate production, as well as for the major share of hydrocarbons processing and transportation, have taken part in the rating 2018. The table below displays reference information with respect to these companies.

| Company | Stock Exchange Listing | Overseas Investors Share in Stock Capital (≥10%) | State Share in Stock Capital (≥10%) | Information Transparency Level |
|------------------------------------|------------------------------|--|---|--------------------------------------|
| Rosneft | Yes | Yes (BP) | Yes | High |
| LUKOIL | Yes | No | No | High |
| Surgutneftegas | 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 Neftegaz Ltd (Sakhalin-1) | No | Yes (Exxon) | No (Sakhalin-1 JSV) | High |
| Arcticgas | No | No | Yes | Low |
| NOVATEK | Yes | Yes (Total) | No | High |
| Russneft | Yes | No | No | Low |
| Neftisa | No | No | No | Low |
| INK | No | No | No | Average |
| Salym Petroleum Development | No | Yes (Shell) | Yes | Average |
| Sakhalin Energy (Sakhalin-2) | No | Yes (Shell, Mitsui, Mitsubishi) | Yes (Sakhalin-2 JSV) | High |
| Zarubezhneft | No | No | Yes | High |
| NNK (NEFTEGAZHOLDING) | No | No | No | Low |
| Dulisma | No | No | No | Low |
| Transneft | Yes | No | Yes | Average |
| New Stream | No | No | No | Low |
| KTK | Yes | Yes | Yes | Average |

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. Three levels of corporate information transparency were singled out:

- **High level.** Non-financial reports are published in compliance with international standards on the annual basis. Information on ecological footprint is fully disclosed to mass media and in the special sections of corporate sites.
- **Average level.** Corporate site has sufficiently informative special sections dedicated to environmental policies and respective issues. No reports on sustainable development and ecological footprint are publicly available.
- Low level. Corporate site either completely lacks any kind of section dedicated to environmental environmental policies and respective issues, or such section is not informative and contains exclusively descriptive generalizations on conservation of the environment

By now, a well established practice during rating preparation is that the majority of participants provide meaningful feedback to requests for disclosure of additional information on environmental responsibility during the first stage of available data analysis and processing.

Ecological Footprint Disclosure Dynamics

Average rating score in 2018 remained almost the same as compared to rating score 2017 (0.959 in 2017 versus 0,953 in 2018). This represents aggregation of two different trends — while Section 2 (Environmental Impact) average score has increased, the same in Sections 1 and 3 (Environmental Management and Disclosure/Transparency) has fallen down. The latter occurred due to introduction of new criteria — oil recovery rate increase program (criterion 1.8) and public/stakeholder participation in emergency exercises and response training and industrial environmental monitoring (criteria 3.8 and 3.9). The companies yet do not actively disclose information on the aforementioned criteria, whose introduction is the logical next step of the Rating natural evolution. At the same time, the noticeable increase of Section 2 average score can be explained with both better ecological footprint indicators and improved disclosure when it comes to processing (average growth of 28% in quantitative indicators), transportation (plus 24%), pipeline accidents (plus 33%) and resulting oil spills (up by 65%). The last mentioned indicator demonstrated a huge upsurge as only four companies have not disclosed the related information this year (as compared to ten companies last year).

At the same time, even though introduction of new criteria has lowered down Section 1 and Section 3 average scores a little bit, rated companies have actually disclosed more information in this field as compared to last year, when the criteria were included in test mode and were not taken into account during rating calculation. The fact that related data is more publicly accessible now gives one hope that information transparency with respect to these criteria will improve even further in the subsequent years.

Furthermore, public availability improved with respect to a number of other important segments, such as energy efficiency program results disclosure, and emergency exercise and response (including rescue animals).

Starting from 2017, the growing availability of oil & gas companies' data in public domain allowed for calculation of environmental impact averages in the industry separately

for production, processing and transportation segments



Lukoil is a good example of positive transparency dynamics, as this year the company has published a lot of additional information falling under the rated criteria. As the result, Lukoil topped the Rating 2018 in Disclosure/Transparency section.

Informing General Public on Emergencies and Controversial Environmental Situations

In 2018, rating participants demonstrated a significantly better level of involvement and readiness to disclose data when it comes to emergencies and controversial environmental situations — related reports are prepared and annually published by WWF Russia (with SIDA support) — wwf.ru/what-we-do/green-economy/obshchestvennyy-ekologicheskiy-kontrol-deyatelnosti-neftegazovykh-kompaniy/spornye-situatsii-avarii-i-intsidenty-kompaniy-neftegazovogo-sektora-rossii. Before WWF Russia puts these reports online, companies are given opportunity to pass over additional data in order to specify information showcased in each particular report. The table below shows feedback statistics.

| Company | Emergencies/ Accidents | Feedback |
|------------------------------|---------------------------|----------|
| Rosneft | yes | yes |
| LUKOIL | yes | yes |
| Surgutneftegas | yes | yes |
| Gazprom Neft | yes | yes |
| Tatneft | yes | no |
| Gazprom | yes | yes |
| Slavneft | yes | no |
| Tomskneft Vnk | yes | no |
| Exxon NI (Sakhalin-1) | yes | yes |
| Arcticgas | yes | no |
| Novatek | yes | yes |
| Russneft | yes | no |
| Neftisa | yes | no |
| INK | no | _ |
| Salym Petroleum Development | no | _ |
| Sakhalin Energy (Sakhalin-2) | yes | no |
| Zarubezhneft | yes | yes |
| NNK (NEFTEGAZHOLDING) | yes | no |
| Dulisma | no | _ |
| Transneft | yes | no |
| New Stream | yes | no |
| KTK | no | _ |

In 2014,
there was only 1 company
with biodiversity conservation
program adopted
at the corporate level.
By 2018, the number
of such companies
arew to 10

Thus, there is an unbiased database with respect to any emergencies and disputable environmental situations, which oil and gas companies have had. Therefore, we hope that one of the most sensitive problems, which oil and gas companies keep silent about, will be solved more efficiently thanks to the rating and public integrity.

Criteria in Test Mode

This year we tested a new criterion: availability of information on pipelines share/length as operated by a company in excess of the standard service life. The green level means that there is a distribution histogram for years of service of pipelines operated by a company (3 companies complied with this level), the yellow level means that there is information on length of pipelines operated in excess of the standard service life (0 rated companies gained this level), and red level means that there are no data on the part of pipelines operated by a company in excess of the standard service life (19 companies). The results of this criterion will not be incorporated in the current rating calculation, and wording of this criterion will be brought up for discussion during annual analysis and adjustment of rating method with oil and gas companies and other concerned parties.

Quantitative Indicators for Environmental Impact

This year we kept on calculating a number of specific values based on separate segments (production, processing and transportation of crude hydrocarbons), which we started back in 2017. Accordingly, an average score in Section 2 was calculated based on specific values in three segments of hydrocarbon life cycle. As it was previously noted, there was a quantum leap in availability of quantitative data in processing and transportation segments, and this gives an increased reliability of industry average values. Please see the Attachment to this booklet for 2017 Quantitative Indicator Distribution Charts for the rated companies.

It is to be noted that, in 2017, a spread-in data for several indicators (for example, specific greenhouse gas emissions, specific contaminated water discharge, pipeline accident rate, accident-based spilled oil volume) amounts to several orders of magnitude. It is obvious that we need to keep up talking both with oil and gas companies and supervisory state authorities to clarify why there is such a significant data spread. It is also obvious that the further rating is being developed, the more important the question of data reliability becomes, especially when it comes down to quantitative data.

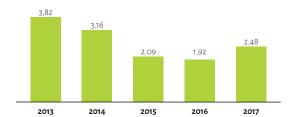
Interannual Trends of Industry Average Indicators

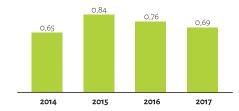
Based on the results of 2014–2018, the interannual trends of industry average indicators of Russian oil and gas industry have been shown for those criteria, where the statistical sampling has been sufficiently taken and the data are homogeneous. It should be pointed out that it is too early to consider interannual trends in some cases since the data spread (even within the same company from year to year) needs to be explained or clarified by company. Along with that, there is a general picture of magnitude orders for the industry average values in terms of impact on air, water, land and wastes, and this is a unique feature of this rating. This is exactly what we initially targeted. Generally, as the rating is developing, there are more and more companies, which disclose information about quantitative indicators of environmental impact, and this increases reliability of industry average values and their interannual trends.



Emission rates of pollutants into the atmosphere per ton of hydrocarbons produced, kg / toe

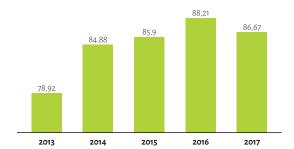
Ratio of disposed and decontaminated waste to waste generation

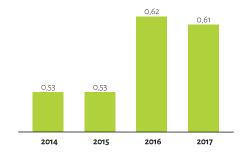




Associated gas utilization, %

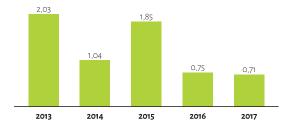
RES share in total power generation, %

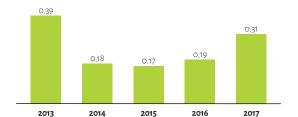




Water consumption for own needs, m^3 / production toe

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

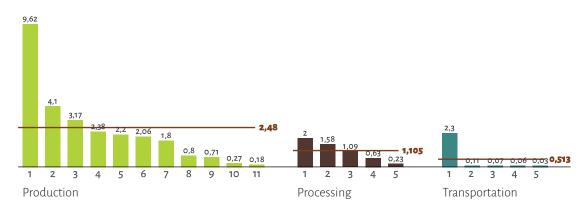




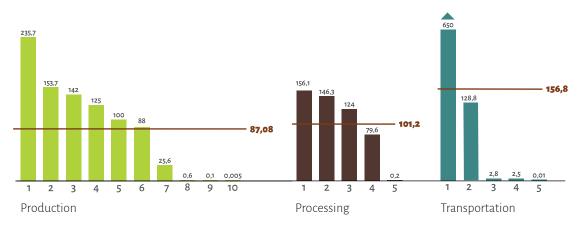
Appendix

Quantitative Criteria Charts of the Environmental Transparency Rating of Oil & Gas Companies, 2017 data

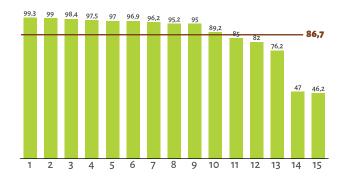
Criterion 2.1
Specific gross emissions of air pollutants, kg / ton of oil equivalent



Criterion 2.2
Specific gross emissions of GHG, kg / ton of oil equivalent

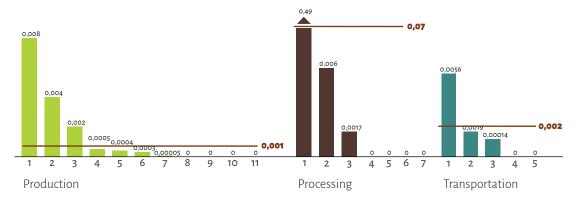


Criterion 2.3
APG utilization rate, %

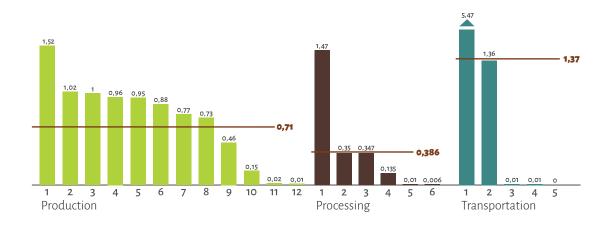




Criterion 2.4 Specific volume of polluted water discharged to surface water bodies, m^3/toe

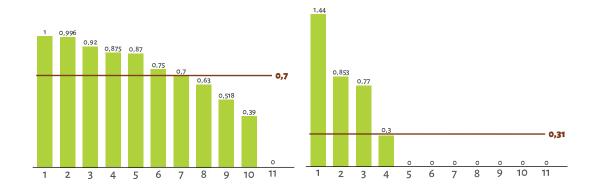


Criterion 2.5 Specific fresh water withdrawal, m^3 / ton of oil equivalent

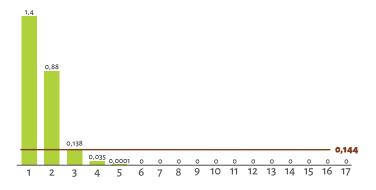


Criterion 2.6
Waste decontamination and disposal, ratio of disposed and decontaminated waste to waste generation, t/t

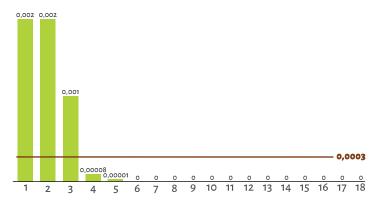
Criterion 2.7 Land pollution dynamics, polluted land area ratio for the beginning to end of the reporting year, ha / ha



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



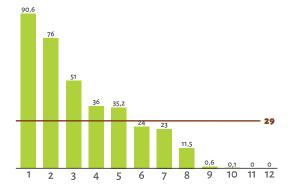
Criterion 2.9
Oil spilled as a result of accidents, kg / toe

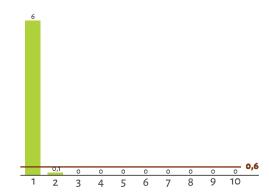


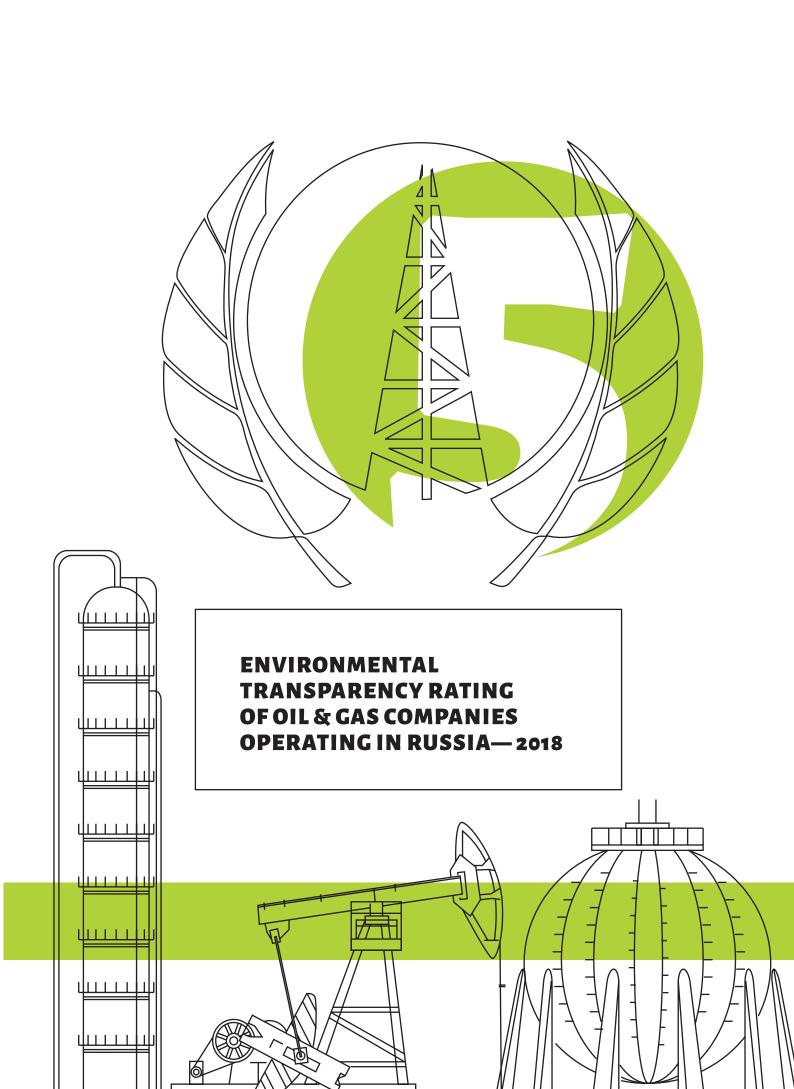
Criterion 2.10
Share of excess charges,
% of total environment payments

Criterion 2.11

Power generation from RES,
% of total power generation











CREON Group

+7 496 276 77 88 +7 495 938 00 08 (φακς) creonenergy.ru zs-rating.ru info@creonenergy.ru

Report prepared by:

Alexey Knizhnikov (WWF Russia) Lioudmila Ametistova (WWF Russia) Daria Yudaeva (NRA) Yulia Sipailova (CREON Group) Alina Dzhus (design)

WORLD WILDLIFE FUND (WWF) RUSSIA

+7 495 727 09 39 +7 495 727 09 38 (факс) wwf.ru russia@wwf.ru

NATIONAL RATING AGENCY (NRA)

+7 495 775 59 02 +7 495 775 59 01 (φακς) ra-national.ru info@ra-national.ru