

Environmental Transparency Rating of Oil and Gas Companies operating in Russia

Organizers





Partners







Modern economy is everchanging at high pace and nowadays investors and consumers pay particular attention to non-economic transaction elements. Social and environmental responsibility have become both the key aspects of attaining Sustainable Development goals and important competitive edge factors. Russian state policies are changing in tune with the above. In July 2019 a new draft law On Public Non-Financial Reporting (PNFR) was introduced by the government. In accordance with this draft, commercial companies, in addition to financial indicators, shall report data on results of their activities pertaining to social and environmental responsibility. Our sector rating has been based on publicly available reports of participating companies from the very first iteration. For six years in a row, since 2014, we have been recording to our estimates, oil and gas industry in our country publishes the best quality PNFR that becomes the basis for fruitful communication between stakeholders and interested parties.

The audacious nationwide Ecology project launched in Russia in 2019. This project aims at noticeable decrease of environmental impact by 2024. Industrial companies are of pivotal importance for achieving the stated goals. Environmental ratings are, on one hand, an important tool for public monitoring of this project implementation and development, and, on the other hand, an additional stimulus for improvement of environmental safety among participating companies.

The national project has a separate focus on biodiversity conservation. Once again, input of industrial companies is very important in this regard. For three years our rating has been evaluating corporate programs dedicated to conservation of biodiversity. As of 2018, the number of companies maintaining related programs increased to 14. The conference of parties to Convention on Biological Diversity will take place in June 2020, and Russian achievements in Business and Biological Diversity segment shall be vividly demonstrated at this conference.

With each passing year our rating enjoys further recognition in business communities, Russian state bodies, and on the international level. Our efforts are supported by United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), and Swedish International Development Cooperation Agency (SIDA). Starting from 2019, sector environmental responsibility and transparency ratings have become a part of the People for Nature project funded by the European Union.



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



National Rating Agency was created in 2002. As of today NRA is one of the leading Russian rating agencies thanks to the high quality of rating methodologies and top level of rating analysts' expert skills and knowledge. NRA delivers rating products in key sectors of Russian economy: banks, insurance, oil and gas, investment potential of Russian regions, etc. In 2019 Central Bank of the Russian Federation included NRA in the register of credit rating agencies.

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.



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.





The People for Nature project is carried out by WWF in 2019-2022 and funded by the European Union. The main goal of the project is to support NGOs and local communities in handling two types of environmental issues:

- Protect the forests through prevention of their degradation and illegal use;
- Reduce environmental impact caused by industrial processes by decreasing air and water pollution and increasing the environmental responsibility of commercial businesses.

The Rating does not reflect the official standpoint of the European Union. The Rating authors bear sole responsibility for information and opinions presented in this publication

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2019

Rating Results

Final Position	Company	Final Rating Point	Final Rating Point in 2018
1	Sakhalin Energy (Sakhalin-2)	1,8148	1
2	Zarubezhneft	1,7744	2
3	Exxon Neftegaz Ltd (Sakhalin-1)	1,7542	3
4	LUKOIL	1,7294	4
5	Surgutneftegaz	1,6338	5
6	Salym Petroleum Development	1,6149	8
7	Tatneft	1,4945	11
8	Rosneft	1,3519	7
9	Gazprom Neft	1,2437	9
10	Gazprom*	1,2134	6
11	INK	1,1742	12
12	CPC	1,1333	▼ 10
13	NOVATEK	1,1023	13
14	Transneft	0,9153	14
15	Slavneft	0,3897	19
16	New Stream	0,354	15
17	Dulisma	0,2694	16
18–19	Neftisa	0,237	21
18–19	RussNeft	0,237	22
20	NNK (Neftegazholding)	0,1953	20
			2

* For rating purpose Gazprom is considered as PAO Gazprom plus its 100% subsidiaries, operating in geological exploration, extraction, transport, underground storage, hydrocarbon refining and maintenance of unified gas supply system

About the Rating

Rating Objective:

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

Rating Targets:

- 1. To identify key indicators of environmental activities for oil & gas companies in Russia. The Rating makes it possible to create an immersive quantified database to be used for calculation of industry average indicators related to discharges, emissions, and wastes.
- **2. To compare main stakeholders** in the oil & gas sector by the following criteria:
 - the company's level of environmental impact per production unit
 - the extent of transparency and availability of ecologically significant information
 - the quality of eco-management in the company (compliance of activities with corporate and national environmental policies, best standards and practices)
 - the frequency of violating environmental legislation in project 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/0aa/serihblokgr_eng.pdf

- The rating methodology is disclosed to general 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: hydrocarbons production, processing and transportation.
- The Rating is based on the data available in the public domain* in Russian language
- The rating calculation is performed by a professional rating agency.
- List of the companies for the rating is defined by the volume of production, refinery and transportation of oil, gas condensate and oil products in accordance with FEC Central Dispatch Control (FEC CDC, www.cdu.ru) data.

The lower borderline (in 2018 or 2017):

volume of oil and gas condensate production:	1,5 mln tons
transportation volume:	30 mln tons
refinery volume of oil, gas condensate and oil products :	9 mln tons

- The rating is performed on the annual basis. This allows for estimation of the oil and gas companies environmental indicators dynamics.
- * Availability in public domain is understood as being accessible to general 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 mandatory inclusion of references to the relevant pages in the site menu (contents), or if it is provided through interviews of the companies' official representatives for federal or regional media.



Oil and Gas Companies, included in the Rating

A total of 20 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 2018**.

	Company	Production / transpor of oil and gas conden	rted/shipped / processed volume isate in 2018, mln tones
1	Rosneft	213,16 / 93,39	
2	LUKOIL	82,1 / 43,1	
3	Surgetneftegaz	60,89 / 18,18	
4	Gazprom Neft	39,49 / 31,5	
5	Tatneft	29,53 / 8,6	
6	Gazprom	17,35 / 12,99	
7	Slavneft	13,81 / 15,71	
8	Exxon Neftegaz Ltd (Sakhalin-1)	11,63	
9	NOVATEK	8,27 / 6,95	
10	RussNeft	7,11	
11	Neftisa	6,79	
12	INK	6,5	-
13	Salym Petroleum Development	6,14	
14	Sakhalin Energy (Sakhalin-2)	5,55	
15	Zarubezhneft	3,12	•
16	NNK (Neftegazholding)	1,96 / 4,88	
17	Dulisma	1,26	
18	Transneft	479,8	
19	New Stream	12,84	
20	СТС	61,08	

^{*}Starting from 2018 Arcticgas is part of NOVATEK while Tomskneft data is fully incorporated in Rosneft reporting. As a result, Arcticgas and Tomskneft are excluded from the Rating.

Environmental Transparency Rating of Oil and Gas Companies Operating in Russia — 2019

Structure of the Rating

The Rating consists of three sections: Environmental Management, Environmental Impact, and Disclosure of Information.

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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 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. Data sources include 2-TP reports (water, air, wastes, and land reclamation), 4-OS reports (costs and payments), reflecting environmental impact from activities executed by companies 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, when not available from official sources (Russian Federal State Statistics Services, Russian Ministry of Natural Resources, Russian Ministry of Economic Development and Trade, and related state bodies), 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 hydrocarbons 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.

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 by WWF Russia) is assessed according to the availability of the information about it in the public domain. If there is no information from a company on a reviewed situation, the criterion is colored red. If a company comments on at least one of the reviewed situations, the criterion is colored yellow. If a company provides information and comments on several reviewed situations, the criterion is colored green. Also, if neither environmental-related conflicts nor accidents were found in the public domain, the criterion is also colored green.



Rating Calculation

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 hydrocarbon), 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.

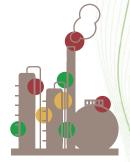
At the next stage, points are assigned for every criterion and companies are rated in each section. Red flag counts as 0 points, Yellow as 1 point, and Green as 2 points. For each section, companies are assigned an arithmetic mean of their points for criteria in the corresponding section. In this calculation, 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. Furthermore, for each criterion with breakdown by production, processing, and transportations (criteria 2.1, 2.2, 2.4 and 2.5) the respective arithmetic mean value is calculated for this criterion only, and afterwards the resulting criterion average value is used for calculation of the final value of the Environmental Impact Section. 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.

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 (at WWF Russia site) 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 or related court rulings).







Environmental Management

Section 1 Position	Company	Section 1 Rating Point	Section 1 Rating Point in 2018
1–3	Surgutneftegaz	2	1-2
1–3	Sakhalin Energy (Sakhalin-2)	2	3
1–3	Exxon Neftegaz Ltd (Sakhalin-1)	2	4-6
4–5	LUKOIL	1,875	4-6
4–5	Salym Petroleum Development	1,875	7–9
6	Surgutneftegaz	1,75	1-2
7-8	Gazprom Neft	1,625	4-6
7-8	Tatneft	1,625	12
9	Rosneft	1,5	7–9
10	INK	1,25	14
11–12	Gazprom	1,125	7-9
11-12	NOVATEK	1,125	10-11
13	CPC	1	10-11
14	Transneft	0,8571	13
15	Slavneft	0,25	15
16	New Stream	0,1429	17
17–18	Neftisa	0,125	16
17–18	RussNeft	0,125	18
19–20	Dulisma	0	19–20
19–20	NNK (Neftegazholding)	0	19–20
		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)

- 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
- O Environmental Management System is not in place in the company's main production outlets

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

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- 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.

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

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

- official document is in place (e.g. policy) and company is engaged in targeted cooperation with local communities leading traditional way of life
- official document is in place (e.g. policy) or company is engaged in targeted cooperation with local communities leading traditional way of life

o not present

* 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.



1.4 Energy efficiency program

- quantitative indicators of energy efficiency (for example, energy intensity) show positive dynamics compared to the previous year figures
- quantitative indicators showing the implementation of an energy efficiency program are available (for example, energy intensity)
- 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;
- 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 studies 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.).

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

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

• yes • partially (limited to specific projects or subsidiaries) • • not present

7 Voluntary insurance of environmental risks

- presence of a corporate system of voluntary insurance against environmental risks
- voluntary insurance against environmental risks in respect of individual projects or individual subsidiaries
- **O** absence of voluntary insurance against environmental risks

3 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 is in place
- O no oil recovery rate increase program in place



2 Environmental Impact

Section 2 Position	Company	Section 2 Rating Point	Section 2 Rating Point in 2018
1–2	Surgutneftegaz	1,8182	• • 7
1–2	Exxon Neftegaz Ltd (Sakhalin-1)	1,8182	2
3	Sakhalin Energy (Sakhalin-2)	1,6667	3
4–5	Salym Petroleum Development	1,6364	5-6
4–5	Tatneft	1,6364	10
6	Zarubezhneft	1,5455	5–6
7	LUKOIL	1,4242	9
8	CPC	1,4	1
9	INK	1,2727	8
10-11	Gazprom	1,1818	₹ 4
10-11	NOVATEK	1,1818	13
12–13	Rosneft	1	11-12
12–13	Transneft	1	14
14	Gazprom Neft	0,7727	11-12
15–20	Dulisma	0,3636	15–18
15–20	Neftisa	0,3636	20
15–20	NNK (Neftegazholding)	0,3636	19
15–20	New Stream	0,3636	15–18
15–20	RussNeft	0,3636	21
15-20	Slavneft	0,3636	22

List of Rated Criteria

2.] Emission rates of pollutants into the atmosphere

- Indicator = gross emissions of pollutants into atmosphere / hydrocarbons production, kg/t of produced hydrocarbons (tonnes of reference fuel*)
- Indicator = gross emissions of pollutants into atmosphere / hydrocarbons refining, kg/t of processed hydrocarbons (tonnes of reference fuel)
- Indicator = gross emissions of pollutants into atmosphere / hydrocarbons transportation, kg/t of transported hydrocarbons (tonnes of reference fuel)

2.2

Emission rates of greenhouse gases into the atmosphere

- Indicator = gross emissions of greenhouse gases into atmosphere / hydrocarbons production, kg/t of produced hydrocarbons (tonnes of reference fuel)
- Indicator = gross emissions of greenhouse gases into atmosphere / hydrocarbons refining, kg/t of processed hydrocarbons (tonnes of reference fuel)
- Indicator = gross emissions of greenhouse gases into atmosphere / hydrocarbons transportation, kg/t of transported hydrocarbons (tonnes of reference fuel)

2.3 Associated petroleum gas utilization (APG), %

2.4 Discharge rate of wastewater into surface water bodies

- Indicator = discharge of wastewater into surface water bodies / hydrocarbons production, m³/t of produced hydrocarbons (tonnes of reference fuel)
- Indicator = discharge of wastewater into surface water bodies / hydrocarbons refining, m³/t of processed hydrocarbons (tonnes of reference fuel)
- Indicator = discharge of wastewater into surface water bodies / hydrocarbons transportation, m³/t of transported hydrocarbons (tonnes of reference fuel)

2.5 Water consumption for the company's own industrial needs

- Indicator = water consumption for the company's own needs / hydrocarbons production, m³/t of produced hydrocarbons (tonnes of reference fuel)
- Indicator = water consumption for the company's own needs / hydrocarbons refining, m³/t of processed hydrocarbons (tonnes of reference fuel)
- Indicator = water consumption for the company's own needs / hydrocarbons transportation, m³/t of transported hydrocarbons (tonnes of reference fuel)

If the company-specific conversion factor is not available, the following ratio is applied:
 1 ton of oil or gas condensate = 1,43 tons of reference fuel (coal equivalent)
 1000 m³ of gas = 1,154 tons of reference fuel (coal equivalent)

Source: Act of the Russian Statistical Agency No. 46 "On Approval of "Methodology for Calculation of the Fuel and Energy Balance of the Russian Federation in accordance with the international practice" dated June 23, 1999



- 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), t/t
- 2.7 Ratio of polluted areas as of the year's end to the year's beginning
- 2.8 Rate of pipeline accidents leading to spills of oil, condensate, oil products and oilfield water
 Indicator = number of pipeline accidents leading to spills of oil, condensate, oil products and oilfield water / total pipeline length, ea/1,000 km of pipelines
- Amounts of oil, condensate and oil products spilled as the result of accidents and leaks
 Indicator = amount of oil, condensate and oil products spilled as the result of accidents and leaks / hydrocarbon production and transport, kg/t of produced hydrocarbons (tonnes of reference fuel)
- 2.10 The proportion of excess charges in the total payments for adverse environmental impact
 Indicator = charges for excess emissions, discharges, and waste disposal / total environmental charges for the reporting year, *RUB/RUB*
- 2.11 **Power generation from renewable energy sources (RES), including for own needs,** % of the total amount of power generation

The following color codes apply to all criteria in this Section:

- equal or better than industry average
- worse than industry average
- O information is not available for general public

Disclosure

of Information

Section 3 Position	Company	Section 3 Rating Point	Section 3 Rating Point in 2018
1	LUKOIL	1,8889	1
2–3	Zarubezhneft	1,7778	2-4
2–3	Sakhalin Energy (Sakhalin-2)	1,7778	2-4
4	Rosneft	1,5556	2-4
5	Exxon Neftegaz Ltd (Sakhalin-1)	1,4444	5-6
6-9	Gazprom	1,3333	7–9
6-9	Gazprom Neft	1,3333	7–9
6–9	Salym Petroleum Development	1,3333	7–9
6-9	Surgutneftegaz	1,3333	5-6
10	Tatneft	1,2222	11
11-13	INK	1	12-13
11–13	CPC	1	▼ 10
11–13	NOVATEK	1	12–13
14	Transneft	0,8889	14
15–16	New Stream	0,5556	15
15–16	Slavneft	0,5556	20
17	Dulisma	0,4444	16
18–20	Neftisa	0,2222	21-22
18-20	NNK (Neftegazholding)	0,2222	▼ 17-19
18-20	RussNeft	0,2222	21-22
		0 1	2



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)
 - GRI application level Comprehensive or IIRF full
 - O either GRI application level Core or VIRF partial or reporting is in compliance with IPIECA/API/IOGP requirements for oil and gas sector

onot present

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

• yes, for majority of projects • yes, for some projects • not present

- 3.4Access to OSCPs and OSERP (in part of environmental impact) in the public domain• with feedback mechanism• without feedback mechanism• o not present
- 3.5 Informing the public (through the company web-site) about emergencies/accidents and mitigation measures thereof in respect of accidents having significant environmental impact*, causing major damages and resulting in prominent public discussions**, including those caused by contractor activities
- 3.6 Informing the public (through the company web-site) of environment-related conflicts*** and measures taken to resolve them within the areas of the company's operation, including its subcontractors
 - * <u>Social and environmental impact</u> includes fatalities, injuries, significant financial losses (above 1 mln roubles), massive (more than 1000 clients) shutdowns and events involving evident environmental damage. If environmental damage is evident (explosions, fires, strong smoke), the wording "environmental damage was not registered" is not accepted (even if sourced to any official/authority). The fact that environmental damage was not registered does not mean that it did not happen if the evidence (photos, video, smoke, fire) supports the opposite. Events lacking environmental damage like electricity fatalities, construction failures, transport accidents (provided such events did not result in toxic discharges and spills), etc are not considered in this Rating.

** Public discussion is defined as the event mentioned in at least 3 public sources with the mass media status or on web-sites of officially registered or influential public organizations (such as United National Front, Greenpeace, Public Chamber, WWF, Russian Bird Protection Union, All-Russia Environmental Protection Society, Green Patrol, and regional environmental organizations). One publication is enough if the event is mentioned on official website of regulatory authorities (Public Prosecution Office, Rosprirodnadzor, Rostekhnadzor, Rosselkhosnadzor and their regional affiliates).

*** <u>Environment-related conflicts</u> are defined as situations with the past, present or future environmental impact which:

 Result in inspections from regulatory authorities (Public Prosecution Office, Rosprirodnadzor, Rostekhnadzor, Rosselkhosnadzor and their regional affiliates) and are reflected on their web sites;

2. Lead to protest movements from local communities;

4. Are discussed by influential public organizations (such as United National Front, Greenpeace, Public Chamber, WWF, Russian Bird Protection Union, All-Russia Environmental Protection Society, Green Patrol, regional environmental organizations)

3. Are discussed in mass media:

Sometimes the information becomes available after the significant amount of time after the event (for example, oil spills, illegal use of natural resources, violations of environmental safety rules, etc). In this case, the event is dated according to the publication date.



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ENVIRONMENTAL TRANSPARENCY RATING OF OIL AND GAS COMPANIES OPERATING IN RUSSIA — 2019

Criteria 3.5-3.6 are reflected in the Rating as follows:

- reliable data at the company web-site is available or no major accidents during the reporting period
- O fragmentary data at the company web-site
- O data missing or unreliable

3.7 Established procedure in place for processing public complaints

• with feedback mechanism and procedure

• with either a feedback mechanism or a procedure

onot present

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

Access in the public domain to quantitative results of industrial environmental monitoring reports reflecting state of the art and dynamics (as an option — in the form of short informative report)

• yes, for majority of projects • yes, for some projects • not present

Test Mode in 2019

(below criteria are not included in Rating 2019 calculations)

Section 1 Criterion

Availability of plans (or similar documents) for adaptation of company activities to climate changes

- yes, covering the entirety of company activities
- partially (covering separate projects or subsidiaries)
- 0 no

Section 2 Criterion

Recycled and disposed waste (including waste recycled and disposed by third parties) **to total waste generated throughout the year** (including waste accepted from third parties), *t/t*

Total area of contaminated land reclaimed throughout the year to total area of land contaminated throughout the year, ha/ha

Section 3 Criterion

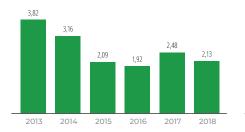
Availability of information on the total length of pipelines exploited by the company beyond its service life

- information on length of pipelines (various categories), pipelines construction dates, permitted pipeline operation time, prolongation of operation time is available for company in general
- information on length of pipelines (various categories), pipelines construction dates, permitted pipeline operation time, prolongation of operation time for company in general is available for separate projects
- O information is not present

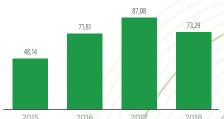


Environmental Impact of Russian Oil and Gas **Companies: Industry Average Indicators**

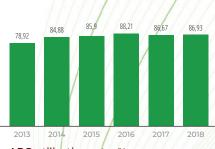
Interannual dynamics of Russian oil&gas industry average indicators based on ratings 2014-2019 is given for criteria supported with sufficient statistical sampling and data homogeneity. At the same time it should be noted that this is not interannual dynamics chart, as considerable data variation (even on the level of one company, year-to-year) calls for additional details and explanations from participants. At the same general picture time, gradually becomes clearer with respect to air emissions, water pollution and waste generation, and this is the unique trait of the Rating. This is what organizers strived to achieve from the very start. In general, it should be noted that as the Rating continues to evolve, more and more companies disclose quantitative data relating to environmental impact, which leads to improved reliability of industry average indicators calculation and appraisal of their interannual dynamics



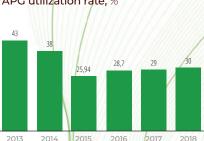
Specific gross emissions of air pollutants, per one ton of hydrocarbons produced, kg / ton of oil equivalent











Share of excess charges, % of total environmental payments

2014 Waste decontamination and disposal, ratio of disposed and decontaminated

0.76

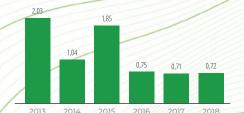
0.69

0.61

0.84

0.65





Specific fresh water withdrawal, m³/ton of hydrocarbons produced equivalent



Environmental Incidents and Disputes – Engaging Oil & Gas Companies into Meaningful Cooperation



In 2019 monitoring of environmental incidents and disputes (an important part of the Environmental Transparency Rating of Oil and Gas Companies preparation) was included in People for Nature project (*wwf.en/peoplefornature*) implemented by WWF/Russia and funded by the European Union.

Reports on and environmental incidents and disputes of oil and gas companies are made based on publicly available information from web-sites of Rostekhnadzor, Rosprirodnadzor, Ministry of Energy of Russian Federation, Russian General Prosecutor Office, and local courts, with account for data and materials provided in mass media and by major Russian and international environmental organisations and NGOs. Participating companies are given an opportunity to submit details in order to rectify possible discrepancies.

The table below shows which companies have submitted such feedback.

Company	Incidents and disputes in 2018 (based on WWF Russia monitoring)	Company provided feedback
Rosneft	50	Yes
LUKOIL	25	Yes
Surgutneftegaz	3	No
Gazprom Neft	11	Yes
Tatneft	3	Yes
Gazprom	81	No
Slavneft	1	No
Exxon NL (Sakhalin–1)	1	Yes
Novatek	1	Yes
RussNeft	5	Yes
Neftisa	1	No
INK	No	—
Salym Petroleum		Yes
Sakhalin Energy (Sakhalin–2)	No	—
Zarubezhneft	No	
NNK (Neftegazholding)	3	No
Dulisma	No	
Transneft	14	No
New Stream		No
СРС	1	Yes

20

The resulting independent database can be used for appraisal of public awareness with regards to environmental incidents and disputes. All reported cases are shown on map (wwf.ru/what-we-do/green-economy/ obshchestvennyy-ekologicheskiy-kontrol-deyateInosti-neftegazovykhkompaniy/spornye-situatsii-avarii-i-intsidenty-kompaniy-neftegazovogosektora-rossii), which makes it easy to identify the most burning issues and major sources of potential conflicts. Rating organizers believe that this approach adds to promotion of business transparency, improves public trust and facilitates cooperation between general public and commercial companies.



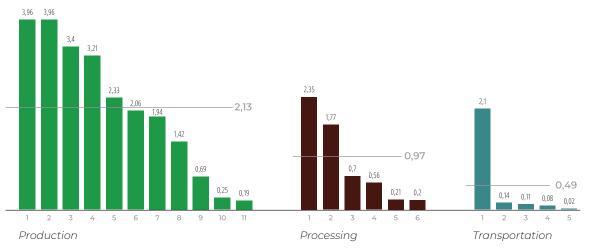
2019

Quantitative Indicators Charts of the Environmental Transparency Rating of Oil & Gas Companies,

2018 data

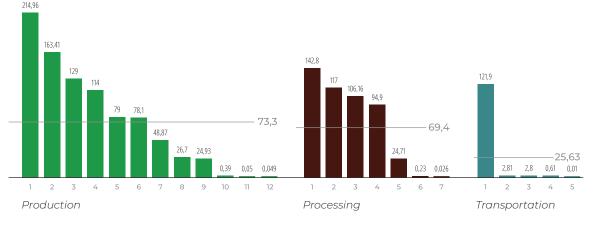
Criterion 2.1

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



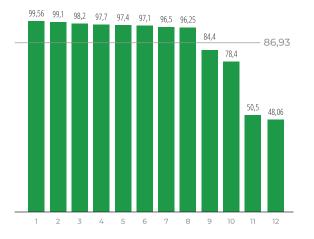
Criterion 2.2

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

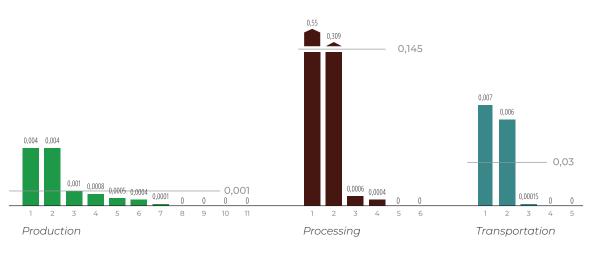




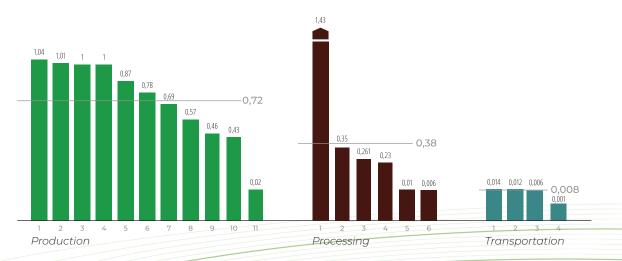
Criterion 2.3 APG utilization rate, %







Criterion 2.5 Specific fresh water withdrawal, m^3/toe

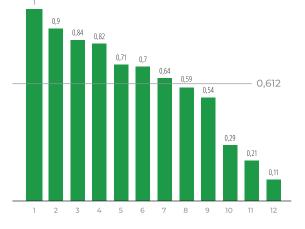


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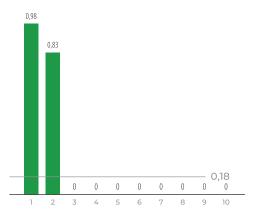
Criterion 2.6 Waste decontamination and disposal, *ratio of disposed and decontaminated*

waste to waste generation, t / t



Criterion 2.7

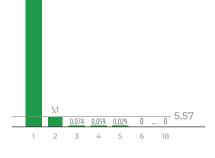
Land pollution dynamics, polluted land area ratio for the beginning to end of the reporting year, ha / ha



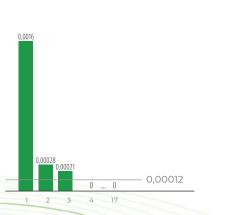
Criterion 2.8 Specific rate

95

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



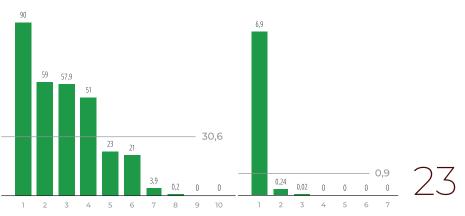
Criterion 2.9 Oil spilled as a result of accidents, kg/toe



Criterion 2.10

Share of excess charges,

% of total environment payments



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



Report



INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT [TRANSLATION FROM RUSSIAN ORIGINAL]

To the management of WWF-Russia

We have undertaken a limited assurance engagement of application of Methodology of Environmental Transparency Rating of Oil and Gas Companies Operating in Russia (year 2019 rating calculation based on 2018 performance indicators) (hereinafter referred to as Methodology) to calculation of Environmental Transparency Rating of Oil&Gas Companies Operating in Russia – 2019 (hereinafter referred to as Rating). Information on results of calculation of Rating is disclosed in the document "Environmental Transparency Rating of Oil&Gas Companies Operating in Russia – 2019" (hereinafter referred to as Rating). Information on results of calculation of Rating is disclosed in the document "Environmental Transparency Rating of Oil&Gas Companies Operating in Russia – 2019" (hereinafter referred to as Reported Information).

Responsibility of the WWF-Russia

WWF-Russia is responsible for calculation of Rating and preparation of the Reported Information. This responsibility includes the design, implementation and maintenance of internal control relevant to the calculation of Rating and preparation of the Reported Information that is free from material misstatement, whether due to fraud or error.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Rules of Independence of the Auditors and Audit Organizations and The Code of Professional Ethics of the Auditors, which are in accordance with International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

The firm applies International Standard on Quality Control 1, Quality Control for Firm that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on application of Methodology to calculation of Rating based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information. This standard requires that we plan and perform this engagement to obtain limited assurance about whether results of calculation of Rating comply with the Methodology and whether the Reported Information is free from material misstatement.

A limited assurance engagement undertaken in accordance with this standard involves assessing compliance of results of calculation of Rating disclosed in the Reported Information with the Methodology.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included inquiries, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we have performed the following procedures:

- study of the Methodology;
- study of the measures taken to ensure the compliance of the Reported Information with the Methodology;

TRANSLATION NOTE: Our report has been prepared in Russian and in English. In all matters of interpretation of information, views or opinions, the Russian version of our report takes precedence over the English version.

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- conducting interviews and obtaining documentary evidence in relation to the Reported Information from representatives of WWF-Russia;
- testing compliance of the list of companies selected for participation in the Rating with the Methodology;
 selective verification of information included in the company profiles for compliance with the data on
- the activities of companies in the Russian Federation, available in the public domain, links to which are given in the company profiles;
- selective verification of the correctness of the color flags and points assigned to the criteria for compliance with the Methodology;
- selective verification of the correctness of data transfer from company profiles to spreadsheets for calculating of Rating, as well as the correctness of the calculations made;
- assessing compliance of results of calculation of Rating disclosed in the Reported Information with the Methodology.

The procedures were performed only in relation to year 2019 rating calculation based on 2018 performance indicators.

The Reported Information should be read in conjunction with the Methodology due to absence of generally recognized and established practices for evaluating and measuring indicators of environmental transparency of oil and gas companies operating in Russia.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about compliance of results of calculation of Rating disclosed in the Reported Information with the Methodology.

Emphasis of Matter

In calculation of year 2019 rating based on 2018 performance indicators Arcticgas and Tomskneft VNK were excluded from the Rating due to the fact that since 2018 Arcticgas has been included in JSC "NOVATEK", and the data of Tomskneft VNK are fully included in the integrated reporting of Rosneft, which is indicated in the section "Oil & Gas Companies Included in the Rating" of the Reported Information. Our conclusion is not modified in respect of the matter.

Limited Assurance Conclusion

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes as to believe that the results of calculation of Rating disclosed in the Reported Information have not complied, in all material aspects, with the Methodology.

FBK, LLC

Practitioner Partner

acting under Power of Attorney No. 76/18 of December 17, 2018 The Russian Federation, Moscow, November 15, 2019



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Environmental Transparency Rating

2019

of Oil and Gas Companies

Operating in Russia



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