

Appendix 7. Main ESG indicators

Corporate governance

GRI 102-18; 102-20; 102-22; 102-23; 102-27; 102-32; 102-35. GRI 405-1

Corporate governance: Independence of Board members, Gender equality, Competence

	2019	2020
Independence of Board members and Board involvement in sustainability matters		
Chairman of the Board of Directors	1	1
Independence of the Chairman of the Board of Directors at appointment	NO	NO
Independent directors	6	6
Non-executive directors	2	3
Executive directors ¹	3	2
Total number of Board members	11	11
Share of independent directors	55%	55%
Number of sustainability and climate-related issues addressed at Board of Directors meetings	20	13
Attendance at in-person meetings	93%	N/A
Share of independent members of the Board of Directors committees		
Strategy, Investment, Sustainability and Climate Adaptation Committee	100%	50%
Audit Committee	100%	100%
Human Resources and Compensation Committee	100%	100%
Health, Safety and Environmental Committee of PJSC LUKOIL		
Number of members	11	15
Number of meetings	2	2
Number of addressed sustainability and climate-related issues	7	8
Share of women	0%	0%
Strategy, Investment, Sustainability and Climate Adaptation Committee of the Board of Directors of PJSC LUKOIL		
Number of members	4	4
Number of meetings	7	7
Number of addressed sustainability and climate-related issues	20	10
Share of women	25%	25%

	2019	2020
Gender composition of the Board of Directors		
Men	9	9
Women	2	2
Share of women	18%	18%
Average age of Board members	65	67
Gender composition of the Management Committee		
Men	14	14
Women	0	0
Share of women	0%	0%
Membership in the Board of Directors		
Up to 5 years	4	7
Up to 10 years	2	1
Over 10 years	3	3
Qualification balance of the Board of Directors members		
Share of members of the Board of Directors of PJSC LUKOIL competent in sustainability and climate-related issues	73%	73%
Persons responsible		
Number of vice-presidents responsible for the Company's climate change-related activities	0	1
Number of vice-presidents responsible for sustainability matters	1	1
Task Forces		
• Decarbonization and Climate Change Adaptation Task Force		
Number of members		15
Number of meetings		1
Number of issues addressed		9
• Sustainability Task Force		
Number of members	13	13
Number of meetings	4	7
Number of addressed sustainability and climate-related issues	7	20

¹ According to the recommendations of the Corporate Governance Code, executive directors are defined not only as members of the Management Committee of PJSC LUKOIL but also as persons employed by the Company.

Climate

Based on the results of the inventory, the boundaries of climate reporting were clarified taking into account the following materiality threshold criterion developed: GHG emissions that amount to at least 99% of the total emissions for each scope in accordance with the full inventory of emission sources shall be accounted for, while an entity can be excluded from reporting for the respective scope provided that its GHG emissions are less than 0.1% of total LUKOIL Group emissions for the given scope.

The materiality criterion was approved by the Decarbonization and Climate Change Adaptation Task Force.

Based on this criterion, direct GHG emissions from oil product supply entities in Russia and abroad, LLC LUKOIL-KNT (the Transportation business sector), as well as from entities of the Other Entities of the Refining, Marketing and Distribution Business Segment (except for the Korobkovsky Gas Processing Plant (KGPP) and LLK-International) were excluded from the reporting for Scope 1.

Organizational reporting boundaries (Scope 1 + Scope 2) for Russian entities include all production assets, oil refining, petrochemical and electric power entities, oil product supply entities, as well as KGPZ and LLK International. For foreign entities, the reporting boundaries include a hydrocarbon production project in Uzbekistan and three refineries in Europe (in Romania, Bulgaria and Italy), as well as 13 oil product supply entities. Thus, the data presented in this Report cover more than 99% of GHG emissions (Scope 1) and 100% of GHG emissions (Scope 2) of LUKOIL Group.

GRI 302-4 *Energy savings from implementation of the Energy Conservation Program of LUKOIL Group entities in Russia, million GJ*

	For 2017-2019	For 2018-2020
Energy	1.2	1.4
Heat	1.6	1.5
Boiler and furnace fuels	12.7	9
Total	15.5	11.9

Note.

The following coefficients under GOST R 51750-2001 were used when converting the data to Joules:
 1 thousand kWh = 3.6 GJ, 1 Gcal = 4.19 GJ, 1 tonne of oil equivalent = 29.3 GJ

GRI 305-1, 305-2

GHG emissions

Indicators	2016	2017	2018	2019	2020
Flaring emissions (Scope 1), million tonnes of CO ₂ E	3.415	2.721	1.637	1.490	1.512
Emissions avoided by using self-generated energy from renewable energy sources (emissions reduction), million tonnes of CO ₂ E					5,573

Indicators	2016	2017	2018	2019	2020
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1. GHG emissions by Russian and foreign entities, million tonnes of CO₂E

1.1. Russian entities

Scope 1	34.723	35.025	34.415	33.925	31.732
Scope 2	8.642	8.089	7.603	7.532	6.246
Scope 1 + 2	43,365	43,114	42,018	41,457	37,978

1.2. Foreign entities

Scope 1	6.259	6.343	6.0283	6.612	5.596
Scope 2	0.927	0.934	1.005	0.928	0.924
Scope 1 + 2	7,186	7,277	7,0333	7,54	6,52

2. Emissions by Russian entities by types of activity, million tonnes of CO₂E2.1. Exploration and production, million tonnes of CO₂E

Scope 1	11.797	10.994	10.824	11.124	10.003
Scope 2	7.056	6.543	6.109	6.009	4.712
Scope 1 + 2	18,853	17,537	16,933	17,133	14,715

2.2. Oil refining and petrochemicals (including LLK-International, KGPZ), million tonnes of CO₂E

Scope 1	10.219	11.491	11.299	11.237	10.612
Scope 2	1.346	1.296	1.193	1.215	1.099
Scope 1 + 2	11,565	12,787	12,492	12,452	11,711

2.3. Power Generation, million tonnes of CO₂E

Scope 1	12.62	12.462	12.206	11.473	11.023
Scope 2	0.13	0.138	0.132	0.125	0.267
Scope 1 + 2	12,75	12,6	12,338	11,598	11,29

2.4. Transportation, million tonnes of CO₂E

Scope 1	0.087	0.078	0.086	0.091	0.094
Scope 2	0.031	0.03	0.034	0.037	0.033
Scope 1 + 2	0,118	0,108	0,12	0,128	0,127

2.5. Oil product supply, million tonnes of CO₂E

Scope 2	0.079	0.082	0.135	0.146	0.135
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3. Emissions by foreign entities by types of activity, million tonnes of CO₂E3.1. Exploration and production (Central Asia), million tonnes of CO₂E

Scope 1	0.046	0.25	0.424	0.383	0.297
Scope 2	0.065	0.105	0.19	0.203	0.125
Scope 1 + 2	0,111	0,355	0,614	0,586	0,422

3.2. Oil refining and petrochemicals (the EU), million tonnes of CO₂E

Scope 1	6.213	6.093	5.6043	6.229	5.299
Scope 2	0.809	0.775	0.761	0.671	0.742
Scope 1 + 2	7,022	6,868	6,3653	6,9	6,041

3.3. Oil product supply entities, million tonnes of CO₂E

Scope 2	0.053	0.054	0.054	0.054	0.057
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Water

The 2018 foreign entity reporting boundaries include: LUKOIL Neftohim Burgas, PETROTEL-LUKOIL SA, LUKOIL Uzbekistan Operating Company. The 2019 boundaries include: the above entities plus ISAB, IOOO LUKOIL Belorussia, and LUKOIL-BULGARIA EOOD.

GRI 303-1 Water withdrawal and use, million cubic meters

	2016	2017	2018	2019	2020
1. Water withdrawal across LUKOIL Group			449.8	694.0	611.0
Within the boundaries for 2018			449.8	464.0	416.5
Within the boundaries for 2019, including:				694.0	611.0
Russian entities	522.2	511.1	428.5	441.0	394.8
including electric power entities	345.1	331.9	297.7	303.6	252.7
Foreign entities			21.3	253.0	216.2
2. Water consumption for own needs (household, industrial, other) across LUKOIL Group			374.4	609.0	543.2
Within the boundaries for 2018			374.4	379.0	348.7
Within the boundaries for 2019, including:				609.0	543.2
Russian entities	415.9	376.4	354.9	358.0	328.7
Foreign entities			19.5	251.0	214.5
3. Other transactions			34.5	28.9	0.0
LUKOIL Group, including:			34.5	28.9	0.0
Within the boundaries for 2018			34.5	28.9	0.0
Within the boundaries for 2019				28.9	0.0
Russian entities		24.2	34.5	28.1	0.0
Foreign entities			0.0	0.8	0.0
4. Unused water transferred to third-party consumers			40.9	56.1	63.1
LUKOIL Group, including:			40.9	56.1	63.1
Within the boundaries for 2018			40.9	56.1	63.1
Within the boundaries for 2019				56.1	63.1
Russian entities			39.1	54.9	62.0
Foreign entities			1.8	1.2	1.1

Notes.

1. Data excludes water produced as a by-product with hydrocarbons and subsequently used for formation pressure maintenance (FPM).
2. The approach to accounting for "Other operations" was revised: before 2020, this category included volumes of water pumped into subsurface formations and residential waste water received from third parties and used in the Group's production processes. Since 2020, these water volumes are accounted for in the «Water for own needs» and «Unused water transferred to third-party consumers» categories.
3. The difference between water withdrawal and water use (water for own needs + unused water of LUKOIL Group transferred to third-party consumers) is due to the specifics of water usage in power generation entities: at energy generating units water is used for equipment cooling, this results in water wastage due to evaporation.
4. In 2018, the water use accounting methodology in the Russian entities was refined - it excluded the duplicate accounting for water used in intra-group transfers (between the LUKOIL Group entities).

GRI 303-3 **Water withdrawal by LUKOIL Group entities by water withdrawal sources, million cubic meters**

	2016	2017	2018	2019	2020
1. Water withdrawal, total across LUKOIL Group (1 = 1.1 + 1.2 + 1.3)			449.8	694.0	611.0
Within the boundaries for 2018			449.8	464.0	416.5
Within the boundaries for 2019				694.0	611.0
Water withdrawn by water withdrawal sources, including:					
1.1. From surface sources			287.0	340.5	285.5
Within the boundaries for 2018			287.0	290.0	244.4
Within the boundaries for 2019, including:				340.5	285.5
sea water					57.8
from other surface sources					227.7
Russian entities	297.4	279.7	267.6	269.7	227.5
Sea water			11.4	11.0	16.7
Water from other surface sources			256.2	258.7	210.8
Foreign entities			19.4	70.8	58.0
Sea water			0.0	50.5	41.1
Water from other surface sources			19.4	20.3	16.9
1.2. From underground sources			99.0	104.8	114.0
Within the boundaries for 2018			99.0	102.3	111.3
Within the boundaries for 2019				104.8	114.0
Russian entities, including:	77.1	76.1	97.1	99.7	108.3
Fresh water			64.7	61.2	60.1
Other water			32.4	38.5	48.2
Foreign entities, including:			1.9	5.1	5.7
Fresh water			0.04	2.5	2.7
Other water			1.9	2.6	3.0
1.3. From other sources, including:			63.8	248.7	211.5
Within the boundaries for 2018			63.8	71.7	60.8
Within the boundaries for 2019				248.7	211.5
Russian entities	147.6	155.3	63.8	71.6	59.0
Foreign entities			0.0	177.1	152.5

Notes.

1. Data excludes water produced as a by-product with hydrocarbons and subsequently used for FPM purposes.
2. Data on the volume of water withdrawal from underground sources includes water produced as a by-product with hydrocarbons and subsequently pumped into underground formations.
3. Water withdrawal from other sources includes withdrawals from centralized water supply sources, and also residential waste water received and transferred to treatment facilities without being used by the Group's entities.
4. The increase in the volume of water withdrawal from underground sources in 2020 by the Group's Russian entities was due to industrial needs (facilitation of the technological processes and well drilling).

**Specific water consumption for own needs by the LUKOIL Group's Russian entities
by type of activity**

	2016	2017	2018	2019	2020
Oil and gas production, cubic meters/tonne of oil equivalent in hydrocarbon resources	1	1	1	1	1
Oil refining, cubic meters/tonne of processed oil	0.6	0.5	0.5	0.5	0.5
Petrochemicals, cubic meters/tonne of processed raw materials	6.2	7.3	6.4	6.9	6.8
Oil Product Supply, cubic meters/tonne of oil products sold	0.06	0.07	0.1	0.07	0.07
Transportation, cubic meters/tonne of oil, oil products transported	0.04	0.02	0.02	0.01	0.02
Power Generation, cubic meters/tonne of oil equivalent in consumed fuel	40.1	34.4	34	35.3	32.9

Notes.

1. Specific indicators are calculated based on the volumes of water consumed by LUKOIL Group entities for their own needs.
2. Fluctuations in the indicators of petrochemical companies are mainly caused by changes in the production volume.
3. Changes in the indicator in the Power Generation business sector are attributable to the fact that in 2019, together with a decrease in production due to the warm winter, LLC LUKOIL-Kubanenergo and LLC LUKOIL-Astrakhanenergo conducted several technological maintenance activities.
4. Indicators for specific water consumption in The Power Generation business sector are calculated using the formula: volume of withdrawn water /fuel consumed for production (electricity). LLK LUKOIL-Ekoenergo (due to the lack of fuel consumption) and LLK LUKOIL-Energoseti (due to the fact that the organization does not carry out electricity production activity) are excluded from the calculation. Data on organizations that transfer heat is included in data on generating organizations, which is explained by the specifics of technological processes.

GRI 303-4 Water discharges by LUKOIL Group entities, million cubic meters

	2016	2017	2018	2019	2020
1. Total water discharges across LUKOIL Group (1 = 1.1+ 1.2 + 1.3 + 1.4 + 1.5)			352.5	568.0	485.3
Within the boundaries for 2018			352.5	357.6	308.1
Within the boundaries for 2019, including:				568.0	485.3
Russian entities	244.0	236.4	337.6	344.3	297.5
Foreign entities			14.9	223.7	187.8
Water discharge by destination					
1.1. Water discharge into surface water bodies for LUKOIL Group (excl. water discharge into the sea)			218.1	216.6	161.7
Within the boundaries for 2018			218.1	216.5	161.7
Within the boundaries for 2019, including:				216.6	161.7
Russian entities			203.4	203.4	151.3
Foreign entities			14.7	13.2	10.4
1.2. Water discharge into the sea			11.3	221.2	188.4
Within the boundaries for 2018			11.3	10.9	12.7
Within the boundaries for 2019, including:				221.2	188.4
Russian entities			11.3	10.9	12.7
Foreign entities			0.0	210.3	175.7
1.3. Water discharge into underground formations			104.2	106.7	109.7
Within the boundaries for 2018			104.2	106.7	109.7
Within the boundaries for 2019, including:				106.7	109.7
Russian entities			104.0	106.5	109.5
Foreign entities			0.2	0.2	0.2
1.4. Water transferred after use to a third party (excluding intra-group exchanges)			18.4	23.4	25.5
Within the boundaries for 2018			18.4	23.4	24.0
Within the boundaries for 2019, including:				23.4	25.5
Russian entities			18.4	23.4	24.0
Foreign entities			0.0	0.0	1.5
1.5. Other water discharge					
LUKOIL Group, including:			0.5	0.1	0.0
Russian entities			0.5	0.1	0.0
Foreign entities			0.0	0.0	0.0

Notes

1. Data excludes water produced as a by-product with hydrocarbons and subsequently used for FPM.
2. Water discharges into underground formations include water produced as a by-product with hydrocarbons and subsequently pumped into underground formations.
3. In 2018, the water use accounting methodology in the Russian entities was refined — it excluded the possibility of duplicate accounting for water used in intra-group transfers (between the LUKOIL Group entities).
4. The increase in the volume of water discharge into underground formations (1.3) in 2020 was due to geological specifics of licensed blocks.
5. The increase in the volume of water transferred to a third party (1.4) in 2020 was due to the increased water consumption of third parties.

GRI 306-1 *Water discharge into surface water bodies by wastewater quality across LUKOIL Group, million cubic meters*

	2016	2017	2018	2019	2020
1. Total water discharged into surface water bodies across LUKOIL Group (1 = 1.1 + 1.2 + 1.3)				216.6	161.7
Russian entities	244.0	236.4	214.7	203.4	151.3
Foreign entities				13.2	10.4
Water discharge into surface water bodies by wastewater quality, including:					
1.1. clean standard-quality wastewater				185.0	126.4
Russian entities	223.7	206.2	186.3	176.1	126.4
Foreign entities				8.9	0.00
1.2. wastewater treated to standard quality				20.2	26.7
Russian entities	19.5	29.1	27.5	16.8	16.3
Foreign entities				3.4	10.4
1.3. polluted wastewater				11.4	8.6
Russian entities	0.7	1.1	0.9	10.5	8.6
Foreign entities				0.9	0.0
2. Water discharges into the sea across Lukoil Group (2 = 2.1 + 2.2 + 2.3)				221.2	188.4
Russian entities				10.9	12.7
Foreign entities				210.3	175.7
Water discharge into surface sea water bodies by wastewater quality, including:					
2.1. clean standard-quality wastewater				220.6	188.0
Russian entities				10.7	12.5
Foreign entities				209.9	175.5
2.2. wastewater treated to standard quality				0.4	0.2
Russian entities				0.001	0.000
Foreign entities				0.40	0.2
2.3. Polluted wastewater				0.2	0.2
Russian entities				0.18	0.2
Foreign entities				0.0	0

Notes.

1. Data excludes water produced as a by-product with hydrocarbons and subsequently used for FPM.
2. The difference in water withdrawal and discharge volumes is explained by the fact that some of the water is transferred to third parties without being used by LUKOIL Group entities and some is used in circulating water supply systems or reused-sequentially used (to be deleted).
3. The increase in discharges of clean standard-quality wastewater into surface sea water bodies in Russian entities in 2020 was due to the increase of the volume of water withdrawal for the purposes of well drilling at LLC LUKOIL-Nizhnevolskneft and further discharge of the water into the sea.
4. Polluted wastewater includes insufficiently treated wastewater and wastewater that is not treated.

Specific discharges of insufficiently treated wastewater into water bodies by Russian entities of LUKOIL Group

	2016	2017	2018	2019	2020
Oil and gas production, cubic meters/tonne of oil equivalent in hydrocarbon resource		0.008	0.004	0.004	0.0005
Oil refining, cubic meters/tonne of refined oil		0	0	0.037	0.2
Oil Product Supply, cubic meters/tonne of oil products sold		0.004	0.003	0.002	0.002
Transportation, cubic meters/tonne of oil, oil products transported		0.008	0.009	0.008	0.008

Notes.

1. No insufficiently treated water is discharged into water bodies by the petrochemical and power generating entities (excluded from the table).
2. The specific discharges of insufficiently treated wastewater by the oil refining entities are calculated based on the volume of production wastewater from LUKOIL-Ukhtaneftepererabotka, excluding any utility wastewater received from MUE Ukhtavodokanal.

Volumes of circulating water supply and reused water across LUKOIL Group entities, million cubic meters

	2016	2017	2018	2019	2020
Russian entities	3,302.5	3,128.6	3,180.7	3,106.0	2,967.6
Volume of circulating water supply	2,371.9	2,253.1	2,284.2	2,240.9	2,160.9
Volume of reused-sequentially used water	930.6	875.5	896.5	865.1	806.7
Foreign entities			200.0	216.2	210.6
Volume of circulating water supply			198.9	214.0	207.8
Volume of reused-sequentially used water			1.1	2.2	2.8

Water produced as a by-product with hydrocarbons and subsequently used for FPM

	2016	2017	2018	2019	2020
Volume of water for LUKOIL Group					350.057
Russian entities					350.038
Foreign entities					0.019

Emissions

The 2018 foreign entity reporting boundaries include: LUKOIL Neftohim Burgas, PETROTEL-LUKOIL SA, LUKOIL Uzbekistan Operating Company. The 2019 boundaries include: the abovementioned entities and ISAB, IOOO LUKOIL Belorussia, and LUKOIL-BULGARIA EOOD.

Specific emissions of pollutants into the atmosphere by Russian entities of LUKOIL Group by types of activity

	2016	2017	2018	2019	2020
Oil and gas extraction, kg/tonne of oil equivalent in extracted hydrocarbon resources		4.1	3.4	3.2	3.3
Oil refining, kg/tonne of refined oil		0.9	0.8	0.9	0.8
Petrochemicals, kg/tonne of processed raw materials		1.3	1.1	1.4	1.6
Oil product supply, kg/tonne of oil products sold		0.8	0.8	0.7	0.7
Transportation, kg/tonne of oil, oil products transported		0.1	0.2	0.2	0.2
Power generation, kg/tonne of oil equivalent in consumed fuel		2.6	2.9	2.9	3.5

Notes.

1. The increase in the indicator in the Power Generation business sector was due to the combustion of reserve fuel (fuel oil) at several CHPPs. Change in the indicator in the Petrochemicals business sector was caused by an increase in production output.
2. Specific emissions of pollutants in The Power Generation business sector are calculated using the formula: mass air pollutant emissions /consumed fuel for the production of products (electricity). LLK LUKOIL-Ekoenergo (due to the lack of fuel consumption) and LLK LUKOIL-Energoseti (due to the fact that the organization does not carry out electricity production activity) are excluded from the calculation. Data on organizations that transfer heat is included in data on generating organizations, which is explained by the specifics of technological processes. At the same time, emissions from organizations that transmit thermal energy are 0.

GRI 305-7 *Gross emissions of pollutants into the atmosphere (net of CO₂) by LUKOIL Group entities, thousand tonnes*

	2016	2017	2018	2019	2020
Total pollutant emissions			451.3	428.8	394.3
Within the boundaries for 2018			451.3	420.4	387.7
Within the boundaries for 2019, including:				428.8	394.3
Russian entities	627.5	502.5	433.3	402.3	375.7
Foreign entities			18.0	26.5	18.6
including by pollutant type:					
NO_x emissions			49.4	49.9	44.7
Within the boundaries for 2018			49.4	47.5	42.9
Within the boundaries for 2019, including:				49.9	44.7
Russian entities	44.0	49.6	47.1	46.2	41.7
Foreign entities			2.3	3.7	3.0
SO₂ emissions			37.5	40.8	31.3
Within the boundaries for 2018			37.5	35.7	27.1
Within the boundaries for 2019, including:				40.8	31.3
Russian entities	59.7	23.0	25.1	22.0	19.2
Foreign entities			12.4	18.8	12.1
solid particle emissions			14.9	15.1	13.9
Within the boundaries for 2018			14.9	15.0	13.9
Within the boundaries for 2019, including:				15.1	13.9
Russian entities	26.9	24.3	14.7	14.9	13.8
Foreign entities			0.2	0.2	0.1
CO emissions			155.9	154.7	142.8
Within the boundaries for 2018			155.9	154.0	142.3
Within the boundaries for 2019, including:				154.7	142.8
Russian entities	295.9	216.6	153.9	152.2	141.0
Foreign entities			2.0	2.5	1.8
hydrocarbon emissions			73.9	61.0	48.8
Within the boundaries for 2018			73.9	61.0	48.8
Within the boundaries for 2019, including:				61.0	48.9
Russian entities	199.2	187.8	72.8	59.8	47.3
Foreign entities			1.1	1.2	1.6
volatile organic compounds (VOC)			115.5	105.9	111.0
Within the boundaries for 2018			115.5	105.9	111.0
Within the boundaries for 2019, including:				105.9	111.0
Russian entities			115.5	105.9	111.0
Foreign entities			0.0	0.048	0.0
emissions of other pollutants			4.2	1.3	1.7
Within the boundaries for 2018			4.2	1.3	1.7
Within the boundaries for 2019, including:				1.3	1.7
Russian entities	1.8	1.2	4.2	1.3	1.7
Foreign entities			0	0.01	0.02

Notes.

1. Hydrocarbon emissions for 2016-2017 include VOCs.
2. Emissions of other pollutants include specific substances, except for those listed in the table, according to the state statistical forms, and the share of which is less than 1% of total emissions.
3. In 2020, the methodology for accounting other pollutants category for foreign organizations was refined: substances belonging to emissions pollutants indicated in the table were identified and taken into account in the corresponding categories (lines of the table). Data for 2019 has been recalculated.

Waste

The 2018 foreign entity reporting boundaries include: LUKOIL Neftohim Burgas, PETROTEL-LUKOIL SA, LUKOIL Uzbekistan Operating Company. The 2019 boundaries include: the abovementioned entities and ISAB, IOOO LUKOIL Belorussia, and LUKOIL-BULGARIA EOOD.

GRI 306-2 Waste movement at LUKOIL Group, thousand tonnes

	2016	2017	2018	2019	2020
Waste at the beginning of the reporting year			956.0	910.0	946.8
Within the boundaries for 2018			956.0	904.8	943.1
Within the boundaries for 2019				910.0	946.8
Russian entities	912.0	765.0	933.0	885.4	919.7
Foreign entities			23.0	24.6	27.1
Waste generated during the reporting year			1,556.0	1,783.1	2,178.4
Within the boundaries for 2018			1,556.0	1,747.2	2,138.7
Within the boundaries for 2019				1,783.1	2,178.4
Russian entities	1,033.0	1,434.0	1,529.0	1,671.8	1,960.4
Foreign entities			27.0	111.3	218.0
Received from third parties			6.0	4.6	4.3
Russian entities			6.0	4.5	4.2
Foreign entities			0.0	0.1	0.1
Amount of waste used, neutralized, and transferred to specialized entities, as well as landfill waste			1,609.0	1,750.9	2,217.1
Within the boundaries for 2018			1,609.0	1,713.6	2,177.7
Within the boundaries for 2019				1,750.9	2,217.1
Russian entities	1,115.0	1,396.0	1,582.0	1,642.1	2,000.2
Foreign entities			27.0	108.8	216.9
Waste at the end of the reporting year			905.0	946.8	912.4
Within the boundaries for 2018			905.0	943.1	908.4
Within the boundaries for 2019				946.8	912.4
Russian entities	765.0	933.0	886.0	919.7	884.1
Foreign entities			19.0	27.1	28.3

Notes.

1. The amount of waste at the beginning and end of the reporting year (waste remaining in accumulation) depends on the organization of the production process and the schedules for recycling/neutralizing the generated waste. Drilling waste comprises the main share of waste remaining in the accumulation. Drilling waste generated as a result of construction of cluster sites, the drilling of which began at the end of the year, is disposed of during the following reporting year, after finalization of drilling at the entire site. Thus, the volume of «transition» waste depends on the scope of drilling operations.
2. The rise in waste generation in 2020 across Russian entities is caused by an increased amount of sewage sludge and construction waste, that was generated during the dismantling of buildings and structures for the construction of technological facilities at the Nizhny Novgorod and Volgograd refineries. In addition, the amount of oil-contaminated waste at LLC LUKOIL-Komi increased due to the significant formation of oil-contaminated soil as a result of pipeline depressurization.
3. The dynamics of the amount of waste used, neutralized and transferred to specialized organizations depends on the dynamics of the amount of waste generated. Generated waste is fully disposed of, neutralized, transferred to specialized organizations.
4. Data on waste across Russian entities are given without taking into account rock formed as a result of mine oil production at LLC LUKOIL-Komi.

GRI 306-2 Waste by hazard class across LUKOIL Group, thousand tonnes

	2019			2020		
	Waste at the beginning of the year	Waste generated during the year	Waste at the end of the year	Waste at the beginning of the year	Waste generated during the year	Waste at the end of the year
LUKOIL Group				946.8	2178.4	912.4
Hazardous				45.5	447.1	45.7
Non-hazardous and low-hazard waste				901.3	1731.3	866.7
1-5 hazard class waste at Russian entities of LUKOIL Group	885.4	1671.8	919.7	919.7	1960.3	884.1
including:						
oil-containing	22.2	294.1	19.9	19.9	401.0	20.1
drilling waste	108.4	1131.4	148.2	148.2	1200.2	109.2
Hazard Class 1	0.0008	0.033	0.002	0.002	0.0392	0.0016
Hazard Class 2	0.0014	0.0937	0.0043	0.0045	0.1277	0.0089
Share of waste of Hazard Classes 1 and 2	0.0002%	0.01%	0.0007%	0.0007%	0.0085%	0.0012%
Hazard Class 3 (incl. oil-containing)	22.8	253.2	20.6	20.6	303.8	20.9
Share of waste of Hazard Classes 1, 2, and 3	2.6%	15.2%	2.2%	2.2%	15.5%	2.4%
Share of waste of Hazard Classes 1, 2, and 3	22.8	253.3	20.6	20.6	304.0	20.9
Hazard Class 4	830.7	1287.2	868.0	868.0	1396.1	828.8
Hazard Class 5	31.9	131.3	31.1	31.1	260.2	34.4
TOTAL non-hazardous and low-hazard waste (Classes 4 and 5)	862.6	1418.5	899.1	899.1	1656.3	863.2
Waste at Foreign entities of LUKOIL Group				27.1	218.1	28.3
Hazardous				24.9	143.1	24.8
Non-hazardous				2.2	75.0	3.5

Note.

The discrepancy between the amount of waste at the end of 2019 and the start of 2020 was due to the inclusion of LLC KamyshinTeploEnergo indicators into LLC LUKOIL-Volgogradenergo reporting in 2020 (LLC KamyshinTeploEnergo was added to LLC LUKOIL-Volgogradenergo structure in 2019)

Safety

GRI 403-9 Number of occupational accidents and employees injured in workplace accidents at LUKOIL Group entities

Indicator	2016	2017	2018	2019	2020
Total number of occupational accidents, including:	19	20	21	19	28
fatal	4	4	1	2	2
high-consequence work-related injuries			5	8	7
number of minor injuries			15	9	19
number of microtraumas			3	7	4
Number of employees injured in workplace accidents (total number of injuries), including:	28	22	23	25	28
number of fatalities (FA)	4	4	1	2	2
number of lost time injuries (traumas) (LTI)	24	18	22	23	26

Note.

If during the reporting period an employee suffered more than one injury, each case is counted as a separate injury. The term "microtrauma" is used according to the GRI definition.

GRI 403-9 Indicators related to occupational injuries at contractor organizations in Russia and abroad

	2016	2017	2018	2019	2020
Total number of occupational accidents, including:	26	20	9	13	10
fatal	8	7	1	6	3
high-consequence work-related injuries		4	3	1	1
Number of employees injured in workplace accidents (total number of injuries), including:	32	25	9	16	11
number of fatalities (FA)	8	10	1	7	4
number of lost time injuries (LTI)	24	15	8	9	7

LUKOIL Group HSE training indicators

	2016	2017	2018	2019	2020
Scope of training, person-courses	47,560	56,481	60,106	59,314	65,220
Russian entities	33,898	42,114	46,485	1,894	52,685
Foreign entities	13,662	14,367	13,621	2,330	12,535
By employee category (Russian and foreign entities)					
Managers				14,385	16,334
Specialists				11,194	12,257
Workers and other personnel				33,735	36,629
Training costs ("Employee training and advanced vocational training" category), RUB million	329.8	327.9	323.2	263.8	339.8

Note.

Data on the amount of training refer to mandatory HSE employee training and certification programs and include both in-person and remote employee training.

Indicators of LUKOIL Group Russian entities preparedness for emergencies

	2016	2017	2018	2019	2020
Number of trainings conducted, including:		193	178	200	163
training on the elimination of a potential oil/oil product spill		109	91	117	94
Number of staff involved in trainings, people		6,640	5,810	6,692	4,631
Number of site drills		10,566	11,996	10,739	12,812
Number of staff involved in the drills, people		75,649	88,300	97,852	83,859

Note.

The dynamics of the indicators depend on training frequency and topics. For example, federal and regional training sessions under the Spill Prevention and Response Plans are conducted once every two years, with staff drills between breaks. Emergency commissions of the Russian Federation constituents determine the procedure and frequency of preparedness checks of personnel and equipment involved in local, regional, and territorial SPRPs training. Because of the pandemic, training schedules changed.

GRI 403-8 Percentage of employees covered by the management systems certified to be compliant with the ISO 14001 and OHSAS 18001 international standards

	2016	2017	2018	2019	2020
LUKOIL Group, %		90	84	83	95

Employees

GRI 102-8 Personnel characteristics by type of employment, employment contract, and gender, people (headcount)

	2018		2019		2020	
Headcount	105,991	%	105,624	%	104,264	%
Employee breakdown by gender						
Men	62,205	59%	62,007	59%	61,183	59%
Women	43,786	41%	43,617	41%	43,081	41%
Employee breakdown by type of employment						
Full-time	86,319	99.5%	105,168	99.6%	103,972	99.7%
Part-time	406	0.5%	456	0.4%	292	0.3%
Employee breakdown by type of employment contract						
Permanent	79,542	92%	98,020	93%	96,659	93%
men (% of total men headcount)			58,808	94.8%	57,854	95%
women (% of total women headcount)			39,212	89.9%	38,805	90%
Temporary	7,167	8%	7,604	7%	7,605	7%
men (% of total men headcount)			3,202	5.2%	3,329	5.4%
women (% of total women headcount)			4,402	10.1%	4,276	9.9%

Note.

Breakdown by type of employment and by type of employment contract for 2018 is accounted for a limited number of Group entities in Russia.

GRI 102-8 *Personnel characteristics by category and age as at December 31 of each reporting year*

	2016	2017	2018	2019	2020
Total for LUKOIL Group	110,101	107,405	105,991	105,624	104,264
Breakdown by category					
Managers	13,322	13,323	12,840	12,806	12,694
Specialists	30,106	28,829	28,091	28,691	28,319
Workers and other personnel	66,673	65,253	65,060	64,127	63,251
Including:					
Russian entities of LUKOIL Group	90,112	89,323	88,019	88,434	87,858
Managers	11,535	11,365	10,873	10,853	10,845
Specialists	24,824	24,557	23,950	24,538	24,141
Workers and other personnel	53,753	53,401	53,196	53,043	52,872
Foreign entities of LUKOIL Group	19,989	18,082	17,972	17,190	16,406
Managers	1,786	1,958	1,967	1,953	1,849
Specialists	5,279	4,272	4,141	4,153	4,178
Workers and other personnel	12,924	11,852	11,864	11,084	10,379
Breakdown by gender					
Across LUKOIL Group	110,101	107,405	105,991	105,624	104,264
Under 35	43,787	42,772	41,174	39,179	36,955
36 to 40 years	17,807	17,253	17,346	17,670	17,962
41 to 50 years	28,727	28,564	29,069	29,793	30,266
51 and above	19,780	18,816	18,402	18,982	19,081
Russian entities of LUKOIL Group	90,112	89,323	88,019	88,434	87,858
Under 35	36,361	35,931	34,700	33,310	31,615
36 to 40 years	14,039	14,007	14,142	14,624	15,085
41 to 50 years	22,944	23,274	23,725	24,545	25,136
51 and above	16,768	16,111	15,452	15,955	16,022
Foreign entities of LUKOIL Group	19,989	18,082	17,972	17,190	16,406
Under 35	7,426	6,841	6,474	5,869	5,340
36 to 40 years	3,768	3,246	3,204	3,046	2,877
41 to 50 years	5,792	5,290	5,344	5,248	5,130
51 and above	3,003	2,705	2,950	3,027	3,059

Percentage of female managers of total number of managers of the respective level at LUKOIL Group entities (headcount), %

Employee category	2016	2017	2018	2019	2020
CEO of a LUKOIL Group entity				1	2
Deputy Heads, Chief Engineer, Chief Accountant				18	18
Head of a branch, TPU, or another standalone business unit				4	7
Heads of departments				26	27

GRI 401-2 Scope of services provided under social programs at LUKOIL Group

Indicator	2016	2017	2018	2019	2020
LUKOIL Group, total		468,150	430,323	456,495	456,750
including:					
Health protection, services		325,711	286,746	322,795	321,215
Social support for families with children, services		65,311	62,241	59,480	60,267
Non-state pension coverage, people		12,453	12,263	12,115	13,361
Support for pensioners, people		43,281	44,990	42,825	43,468
Other, services		21,394	24,083	19,280	18,439
Specifically for Russian entities, total,		402,709	357,277	387,154	386,541
including:					
Health protection, services		276,063	229,781	267,830	265,984
Social support for families with children, services		61,461	58,664	55,308	56,650
Non-state pension coverage, people		5,795	6,363	6,345	7,308
Support for pensioners, people		43,116	44,884	42,689	43,265
Other, services		16,274	17,585	14,982	13,334

Note.

A service provided to an employee under social programs constitutes the provision of various types of social assistance and support at the employee's request in kind (e.g. vaccinations) or in cash, to pay for the service or to compensate for its cost.

GRI 404-3 Percentage of employees receiving regular performance and career development reviews at PJSC LUKOIL

Indicator	2016	2017	2018	2019	2020
PJSC LUKOIL headcount, people		2,331	2,351	2,406	2,204
Total PJSC LUKOIL employees who received an official performance review, people		2,109	2,121	2,210	2,012
Percentage of the total number of PJSC LUKOIL employees		90%	90%	92%	91%

Financial indicators

201-1 (2016) *Direct economic value generated and distributed, RUB mln*

	2016	2017	2018	2019	2020
Direct economic value generated	5,256,250	6,010,089	8,058,338	7,876,876	5,655,070
Revenue	5,227,045	5,936,705	8,035,889	7,841,246	5,639,401
Income from financial investments	14,756	15,151	19,530	25,134	13,051
Income from disposal of tangible assets	14,449	58,233	2,919	10,496	2,618
Distributed economic value	-4,746,967	-5,394,491	-7,267,222	-6,985,273	-5,472,090
Operating expenses	-3,413,258	-3,908,114	-5,297,908	-5,076,133	-3,753,470
Wages and salary	-136,035	-127,851	-135,671	-143,602	-154,093
Other employee payments and benefits	-20,370	-1,135	-31,300	-31,366	-31,366
Payments to capital providers, including:	-180,423	-180,371	-200,286	-226,376	-449,998
dividends paid	-130,728	-141,499	-160,365	-184,787	-410,898
interest paid to creditors	-49,695	-38,872	-39,921	-41,589	-39,100
Budget contributions	-984,821	-1,168,011	-1,593,272	-1,498,568	-1,074,740
Societal investment	-12,060	-9,009	-8,785	-9,228	-8,423
Undistributed economic value	509,283	615,598	791,116	891,603	182,980

Notes.

The calculation of the following indicators has been clarified:

- Income from disposal of tangible assets (2019): other types of income are excluded, except for income from the disposal or retirement of assets;

- Interest paid to creditors (2016–2018): interest expenses are recalculated on a cash basis;

- Budget contributions (2018–2019): deferred taxes are excluded. The data is presented on the accruals basis, except for the «Payments to capital providers» indicator, for which the cash basis approach was used.

Income from financial investments = Income from interest on deposits + Income from interest on loans issued + Other financial income.

Income from disposal of tangible assets = Income from sale and disposal of assets.

Operating expenses = Operating expenses + Cost of purchased oil, gas and refined products + Transportation expenses + Selling, general and administrative expenses – Wages and salaries – Other employee payments and benefits + Exploration expenses.

Wages and salaries = Labor pay (including labor pay, estimated liabilities, compensation and incentive payments, pension insurance, voluntary health insurance, voluntary accident insurance).

Other employee payments and benefits = Employee reward program payments.

Dividends paid = Dividends paid on Company shares + Dividends paid to non-controlling interest holders.

Interest paid to creditors = Interest expense

Budget contributions = Taxes (other than income tax) + Excise taxes and export duties + Current income tax.

Societal investment = Charity expenses.

Average salaries at Russian LUKOIL Group entities

Existing regions of operation	2018			2019			2020
	Average salary (LUKOIL)	Average salary in the region	Average salary (LUKOIL)	Average salary in the region	Average salary (LUKOIL)	Average salary in the region	
		(January–December 2018)		(January–December 2019)		(January–December 2020)	
Regions where production facilities are located							
Astrakhan Region	88,215	33,748	92,620	35,792	95,488	39,037	
Volgograd Region	62,445	30,350	65,277	32,737	66,904	35,599	
Kaliningrad Region	89,637	32,634	89,645	34,357	87,477	37,497	
Nenets Autonomous Area	124,451	82,754	128,702	86,815	138,227	91,677	
Nizhny Novgorod Region	73,081	32,909	71,593	35,692	73,828	37,449	
Perm Territory	75,455	35,577	79,152	38,562	79,877	41,203	
Komi Republic	97,993	50,186	103,113	53,162	106,758	56,780	
Samara Region	56,702	33,620	60,156	36,362	57,384	38,747	
Saratov Region	51,443	26,821	57,996	28,503	64,010	33,365	
Stavropol Territory	58,071	28,651	54,736	31,867	56,880	33,708	
Khanty-Mansi Autonomous Area — Yugra	104,709	71,000	109,058	74,525	112,514	79,057	
Yamal-Nenets Autonomous Area	124,257	96,846	131,225	100,456	136,883	110,759	
Regions where only oil product supply entities operate, as well as LUKOIL Technologies and LUKOIL-Engineering							
Moscow (excluding PJSC LUKOIL)	104,845	83,678	137,143	94,011	111,262	100,506	
Republic of Bashkortostan	67,986	33,017	73,090	36,495	73,561	38,706	
Vologda Region	Less than 500 people	35,545	45,144	39,132	45,549	42,779	
Krasnodar Territory	50,214	33,583	52,249	36,155	51,517	37,666	
Moscow Region	60,779	50,723	56,660	55,270	58,533	57,087	
Rostov Region	36,232	30,653	38,443	33,490	39,109	35,563	
Saint-Petersburg	71,004	60,123	73,440	63,157	73,101	68,383	
Sverdlovsk Region	Less than 500 people	37,593	47,567	40,900	48,866	43,154	
Tyumen Region	154,102	68,671	165,436	72,221	164,825	77,795	
Chelyabinsk Region	40,004	34,980	44,437	37,308	46,664	38,693	

Note.

Given the large number of countries in which LUKOIL Group entities operate, certain indicators (such as «Share of local employees,» «Average salary») are disclosed for significant regions. The definition of significant regions is given in Appendix 6. Average salary in the regions where one Group entity operates = Average salary in this particular organization. In the regions where several Group entities operate, the average salary (weighted average) for these organizations is indicated.

Changes in the list of regions are due to fluctuations in the headcount of the Group's entities.

Economic effect of the implementation of the Energy Conservation Program, RUB million

	2016	2017	2018	2019	2020
Total across Russian LUKOIL Group entities		1,185	1,165	1,445	1,261

Financing of APG use activities, RUB billion


	2016	2017	2018	2019	2020
Total across Russian LUKOIL Group entities	24	15	8	10	5



Note.



The indicator covers the expenses on the construction and reconstruction of APG preparation, transportation, and processing facilities, as well as heat and electric power generation facilities in Russia.

The change in the indicator is attributed to the schedule of activities under the effective APG use program.


SASB indicators

Code	Definition	Segment: E – Extraction, R – Refining, Marketing, and Distribution, S – Services (drilling, others), T – Transportation	Response / reference to indicators in Sustainability Report for 2020	Documents
Management				
EM-EP 110a3) EM-RM 110a3) EM-MD 110a3)	Long- and mid-term strategy to reduce direct GHG emissions. Reduction targets. Analysis of activities related to these targets	E, R	In 2020, the development of a climate strategy and GHG reduction targets continued	Annual Report 
EM-EP 160 a1)	Description of the environmental management system	E, T	A unified environmental management system — part of the Integrated Health, Safety, and Environment Management System — is in place for all business segments	

Code	Definition	Segment: E – Extraction, R – Refining, Marketing, and Distribution, S – Services (drilling, others), T – Transportation	Response / reference to indicators in Sustainability Report for 2020	Documents
Greenhouse gases				
EM-EP 110a1) EM-RM 110a1) EM-MD 110a1)	Total gross GHG emissions, including the share of methane, the share of emissions by countries with legal regulation of GHG emissions	E, T, R	P. 54-55, 181	Annual Report  Analyst's Handbook 
Emissions				
EM-EP 120 a1) EM-RM 120 a1) EM-MD 120 a1)	Volume of NO _x , SO _x , and other pollutant emissions to the atmosphere, VOCs, and PM10 dust	E, T, R	P. 189	
Water				
EM-EP 140 a1 EM-RM 140 a1	Amount of freshwater withdrawn, share of total consumption, share in regions with severe water scarcity	E, R	P. 104, 183	
Occupational safety				
EM-RM 320 a2)	Description of the management system to improve safety culture	E, R	Improving safety culture is one of the mechanisms of the Integrated Health, Safety, and Environment Management System, p. 73-75	
EM-EP 320 a1) EM-RM 320 a1 EM-SV 320 a1	Total Recordable Injury Rate (TRIR), Fatality Rate, Near-Miss Frequency Rate (NMFR), Average Duration of OHS Training for a) Staff, b) Contractors, c) Short-Term Employees	E, R, S	P. 88, 89, 192, 193	

Code	Definition	Segment: E – Extraction, R – Refining, Marketing, and Distribution, S – Services (drilling, others), T – Transportation	Response / reference to indicators in Sustainability Report for 2020	Documents
Extraction				
EM-ER-160a2)	Total number and volume of hydrocarbon spills, including a) in the Arctic, b) impacting coastlines in categories 8-10 of the Environmental Sensitivity Index (ESI) (mangroves, marshes, rocky shores, and others), percentage of recovered sites	E	Partially, p. 82	
EM-EP 210 a3)	Engagement with stakeholders and risk assessment with respect to human rights, rights of Indigenous Minorities of the North, and activities in the conflict zone	E	P. 33, 37-39, 155	
EM-EP 420 a1)	Sensitivity of hydrocarbon reserves to future price projection scenarios that take into account carbon price or emissions	E		
EM-EP 420 a3)	Investments in RES, share of income received from RES		P. 67	
EM-EP 420 a4)	Assessment of price and demand for hydrocarbons and / or climate regulation affecting capital investment strategy for exploration, acquisition, and development of assets	E		

Code	Definition	Segment: E – Extraction, R – Refining, Marketing, and Distribution, S – Services (drilling, others), T – Transportation	Response / reference to indicators in Sustainability Report for 2020	Documents
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EM-EP 510a1)	Percentage of 1) proved and 2) prospective reserves in countries that rank in the bottom 20 of Transparency International's Corruption Index	E	The share of reserves located in Iraq and the Republic of Congo (according to PJSC LUKOIL share) of LUKOIL Group's proved reserves abroad was 9.6% in 2018, and 15.4% in 2019	Analyst's Handbook 
EM-EP-510a2)	Management system for the prevention of corruption in the company and supply chain	E	Partially, p. 34 , 43	Anti-Corruption Policy of PJSC LUKOIL
EM-ER-540 a2)	Describe the risk management system for catastrophic events and accidents	E, S	P. 76 , 77	
Refining and distribution				
EM-RM-110 a2)	Long- and mid-term strategy to reduce GHG emissions (Scope 1), established targets and analysis of the achieved results	T, R	P. 56 , 57	
EM-RM 120 a2)	Number of plants located in or in the vicinity of heavily populated cities	R	LUKOIL's refineries are located in cities with a population of 10,000 or more. The largest population is in Volgograd (about 1 million people), Perm (about 1 million people), Nizhny Novgorod (1.3 million people) and Saratov (842 thousand people). (all cities are located in Russia).	
EM-RM 150 a1)	Amount of hazardous waste generated, share of recycled waste	R	P. 109 , 191	
EM-RM 520 a2)	Number of court-ordered penalties for price-gouging and price-fixing	R	P. 35	

Code	Definition	Segment: E – Extraction, R – Refining, Marketing, and Distribution, S – Services (drilling, others), T – Transportation	Response / reference to indicators in Sustainability Report for 2020	Documents
Transport				
EM-MD 520 a1)	Total losses from lawsuits related to pipelines and storage facilities	T	P. 35	
EM-MD 540 a1)	Number of pipeline-related incidents reported, share of significant incidents	T	P. 82	
EM-MD 540 a2)	Share of inspected gas pipelines (natural gas) and pipelines for transportation of hazardous materials	T	P. 59	
EM-MD 540 a3)	Number of emergency and non-emergency spills during railway transportation	T	All railway transportation operations are performed by contractors. Contractors are liable for transportation safety	
Services (contractors)				
EM-SV 510a1)	Share of income in countries that rank in the bottom 20 of Transparency International's Corruption Index	S	The Company does not generate significant revenues in these countries. The share of reserves located in Iraq and the Republic of Congo (according to PJSC LUKOIL share) of LUKOIL Group's proved reserves abroad was 9.6% in 2018, and 15.4% in 2019. The share of reserves located in Iraq and the Republic of Congo (according to PJSC «LUKOIL» share) of total reserves of LUKOIL Group was 1% in 2018, and 1.5% in 2019	
EM-SV 150 a2)	Strategy and plans to mitigate risks associated with the use of chemicals	S	Partially p. 107, 109	
EM-SV 160 a2)	Strategy and plans to mitigate risks associated with environmental impacts in services	S	Partially, p. 107, 109	

Appendix 8. Indicator boundaries

Appendix 8 is published in the interactive version of the Sustainability report on the website.

