ESG datasheet 2019

March 2020

Contents

Introduction

This ESG datasheet aims to provide a consolidated overview of BP's non-financial performance. Metrics included in this datasheet cover our activities during the period 1 January to 31 December for the years indicated.

This ESG datasheet presents the performance data tables previously included in BP Sustainability Reports.

Assured metrics for 2019

The selected sustainability information below were subject to assurance by Deloitte LLP in accordance with the International Standard for Assurance Engagements ("ISAE") 3000 (Revised). Please see *bp.com/assurance* for more information, including Deloitte's independent assurance statement.

1. Recordable injury frequency rate (employees and contractors on site).
2. Day away from work case frequency (DAFWCF) (employees and contractors on site).
3. Number of fatalities (employees and contractors on site).
4. Number of oil spills.
5. Process safety events (tier 1 and tier 2).
6. Equity-based Scope 1 (direct) greenhouse gas (GHG) emissions.
7. Operational control-based Scope 1 GHG emissions.
8. Total sustainable GHG emissions reductions towards 3.5MtCO_2e target.
9. Methane emissions intensity.
10. Average emissions intensity of our marketed energy products.
11. Emissions from Upstream oil and gas production (CO_2).

Note to users

Performance data included in this datasheet is discussed further in the Sustainability Report 2019. The datasheet should be read in conjunction with the Sustainability Report and is not a substitute for it. Read the report at *bp.com/sustainability*.

Reports and reporting frameworks

Reporting Centre

Copies of all of BP's key reports, and an archive, can also be found in our reporting centre

Reports

Annual report and form 20-F 2019
Sustainability report 2019
Our participation in trade associations: Climate
Protected areas 2019
Gender pay gap report 2019
Economic impact report UK 2018
Economic impact report US 2019
Technology outlook 2018
Energy outlook 2019
Energy outlook summary table 2019
Energy outlook charts data pack 2019
Statistical review of world energy 2019
Statistical review of world energy all data

Reporting frameworks

GRI Standards	GRI reporting index 2019
IPIECA guidance	To be published
UN global compact	To be published

Policies and position statements

Business and Human Rights policy
BP's participation in trade associations
BP's code of conduct
BP's approach to tax
BP Labour Rights and Modern Slavery principles
BP's expectations of its suppliers
Payments to governments
Slavery and human trafficking statement

Greenhouse gas emissions

Metric	Unit	2015	2016	2017	2018	**2019**
Operational control[a]						
Scope 1 (direct) greenhouse gas emissions	$MteCO_2e$	51.2	51.4	50.5	48.8	**49.2**
Scope 1 (direct) carbon dioxide emissions	$MteCO_2e$	48.5	48.4	47.8	46.4	**46.8**
Scope 1 (direct) methane emissions	Mte	0.11	0.12	0.11	0.09	**0.10**
Methane emissions intensity[b]	%		0.2	0.2	0.16	**0.14**
Sustainable GHG emissions reductions	$MteCO_2e$	0.2	0.7	0.5	1.3	**1.4**
Scope 2 (indirect) emissions	$MteCO_2e$	7	6.2	6.1	5.4	**5.2**
Flaring[c]	kt	1863	1896	1987	1634	**1395**
Equity[d]						
Scope 1 (direct) greenhouse gas emissions	$MteCO_2e$	49.0	50.1	49.4	46.5	**46.0**
Scope 1 (direct) carbon dioxide emissions	$MteCO_2e$	45.1	46.1	45.8	43.3	**43.0**
Scope 1 (direct) methane emissions	Mte	0.16	0.16	0.15	0.13	**0.12**
Sustainable GHG emissions reductions	$MteCO_2e$	0.1	0.3	0.4	0.6	**0.8**
Greenhouse gas intensity	–	–	–	–	–	**–**
Upstream	tCO_2e per thousand boe	32.7	34.7	30.4	27.8	**25.9**
Refining	tCO_2e per utilized equivalent distillation capacity	944	951	923	915	**916**
Petrochemicals	tCO_2e per thousand tonnes	290	287	304	289	**291**
Scope 2 (indirect) emissions	$MteCO_2e$	6.9	6.2	6.8	5.7	**5.7**
Emissions from the carbon in our Upstream oil and gas production[e]	$MteCO_2e$					**357.3**
Average emissions intensity of our marketed energy products[f]	gCO_2e/MJ					**79.7**
Refined energy products emissions intensity	gCO_2e/MJ					**93.7**
Gas products emissions intensity	gCO_2e/MJ					**71.6**
Bio-products emissions intensity	gCO_2e/MJ					**28.8**
Power products emissions intensity	gCO_2e/MJ					**43.8**
Marketed emissions[g]	$MteCO_2e$					**1012.5**
CO_2 avoided through our renewables business[h]	$MteCO_2e$	3.3	2.8	2.7	2.8	**2.3**

a Comprises 100% of emissions from activities that are operated by BP.

b Methane emissions intensity refers to the amount of methane emissions from BP's operated upstream oil and gas assets as a percentage of the total gas that goes to market from those operations. Our methodology is aligned with the Oil and Gas Climate Initiative's (OGCI) methane intensity target.
Methane emissions intensity was previously reported to one decimal place but is now reported to two, in order to better demonstrate year-on-year changes.

c We report the total hydrocarbons flared from our upstream operations.

d BP's equity share data comprises 100% of emissions from subsidiaries and the percentage of emissions equivalent to our share of joint arrangements and associates, other than BP's share of Rosneft.

e Estimated CO_2 emissions from the combustion of upstream production of crude oil, natural gas and natural gas liquids (NGLs) on a BP equity share basis based on BP's net share of production, excluding BP's share of Rosneft production and assuming that all produced volumes undergo full stoichiometric combustion to CO_2. Emissions are broadly equivalent to the GHG Protocol, Scope 3, category 11, with the specific scope of upstream production volumes.

f Emission rate of equivalent carbon dioxide per unit of energy provided.
Emissions intensity: estimated CO_2e on a lifecycle basis from the use, production and distribution of marketed energy products per unit of energy (MJ) delivered.

g The intensity of our marketed energy products is calculated as outlined in the basis of reporting document, available at bp.com/basisofreporting. Marketed emissions is a weighted average of the lifecycle of each marketed energy product on an absolute basis. Energy products include all products such as fuels (liquid, gaseous and solid) and power sold to assumed third party end users. Bio-products include all equity sales associated with ethanol, Butamax and Biojet. Crude oil is not included as it requires refining prior to end use. Refined products intended for non-fuel use (including lubricants, bitumen and naphtha) are excluded. Sales of energy products reported as trades are not included. Sales to other oil companies where product is subsequently marketed by them are excluded

h Based on BP's total ethanol production and wind generating capacity.

Safety[1]

Metric	Unit	2015	2016	2017	2018	**2019**
Personal safety						
Fatalities – workforce	#	1	3	1	1	**2**
Employee	#	0	0	1	0	**1**
Contractor	#	1	3	0	1	**1**
Fatality rate – workforce	fatalities per million hours worked	0.003	0.008	0.003	0.003	**0.006**
Employee	fatalities per million hours worked	0.000	0.000	0.007	0.000	**0.007**
Contractor	fatalities per million hours worked	0.005	0.014	0.000	0.005	**0.005**
Day away from work cases – workforce	#	108	94	97	79	**77**
Employee	#	53	38	41	33	**29**
Contractor	#	55	56	56	46	**48**
Day away from work case frequency (DAFWCF) - workforce	DAFWC per 200,000 hours worked	0.061	0.051	0.055	0.048	**0.047**
Employee	DAFWC per 200,000 hours worked	0.063	0.050	0.056	0.046	**0.042**
Contractor	DAFWC per 200,000 hours worked	0.059	0.052	0.054	0.049	**0.050**
Recordable injuries – workforce	#	428	385	384	328	**273**
Employee	#	170	147	147	108	**88**
Contractor	#	258	238	237	220	**185**
Recordable injury frequency (RIF) – workforce	recordable injuries per 200,000 hours worked	0.243	0.211	0.218	0.198	**0.166**
Employee	recordable injuries per 200,000 hours worked	0.203	0.194	0.202	0.152	**0.128**
Contractor	recordable injuries per 200,000 hours worked	0.279	0.222	0.229	0.233	**0.193**
Hours worked – workforce	million hours	353	366	352	331	**329**
Employee	million hours	168	152	145	143	**138**
Contractor	million hours	185	214	207	189	**191**
Process safety						
Tier 1 process safety events	#	20	16	18	16	**26**
Upstream	#	6	9	13	8	**17**
Downstream	#	12	7	5	8	**8**
Other	#	2	0	0	0	**1**
Tier 2 process safety events	#	83	84	61	56	**72**
Upstream	#	42	48	31	23	**53**
Downstream	#	37	35	29	31	**18**
Other	#	4	1	1	2	**1**
Loss of primary containment	#	202	200	205	186	**237**
Oil spills – number (> one barrel)	#	146	149	139	124	**152**
contained	#	91	91	81	63	**90**
reaching land	#	51	51	44	49	**53**
reaching water	#	4	7	14	8	**5**
Number of spills upstream	#	59	73	72	55	**73**
contained	#	38	42	41	24	**43**
reaching land	#	17	25	17	23	**24**
reaching water	#	4	6	14	8	**5**
Number of spills downstream	#	72	64	53	63	**71**
contained	#	40	39	27	35	**40**
reaching land	#	32	25	26	24	**28**
reaching water	#	0	0	0	0	**0**
Number of spills other	#	15	12	14	6	**8**
contained	#	13	10	13	4	**7**
reaching land	#	2	1	1	2	**1**
reaching water	#	0	1	0	0	**0**
Oil spills – volume	thousand litres	432	677	886	538	**710**
unrecovered	thousand litres	142	311	265	131	**300**
upstream – spilled	thousand litres	88	390	119	162	**293**
upstream – unrecovered	thousand litres	38	293	49	52	**229**
downstream – spilled	thousand litres	329	281	758	370	**410**
downstream – unrecovered	thousand litres	102	18	216	78	**70**
other – spilled	thousand litres	14.1	7.0	8.3	5.8	**7.6**
other – unrecovered	thousand litres	1.2	0.4	0.5	1.6	**1.6**
Vehicle safety						
Severe vehicle accident rate	accidents per million km driven	0.11	0.05	0.03	0.04	**0.05**
Total vehicle accident rate	accidents per million km driven	1.08	1.04	1.08	0.87	**0.90**

i This represents reported incidents occuring within BP's operational HSSE reporting boundary. That boundary includes BP's own operated facilities and certain other locations or situations.

Value to society

Metric	Unit	2015	2016	2017	2018	**2019**
Economic value generated by BP	$ million				303,900	**283,300**
Payments to suppliers	$ million				255,900	**233,600**
Benefits to employees[j]	$ million	12,928	11,233	10,204	10,490	**9,836**
Taxes to governments[k]	$ million	3,516	2,174	5,797	7,527	**6,913**
Contribution to communities	$ million	67	61	90	114	**84**
US and Canada	$ million				22.6	**27.8**
Sub-Saharan Africa	$ million				35.9	**13.3**
Middle East and North Africa	$ million				23.8	**16.2**
Europe	$ million				11.9	**12.3**
Asia Pacific	$ million				12.1	**9.8**
South and Central America	$ million				7.9	**4.4**
Total dividends distributed to BP shareholders[l]	$ million	7,301	7,469	7,867	8,080	**8,329**
Percentage of major operating sites in indigenous land	%					**16**

j Includes wages, salaries, share-based payments, benefits and pensions.
k Comprises income taxes and production taxes paid.
l This includes dividends paid in cash and scrip dividends.

Environment

Metric	Unit	2015	2016	2017	2018	**2019**
Water						
Total water withdrawal	million m^3	284.7	256.5	275.5	271.0	**281.2**
Upstream	million m^3	6.8	5.7	6.4	5.7	**6.7**
Downstream	million m^3	264.5	238.6	259.1	254.2	**263.6**
Other	million m^3	13.5	12.2	10.0	11.0	**11.0**
Potable water	million m^3	38.2	39.5	43.2	38.8	**39.1**
Freshwater	million m^3	238.0	210.2	225.5	223.8	**232.3**
Reclaimed water	million m^3	2.2	0.8	0.6	2.2	**2.4**
Industrial water and steam	million m^3	6.4	6.0	6.2	6.1	**7.4**
In areas with water stress or scarcity	%					**9**
Freshwater withdrawal – group intensity	t withdrawn/t production	1.0	1.0	1.1	1.0	**1.0**
Upstream	t withdrawn/t production	0.0	0.0	0.0	0.0	**0.04**
Refining	t withdrawn/t throughput	2.6	2.5	2.7	2.6	**2.7**
Petrochemicals	t withdrawn/t production	3.7	3.1	3.0	3.3	**3.0**
Freshwater consumption	million m^3	91.7	87.4	90.5	88.2	**91.1**
Percentage of withdrawal	%	32	34	33	33	**32**
In areas with water stress or scarcity	%					**19**
Freshwater consumption – group intensity	t consumed/t production	0.4	0.3	0.3	0.3	**0.3**
Discharges to water – Upstream		–	–	–	–	**–**
Mass of produced water managed per unit of mass production	t/t	0.6	0.7	0.7	0.7	**0.7**
Produced water generated	million tonnes	91	98	102	101	**112**
Produced water discharged	%					**17**
Produced water injected	%					**83**
Oil discharged	tonnes	292	473	282	573	**411**
Oil discharged in muds and cuttings	tonnes	1	4	4	122	**35**
Oil discharged in produced water and effluent	tonnes	291	469	278	451	**376**
Hydrocarbon concentration in discharged water	mg/l					**21.8**
Discharges to water – Downstream	million m^3	88	76	80	78	**78**
Discharged to third party operated wastewater treatment plant	million m^3	15.9	14.7	15.6	14.3	**14.5**
Discharged to BP operated wastewater treatment plant	million m^3	71.9	61.6	64.7	63.4	**62.8**
Wastewater treatment measured as chemical oxygen demand	mg/l	40.1	49.3	41.0	44.2	**45.0**
Discharges to water – Other	million m^3	0	0	0	0	**0**
Air emissions						
Total emissions to air	kte	363	371	353	305	**296**
upstream	kte	241	256	231	197	**210**
downstream	kte	56	47	45	41	**39**
other	kte	67	68	77	67	**47**
Air emissions – nitrogen oxides	kte	123	125	122	115	**110**
upstream	kte	79	82	78	75	**73**
downstream	kte	11	11	10	10	**10**
other	kte	33	32	34	30	**27**
Air emissions – sulphur oxides	kte	36	36	35	32	**23**
upstream	kte	2	2	2	1	**1**
downstream	kte	18	17	15	14	**12**
other	kte	33	32	34	30	**9**
Air emissions – non-methane hydrocarbons	kte	94	91	87	64	**67**
upstream	kte	56	58	47	31	**42**
downstream	kte	22	16	17	14	**13**
other	kte	16	17	24	19	**11**
Air emissions – volatile organic compounds (methane group)	kte	110	120	109	95	**96**
upstream	kte	104	115	104	90	**92**
downstream	kte	4	3	3	3	**3**
other	kte	2	2	2	2	**1**

Environment *continued*

Metric	Unit	2015	2016	2017	2018	**2019**
Energy						
Total energy consumed	million GJ	756	759	742	755	**760**
Upstream	million GJ	384	387	375	400	**395**
Downstream	million GJ	347	347	341	332	**346**
Other	million GJ	25	26	26	23	**19**
Energy efficiency			–	–	–	**–**
Upstream (production/consumption loss)	production/consumption loss		102.4	101	91.3	**86.8**
Refining (energy intensity performance index)	energy intensity performance index		103.1	104.4	103.9	**104.5**
Petrochemicals (energy intensity)	energy intensity		82.3	79.9	86.5	**88.5**
Waste						
Hazardous waste disposed (excluding deepwell)	kte	157.4	228.4	171.0	182.8	**142.6**
upstream	kte	48.9	57.4	78.8	65.9	**46.0**
downstream	kte	107.9	170.4	91.3	115.5	**95.3**
other	kte	0.7	0.6	1.0	1.3	**1.2**
Non-hazardous waste generated	kte					**422.3**
Non-hazardous waste recovered-recycled offsite	kte	116.6	130.4	136.0	112.7	**194.0**
upstream	kte	18.9	27.2	29.3	15.7	**19.3**
downstream	kte	95.3	99.2	104.9	95.2	**172.6**
other	kte	2.3	4.0	1.8	1.9	**2.1**
Non-hazardous waste disposed offsite	kte	266.0	242.4	286.5	241.5	**228.3**
upstream	kte	79.2	66.6	60.4	68.1	**80.2**
downstream	kte	183.6	173.2	223.7	171.7	**146.0**
other	kte	3.2	2.6	2.4	1.7	**2.1**
Other						
Environmental expenditure[m]	$ million	8017	536	971	1546	**2319**
Environmental and safety fines	$ million	0.6	15	3.6	1.9	**0.8**
Percentage of major operating sites externally verified to be in conformance with ISO 14001	%					**100**
Number of major operating sites in or near protected areas	#					**26**

m Operating and capital expenditure on the prevention, control, treatment or elimination of air and water emissions and solid waste is often not incurred as a separately identifiable transaction. Instead, it forms part of a larger transaction that includes, for example, normal operations and maintenance expenditure. The figure for environmental expenditure is therefore estimated, based on the definitions and guidelines of the American Petroleum Institute.

Our people

Metric	Unit	2015	2016	2017	2018	**2019**
Number of employees – group	#	79,800	74,500	74,000	73,000	**70,100**
Percentage female	%					**38**
Percentage male	%					**62**
Number of employees – group leadership	#	431	394	394	376	**378**
Women in group leadership	%	19	22	21	24	**25**
Women at management level	%	28	28	30	31	**31**
People from racial minorities in UK and US group leadership	%	10	11	11	11	**14**
People from beyond the UK and US in group leadership	%	21	23	24	24	**25**
Employee engagement[n]	%	71	73	66	66	**65**
Employee turnover[o]	%	16	16	12	12	**18**
Number of new employee hires[p]	#					**14,281**
25 and under	#					**5,795**
26-30	#					**2,282**
31-35	#					**1,814**
36-40	#					**1,431**
41-45	#					**1,056**
46-50	#					**807**
51-55	#					**565**
56-60	#					**310**
61 and over	#					**183**
Male	#					**7,450**
Female	#					**6,775**
Asia Pacific	#					**3,307**
Europe	#					**8,493**
Middle East & North Africa	#					**311**
Russia	#					**16**
South & Central America	#					**653**
Sub-Saharan Africa	#					**178**
US & Canada	#					**1,323**
Rate of new employee hires[q]	%					**20**
25 and under	%					**74**
26-30	%					**27**
31-35	%					**17**
36-40	%					**13**
41-45	%					**11**
46-50	%					**9**
51-55	%					**8**
56-60	%					**6**
61 and over	%					**7**
Male	%					**16**
Female	%					**27**
Asia Pacific	%					**23**
Europe	%					**28**
Middle East & North Africa	%					**6**
Russia	%					**6**
South & Central America	%					**12**
Sub-Saharan Africa	%					**10**
US & Canada	%					**10**

n We conduct an annual employee survey to understand and monitor levels of employee engagement and identify areas for improvement. We changed our survey questions in 2017 to reflect the new priorities set out in our refreshed strategy. The scores prior to 2017 are based on questions on priorities set out in 2012, so the numbers are not directly comparable.
o These figures relate to non-retail employees only. In 2019 voluntary turnover (resignations and retirements) was 4.6%.
p Absolute number of new employee hires.
q New employee hires as a percentage headcount at the end of the reporting period.

Business ethics

Metric	Unit	2015	2016	2017	2018	**2019**
Concerns and enquiries raised through all reporting channels[r]	#	1,158	1,701	1,612	1,710	**1,849**
Separations (dismissals, resignations and supplier terminations) for non-compliance and unethical behaviours	#			202	178	**138**

r The figures from 2016 are restated to include concerns raised to line management, as well as OpenTalk cases. Any employee, contractor or other third party can contact our confidential helpline, OpenTalk.
s Excludes dismissals of contractors/vendors and staff employed at our retail sites. Excludes heliport spot checks.

Key definitions

Topic	Definition
Major operating sites	A site or grouping of sites that produce or manage petroleum, chemical, or manufactured products where such products, their production processes, or their exploration processes have the potential to cause significant impact on the environment or the safety and health of employees, neighbours, or consumers.
Senior management	Includes employees who are group leaders, senior level leaders or in other management positions.
Areas of water stress and scarcity	Includes areas of med-high, high and very high water stress based on World Resources Institute aqueduct data
Protected areas	Includes World Heritage Sites, Ramsar sites, IUCN Category I-II, Natura 2000 sites. See *bp.com/protectedareas* for details.
COD	The capacity of water to consume oxygen during the decomposition of organic matter and the oxidation of inorganic chemicals such as Ammonia and nitrite. COD measurements are commonly made on samples of waste waters or of natural waters contaminated by domestic or industrial wastes. In wastewater treatment, the COD is used as an index to assess the effect discharged wastewater will have on the receiving environment.
Hazardous waste	Waste that is classified as hazardous (or the regulatory equivalent) by the local regulatory authority.
Non-hazardous waste	Waste that is not classified as hazardous (or the regulatory equivalent) by the local regulatory authority.
Oil spill	Any liquid hydrocarbon release of more than, or equal to, one barrel (159 litres, equivalent to 42 US gallons).
Sustainable emissions reduction	Sustainable Emission Reductions (SERs) result from actions or interventions that have led to ongoing reductions in Scope 1 (direct)) and/or Scope 2 (indirect) GHG emissions (carbon dioxide and methane) such that GHG emissions would have been higher in the reporting year if the intervention had not taken place. SERs must meet three criteria: BP made a specific intervention that has reduced GHG emissions, BP must be able to quantify the reduction and the reduction is expected to be ongoing. Reductions are reportable for a 12-month period from the start of the intervention/action.
Fatality	A fatality is any death of an employee or contractor as a result of a work-related incident.
Tier 1 process safety event	Losses of primary containment of greatest consequence – causing harm to a member of the workforce, costly damage to equipment or exceeding defined quantities.
Tier 2 process safety event	Losses of primary containment of lesser consequence than tier 1.
Loss of primary containment (LOPC)	An unplanned or uncontrolled release of oil, gas or other hazardous materials from a tank, vessel, pipe, truck, rail car or other equipment used for storage, separation, processing or transfer.