

Environment

	2015	2016	2017	2018	2019	2020
Oil and oil products spills (m ³)	71,6	51,9	35,8	18,5	415,3	216,5
Greenhouse gas emissions (million metric tCO ₂ e)	78	66	67	62	59	56
Emissions of carbon dioxide - CO ₂ (million metric tons)	74	62	63	58	55	53
Emissions of methane - CH ₄ (thousand metric tons)	150	145	133	127	129	102
Emissions of nitrous oxide - N ₂ O (metric tons)	2.332	1.820	1.761	1.629	1.514	1.402
Atmospheric emissions - Nox (thousand metric tons)	267	235	281	239	217	215
Atmospheric emissions - Sox (thousand metric tons)	120	131	135	139	138	108
Particulate material (thousand metric tons)	19	15	15	14	13	11
Freshwater withdrawn (million m ³)	213,3	191,6	177,7	182,3	156,9	146,3
Reuse in proportion to the total freshwater used (%)	10,0	11,5	12,5	31,5	34,4	33,6
Freshwater demand [withdrawn + reused] (million m ³)	236,9	216,4	203,1	266,3	239,1	220,2
Reused water (million m ³)*	23,6	24,8	25,4	84,0	82,2	73,9
Discarded Wastewater Effluent Volume (EHD) (million of m ³)**	277,1	281,8	293,2	292,9	275,3	277,5
Hazardous waste generated (thousand metric tons/year)	192	132	113	120	118	124
Non-Hazardous waste generated (thousand metric tons/year)	319	210	153	158	245	201
Direct (Scope 1) GHG emissions (million tons CO ₂ e)	77,5	66,0	66,6	61,4	58,9	55,5
Indirect (Scope 2) GHG emissions (million tons CO ₂ e)	0,78	0,50	0,40	0,40	0,30	0,20
Other indirect (Scope 3) GHG emissions (tons CO ₂ e)	527	460	437	412	400	410
Unused hydrocarbons (million of m ³) - burn on flare	2.894,0	2.998,0	2.924,0	3.071,0	2.717,0	2.084,0
Unused hydrocarbons (million of m ³) - dispatched into the atmosphere	72,0	60,3	49,3	52,5	57,4	43,9
Carbon Intensity in E&P (KgCO ₂ e/boe)			21,0		17,3	15,8
Carbon Intensity in Refining Segment (KgCO ₂ e/CWT)	43,0	43,0	43,0	42,0	41,7	40,2
Energy consumption (terajoule - TJ)	1.115.185	899.487	947.645	852.600	826.441	811.912
- Diesel	79.648	57.672	61.948	50.643	50.098	48.216
- Fuel Oil	59.415	75.342	51.106	31.349	19.425	23.603
- Natural Gas	719.597	550.027	641.530	573.330	557.135	549.663
- Fuel Gas	124.596	100.560	86.150	85.170	86.973	79.943
- Residual Gas	17.990	11.488	16.612	17.330	20.573	21.393
- Liquefied Petroleum Gas (LPG)	1.254	147	1.130	286	108	71
- FCC Coke	69.161	61.755	67.715	59.779	59.487	58.255
- Other	3.114	3.066	8	-	-	-
- Imported steam	28.256	26.870	1.852	20.123	20.886	19.346
- Imported electricity	18.382	18.693	19.593	14.589	11.756	11.422

Safety and Health

Occupational Health and Safety

Fatalities	16	3	7	6	2	-
Lost Time Injury Frequency Rate (TFCA)	0,76	0,59	0,58	0,57	0,48	0,35
- Lost Time Injury Frequency Rate (TFCA) - Employees		0,47	0,60	0,61	0,62	0,25
- Lost Time Injury Frequency Rate (TFCA) - Contractors		1,81	1,18	1,08	0,78	0,39
Total Recordable Injuries Rate (TRI)	2,15	1,63	1,08	1,01	0,76	0,56
- Total Recordable Injuries Rate (TRI) - Employees		1,09	0,81	0,82	0,71	0,31
- Total Recordable Injuries Rate (TRI) - Contractors		1,81	1,18	1,08	0,78	0,66
Occupational disease Frequency Rate (TIDO) - Employees		-	0,02	0,02	-	-
Average work related days lost per employee		0,19	0,23	0,18	0,15	0,11
Percentage of Time Lost -PTP/PTP-S50(%) -Employees		2,42	2,32	2,42	2,37	1,53
Process Safety						
Number of Process Safety Anomalies (Nasp Tier 1)	51	24	27	24	23	10

Contributions to Society

Investments in socio-environmental projects (million BRL)	271	120	60	87	116	89
Investments in cultural projects (million BRL)	139	71	61	38	37	18
Investments in sport projects (million BRL)	86	50	21	80	71	5
Donations (Bilion BRL)					1	20
Taxes paid (Bilion BRL)		125,60	140,00	182,40	246,00	128,70

Dividends per share (US\$) - PETR3	-	-	-	0,07	0,18	0,15
Dividends por share (US\$) - PETR4	-	-	-	0,24	0,23	0,15

People

Employees	56.874	51.255	46.981	47.556	46.416	41.485
Gender						
- Female	9.130	8.296	7.613	7.767	7.583	6.904
- Male	47.744	42.959	39.368	39.789	38.833	34.581
Ethnics						
- White	29.875	27.334	25.325	25.719	25.239	23.214
- Brown	12.730	11.495	10.585	10.878	10.686	9.830
- Black	2.785	2.564	2.392	2.486	2.455	2.285
- Yellow	754	705	647	656	648	602
- Indigenous	175	147	123	121	116	98
- Not stated	10.555	9.010	7.909	7.696	7.272	5.456
Idade						
- Up to 24 years old		480	248	184	99	45
- From 25 to 29 years old		3.901	2.770	2.181	1.518	976
- From 30 to 34 years old		9.151	8.031	7.406	6.558	5.334
- From 35 to 39 years old		9.765	10.103	10.374	10.056	9.629
- From 40 to 44 years old		6.262	6.899	7.506	8.188	8.829
- From 45 to 49 years old		4.864	4.664	4.787	5.222	5.500
- From 50 to 54 years old		9.499	8.017	7.233	6.054	4.867
- From 55 to 59 years old		5.326	4.584	5.753	6.220	4.499
- 60 years old or more		2.007	1.665	2.132	2.501	1.806

*Since 2018, due to the revision of the corporate indicator "Reused Water Volume", we started to consider for the reinjected volume of water produced for secondary recovery of oil and gas in onshore fields.

**EHD indicator – Discarded Wastewater Effluent Volume includes industrial, sanitary and produced water effluents that are disposed of (observing legal limits) or sent for treatment and final disposal. It does not account for the discharge of cooling water in an open circuit, nor the injection or reinjection of water in reservoirs for secondary recovery purposes.