

10. Environmental Performance Indicators

Environmental KPIs ⁽¹⁾⁽²⁾	Unit	Ports and Related Services			Retail			Infrastructure	
		2017	2018	2019	2017	2018	2019	2017 ⁽¹²⁾	2018 ⁽¹²⁾
GHG emissions									
Total GHG emissions	tonne CO ₂ e	489,802 ⁽⁵⁾	585,427	579,058	641,554 ⁽⁹⁾	661,127 ⁽⁹⁾	661,985	9,778,614	10,864,931
Scope 1 emissions		283,473	324,123	306,877	219,113	219,445	190,448	7,464,392	8,944,665
Scope 2 emissions		206,329	261,304	272,181	422,441	441,682	471,537	2,314,222	1,920,266
Total GHG emissions intensity	tonne	0.019	0.022	0.021	0.005	0.005	0.005	0.255	0.226
Scope 1 GHG emission intensity	CO ₂ e/ revenue	0.011	0.012	0.011	0.002	0.002	0.001	0.195	0.186
Scope 2 GHG emission intensity	HK\$'000	0.008	0.010	0.010	0.003	0.003	0.004	0.060	0.040
Use of energy									
Total energy consumption	GWh	1,511 ⁽⁵⁾	1,819	1,773	1,201 ⁽⁹⁾	1,298 ⁽⁹⁾	1,278	29,905	32,757
Direct energy consumption		1,113	1,285	1,217	387	398	454	25,442	28,833
Gasoline/ Petrol		8	37	8	9	2	1	37	32
Diesel		1,073	1,226	1,192	287	265	277	465	511
Natural gas		8	12	9	79	75	78	10,268	10,514
Towngas ⁽³⁾		-	-	-	7	22	32	-	-
Other gas fuels (excl. Towngas and natural gas)		3	7	5	5	34	66	4	5
Other fuels ⁽⁴⁾		21	3	3	-	-	-	14,668	17,771
Indirect energy consumption		398	534	556	814	900	824	4,463	3,924
Electricity		398	534	556	814	900	824	4,463	3,924
Steam energy		-	-	-	-	-	-	-	-
Total energy consumption intensity		kWh/	59.079	68.396	65.659	9.706	9.718	9.649	780.114
Direct energy consumption intensity	revenue	43.517	48.322	45.066	3.126	2.979	3.431	663.692	599.464
Indirect energy consumption intensity	HK\$'000	15.562	20.074	20.593	6.580	6.738	6.218	116.422	81.574
Air emissions									
NOx emissions	tonne	2,023	292	341	-	-	-	5,649	9,958
SOx emissions		269	2	2	-	-	-	668	674
Particulate matter emissions		88	23	26	-	-	-	426	316
Waste Production									
Total hazardous waste produced	tonne	10,391	3,420	2,204⁽⁶⁾	-	-	-	105,728	106,716
Total non-hazardous waste produced		57,916	23,847	34,985⁽⁷⁾	46,794	49,890	83,503⁽¹⁰⁾	496,761	537,527
Use of water									
Water consumption	'000 m ³	2,604	1,357	928⁽⁸⁾	2,606	3,239	2,404⁽¹¹⁾	38,634	38,835
Water consumption intensity	m ³ / revenue	0.102	0.051	0.034	0.021	0.024	0.018	1.008	0.807
Packaging material									
Total packaging material used for finished products	tonne	1	19	16	42,749	57,177	73,967	4,489	3,387
Plastic		-	19	16	21,339	27,015	34,129	-	-
Paper		1	-	-	15,851	23,296	26,847	4,489	3,387
Metal		-	-	-	2,694	3,761	6,909	-	-
Glass		-	-	-	2,361	2,616	4,917	-	-
Other packaging material		-	-	-	504	489	1,165	-	-

Note:

- Environmental KPIs in this data table reflect the data of the Company and its subsidiaries for the year ended 31 December 2019, with acquisitions and disposals happening in the year excluded, unless otherwise specified.
- This year, the methodology used for calculating the 2019 environmental KPIs has been fine-tuned to integrate a more accurate dataset, including primary data, if available.
- The term is revised to better clarify the fuel used. "Towngas/Gas work gas" was the term used previously.
- Other fuels include residual fuel oil, waste oils, landfill gas, energy generated from industrial and municipal wastes, refinery fuel gas, etc.
- The 2017 GHG emissions and the energy consumption figures have been restated due to a reporting error.
- The total amount of hazardous waste decreased by 36% compared with 2018. This is mainly due to the lower incidence of oil spills at Hutchison Ports PPC.
- The total amount of non-hazardous waste increased by 47% compared with 2018. This is mainly due to the scrap metal project to remove derelict equipment in Hutchison Ports FCP, which is expected to be completed this year.
- The water consumption decreased by 32% compared with 2018. This is mainly due to the completion of the water leak repair in Hutchison Ports PPC.
- The 2017 and 2018 GHG emissions and the energy consumption figures have been restated mainly due to a unit conversion error.
- This year, the methodology used for calculating the 2019 environmental KPIs has been fine-tuned to integrate a more accurate dataset, including primary data, if available.
- The water consumption decreased by 26% compared with 2018. This is mainly due to a drop in the number of stores and reduced frequency of deep cleaning in some stores in PARKSHOP.

	Telecommunications			Total			Husky ⁽¹⁸⁾		
2019	2017	2018	2019 ⁽¹⁴⁾	2017	2018	2019	2016	2017	2018
10,313,728	521,013 ⁽¹³⁾	561,448 ⁽¹³⁾	866,533	11,430,983	12,672,933	12,421,304	5,372,066	5,384,522	4,943,370
8,486,783	23,770	63,130	139,123	7,990,748	9,551,363	9,123,231	4,517,036	4,492,124	4,125,503
1,826,945	497,243	498,318	727,410	3,440,235	3,121,570	3,298,073	855,030	892,398	817,867
0.227	0.008	0.007	0.008	0.045	0.044	0.040	0.176	0.120	0.091
0.187	0.00037	0.001	0.001	0.032	0.033	0.030	0.148	0.100	0.076
0.040	0.008	0.006	0.007	0.014	0.011	0.011	0.028	0.020	0.015
32,222	1,028 ⁽¹³⁾	1,050 ⁽¹³⁾	2,011	33,645	36,924	37,284	17,426	17,356	19,290
28,457	69	32	73	27,011	30,548	30,201	15,741	15,726	16,038
33	1	10	9	55	81	51	-	-	-
542	63	14	55	1,888	2,016	2,066	-	-	-
10,525	5	8	9	10,360	10,609	10,621	12,344 ⁽¹⁹⁾	12,161	12,590
-	-	-	-	7	22	32	-	-	-
5	-	-	0.14	12	46	76	-	-	-
17,352	- ⁽⁵⁾	-	-	14,689	17,774	17,355	3,397 ⁽¹⁹⁾	3,565	3,448
3,765	959	1,018	1,938	6,634	6,376	7,083	1,685	1,630	3,252
3,765	959	1,018	1,938	6,634	6,376	7,083	949	913	2,463 ⁽²¹⁾
-	-	-	-	-	-	-	736 ⁽²⁰⁾	717 ⁽²⁰⁾	789
709,343	16,078	13,299	19,643	133,735	128,544	121,335	571,965	386,142	355,562
626,469	1,082	0,413	0,706	107,366	106,350	98,285	516,671	349,881	295,630
82,875	14,996	12,886	18,937	26,369	22,194	23,050	55,294	36,261	59,932
8,027	1	1	50	7,673	10,251	8,418	3,927	4,163	3,745
636	-	-	-	937	676	638	3,555	2,508	2,109
233	-	-	5	514	339	264	-	237	244
106,622	1,294	3,397	883 ⁽¹⁵⁾	117,413	113,533	109,709	-	-	-
508,859	110,556	122,947	3,649 ⁽¹⁶⁾	712,027	734,211	630,996	-	-	-
35,665	101	121	227	43,945	43,552	39,224	13,018	12,737	12,258
0.785	0.002	0.002	0.002	0.175	0.152	0.128	0.427	0.283	0.226
3,545	688	418	727	47,927	61,001	78,255	-	-	-
-	425	152	86 ⁽¹⁷⁾	21,764	27,186	34,231	-	-	-
3,545	263	266	641	20,604	26,949	31,033	-	-	-
-	-	-	-	2,694	3,761	6,909	-	-	-
-	-	-	-	2,361	2,616	4,917	-	-	-
-	-	-	-	504	489	1,165	-	-	-

(12) The 2017 and 2018 figures were restated to be consistent with CKI Annual Reports 2018 and 2019.

(13) The 2017 and 2018 GHG emissions and the energy consumption figures have been restated mainly due to re-categorisation of fuel type and a reporting error.

(14) Data boundary of 2019 has expanded to include Wind Tre as it became a subsidiary in September 2018, hence the data is not directly comparable with prior years.

(15) The total amount of hazardous waste decreased by 74% compared with 2018. This is mainly due to battery replacement in 2018 for network rollout in Vietnamobile.

(16) The total amount of non-hazardous waste decreased by 97% compared with 2018. This is mainly due to the completion of headquarter rebuilding and office relocation in 3 Austria in 2017 and 2018, in which a lot of bulky waste, cardboard packaging and packaging materials were generated.

(17) The amount of plastic used for packaging material decreased by 43% compared with 2018. This is mainly due to the pre-paid SIM card registration becoming mandatory in Indonesia, which significantly reduces the demand of the SIM starter pack in 3 Indonesia.

(18) Figures for Husky, a material associated company of the Group, are prorated based on the percentage equity stake held by CKHH. 2018 data is the latest data available for the report and 2019 data will be published on Husky's corporate website at www.huskyenergy.ca at a later date.

(19) The 2016 figure were restated mainly due to re-categorisation of fuel type.

(20) Data boundary of energy use has expanded to include steam energy this year. 2016 and 2017 figures are included for comparison purpose.

(21) The increase in electricity consumption was due to the methodology change to apply IPIECA grid factor of 38% to purchased electricity, accounting for the efficiency loss during electricity generation from fuel combustion.