

Asset Performance Statistics

Castle Peak Hong Kong

- Coal-fired power station
- 4,108MW (4 x 350MW, 4 x 677MW)
- Plant commissioned between 1982 and 1990
- Shareholding of 70% with operational control by CLP



Parameter	Unit	2015	2014	2013	2012	2011
1. Operation						
Electricity sent out	GWh	15,176	20,280	19,409	17,310	17,644
Coal consumed	TJ	161,988	215,367	205,198	182,651	188,407
Oil consumed	TJ	2,032	1,620	1,340	4,195	995
Gas consumed	TJ	43	32	2,404	12	26
Thermal efficiency	%	33.3	33.6	33.4	33.4	33.5
Equivalent availability factor (EAF)	%	85.0	81.9	84.7	81.3	85.1
2. Air Emissions						
CO ₂ e (Scope 1) ⁽¹⁾	kT	14,797	19,519	18,645	16,645	16,921
CO ₂ (Scope 1) ⁽¹⁾	kT	14,700	19,389	18,528	16,538	16,821
SO ₂	kT	4.3	13.9	11.8	11.3	9.7
NO _x	kT	15.9	26.0	24.8	20.8	19.6
Particulate (Total)	kT	0.5	1.2	1.1	1.1	1.1
Particulate (Respirable)	kT	0.3	0.8	0.7	0.7	0.7
3. Water						
Water Withdrawal	Mm ³	2,708.3	3,203.1	3,180.0	2,887.6	2,807.6
from marine water resources	Mm ³	2,703.5	3,198.0	3,175.5	2,883.3	2,803.8
from freshwater resources ⁽²⁾	Mm ³	-	-	-	-	-
from municipal sources	Mm ³	4.8	5.1	4.6	4.3	3.9
Water Discharged	Mm ³	2,704.5	3,199.2	3,176.6	2,884.3	2,804.5
cooling water discharged to sea	Mm ³	2,703.5	3,198.0	3,175.5	2,883.3	2,803.8
treated wastewater discharged to sea	Mm ³	1.0	1.2	1.1	1.0	0.7
treated wastewater discharged to freshwater bodies ⁽²⁾	Mm ³	-	-	-	-	-
wastewater discharged to sewerage ⁽³⁾	Mm ³	-	-	-	-	-
Water Reused / Recycled ⁽⁴⁾	Mm ³	-	-	-	-	-
4. Environmental Compliance						
Regulatory non-compliances resulting in fines or prosecutions	No.	0	0	0	0	0
Licence limit exceedances & other non-compliances	No.	0	0	0	0	0

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5. By-products & Waste Management						
Ash produced	kT	240	374	349	341	324
Ash recycled / sold	kT	240	373	347	338	248
Gypsum produced	kT	72	98	93	93	96
Gypsum recycled / sold	kT	70	93	93	89	96
Hazardous waste ⁽⁵⁾						
produced	T (solid) / kl (liquid)	96 / 1,805	73 / 199	63 / 241	86 / 354	234 / 109
recycled	T (solid) / kl (liquid)	55 / 184	1 / 199	2 / 183	1 / 354	1 / 109
disposed	T (solid) / kl (liquid)	40 / 1,621	72 / 1	62 / 58	85 / 0	233 / 0
Non-hazardous waste ⁽⁵⁾						
produced	T (solid) / kl (liquid)	4,431 / 0	3,816 / 0	3,871 / 0	5,193 / 0	2,289 / 0
recycled	T (solid) / kl (liquid)	1,728 / 0	870 / 0	826 / 0	1,358 / 0	1,831 / 0
disposed	T (solid) / kl (liquid)	2,703 / 0	2,945 / 0	3,045 / 0	3,836 / 0	459 / 0
6. Safety ⁽⁶⁾						
Employee - Fatalities	No.	0	0	0	0	0
Employee - Days lost / charged	Days	0	0	0	62	12
Employee - Lost Time Injuries ⁽⁷⁾	Cases	0	0	-	-	-
Employee - Occupational Disease ⁽⁷⁾	Cases	0	0	-	-	-
Employee - Total Work Hours ⁽⁷⁾	Manhours	1,815,968	1,858,816	-	-	-
Contractor - Fatalities ⁽⁷⁾	No.	0	0	-	-	-
Contractor - Lost Time Injuries ⁽⁷⁾	Cases	2	0	-	-	-
Contractor - Total Work Hours ⁽⁷⁾	Manhours	3,980,288	4,343,822	-	-	-

Notes:

(1) Scope 2 emissions are included in Scope 1 as electricity consumed was generated within CLP Power Hong Kong's own organisational boundary.

(2) Not applicable to Castle Peak.

(3) Not applicable as wastewater is treated on site and discharged to sea. There is no discharge to sewerage.

(4) A portion of the treated wastewater is reused on site but measurement data are not routinely collected.

(5) Waste categorised in accordance with local regulations. Contractor waste is included.

(6) All safety and employee data are combined for the three power stations under Castle Peak Power Company (CAPCO).

(7) Started reporting in 2014.

2015 data have been independently reviewed by the Hong Kong Quality Assurance Agency (HKQAA).