

# Paguthan

- Gas-fired power station (with naphtha as secondary fuel)
- 655MW (3x138MW gas turbine, 1x241MW steam turbine)
- Plant commissioned in 1998
- Wholly owned and operated by CLP

Parameter	Unit	2017	2016	2015	2014	2013
<b>1. Operation</b>						
Electricity sent out	GWh	376	547	621	271	286
Gas consumed	TJ	3,307	4,939	5,491	2,688	2,756
Naphtha consumed	TJ	424	0	0	0	19
Thermal efficiency	%	36.3	39.8	40.7	36.3	41.3
Equivalent availability factor (EAF)	%	95.5	95.6	99.0	91.3	98.6
<b>2. Air Emissions</b>						
CO <sub>2</sub> e (Scopes 1 & 2)	kT	211	264	289	149	151
CO <sub>2</sub> (Scopes 1 & 2)	kT	208	263	288	146	151
SO <sub>2</sub>	kT	0.003	0.002	0.003	0.001	0.001
NO <sub>x</sub>	kT	0.11	0.12	0.14	0.03	0.04
Particulate (Total) <sup>(1)</sup>	kT	-	-	-	-	-
<b>3. Water</b>						
Water Withdrawal	Mm <sup>3</sup>	0.85	1.32	1.20	0.92	0.92
from marine water resources <sup>(2)</sup>	Mm <sup>3</sup>	-	-	-	-	-
from freshwater resources	Mm <sup>3</sup>	0.85	1.32	1.20	0.92	0.92
from municipal sources <sup>(2)</sup>	Mm <sup>3</sup>	-	-	-	-	-
Water Discharged	Mm <sup>3</sup>	0.05	0.07	0.03	0.01	0.008
cooling water blowdown discharged to natural drain	Mm <sup>3</sup>	0.05	0.06	0.03	0.01	0.006
treated wastewater discharged to natural drain	Mm <sup>3</sup>	0.004	0.007	0.002	0.0005	0.002
wastewater discharged to sewerage <sup>(3)</sup>	Mm <sup>3</sup>	-	-	-	-	-
Water Reused / Recycled	Mm <sup>3</sup>	1.19	2.97	4.24	1.49	1.92
<b>4. Environmental Compliance</b>						
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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<b>5. Waste Management <sup>(4)</sup></b>						
Hazardous waste						
produced	T (solid) / kl (liquid)	15 / 4	14 / 19	36 / 1	33 / 19	8 / 2
recycled	T (solid) / kl (liquid)	1 / 4	1 / 15	6 / 1	0.4 / 19	6 / 2
disposed	T (solid) / kl (liquid)	14 / 0	12 / 3	30 / 0	32 / 0	21 / 0
Non-hazardous waste						
produced	T (solid) / kl (liquid)	71 / 0	37 / 0	55 / 0	50 / 0	38 / 0
recycled	T (solid) / kl (liquid)	0 / 0	0 / 0	19 / 0	0 / 0	0 / 0
disposed	T (solid) / kl (liquid)	71 / 0	37 / 0	36 / 0	50 / 0	38 / 0
<b>6. Safety</b>						
Employee						
Fatalities	No.	0	0	0	0	0
Days lost / charged	Days	0	0	0	0	0
Lost Time Injuries <sup>(5)</sup>	Cases	0	0	0	0	-
Occupational Disease <sup>(5)</sup>	Cases	0	0	0	0	-
Total Work Hours <sup>(5)</sup>	Manhours	145,482	158,555	155,431	169,408	-
Contractor						
Fatalities <sup>(5)</sup>	No.	0	0	0	0	-
Lost Time Injuries <sup>(5)</sup>	Cases	0	0	0	1	-
Total Work Hours <sup>(5)</sup>	Manhours	1,177,975	1,274,975	1,252,581	1,301,138	-

## Notes:

- <sup>(1)</sup> Total particulates measured were below detection limit.
- <sup>(2)</sup> Not applicable to Paguthan.
- <sup>(3)</sup> No discharge to sewerage as wastewater is treated on site and discharged to natural drain.
- <sup>(4)</sup> Waste categorised in accordance with local regulations. Contractor waste is included.
- <sup>(5)</sup> Started reporting in 2014.

2017 data have been independently verified by DNV GL Business Assurance India Pvt Limited.