Environmental Performance

2019

Airports of Thailand PCL

2019 Environmental Performance Data Coverage

Topics	Suvarnabhumi Airport (BKK)	Don Mueang International Airport (DMK)	Chiang Mai International Airport (CNX)	Hat Yai International Airport (HDY)	Phuket International Airport (HKT)	Mae Fah Luang - Chiang Rai International Airport (CEI)	Percentage of Revenue Generation
Electricity Consumption	✓	✓	✓	✓	✓	✓	100%
GHG Emissions	✓	✓	✓	✓	✓	✓	100%
Water Consumption	✓	✓	✓	✓	✓	✓	100%
Solid Waste	✓	✓	✓	✓	✓	✓	100%

Energy Consumption

Energy Consumption

	Unit	2016	2017	2018	2019
Electricity consumption	MWh	554,330	571,775	569,745	594,497
Purchased Cooling	MWh	96,921	95,392	91,631	93,813
Total Energy consumption	MWh	651,251	667,167	661,376	688,310
Energy intensity	kWh per passenger	5.43	5.16	4.74	4.85
Costs of energy consumption	THB	2,438,309,329	2,454,467,557	2,557,724,241	2,500,597,104

Note: Reported data covers all 6 airports.

Electricity Consumption Targets

Electricity Consumption Targets

Locations	Intensity Target
Suvarnabhumi Airport	Reduce electricity consumption per passenger by 18% in 2020 compared to the 2011 level
Don Mueang International Airport Chiang Mai International Airport Hat Yai International Airport Mah Fah Luang - Chiang Rai International Airport	Reduce electricity consumption per passenger by 20% in 2023 compared to the 2013 level equalling an average decrease of 2% per annum

Note: Phuket International Airport's target is under revision

GHG Emissions

GHG Emissions

	Unit	2015	2016	2017	2018*
Direct GHG emissions (Scope 1)	tCO2e	2,494.99	2,755.94	2,684.55	3,149.73
Indirect GHG emissions from electricity (Scope 2)	tCO2e	198,701.80	211,570.34	213,385.60	228,811.11
Total GHG Emission (Scope 1+2)	tCO2e	201,196.79	214,326.28	216,070.15	231,960.84
Emission intensity	kgCO2e per passenger	2.02	2.01	1.86	1.65

* Data in 2018 covers 6 airports (100%). Data in 2015-1017 covers 5 airports (HKT excluded).

Note: Large increase in 2016 scope 2 emission is due to scope expansion to include cooling water of BKK.

Data in 2019 is under process of verification, thus, not reported here due to a different reporting timeline of AOT's GHG data.

GHG Emission Reduction Targets

GHG Emissions Reduction Targets

Locations	Intensity Target
Suvarnabhumi Airport	Reduce CO2 Emission per passenger by 10% in 2020 compared to the 2015 level
Don Mueang International Airport Chiang Mai International Airport Hat Yai International Airport Mah Fah Luang - Chiang Rai International Airport	Reduce CO2 Emission per passenger by 20% in 2023 compared to the 2013 level equalling an average decrease of 2% per annum

Note: Phuket International Airport's target is under revision

Water consumption

Water Consumption

	Unit	2016	2017	2018	2019
Total municipal water withdrawal	Thousand cubic meters	8,052	9,000	10,299	10,133
Total fresh surface water (lakes, rivers, etc.) and groundwater withdrawal	Thousand cubic meters	539	474	301	348
Treated water discharge	Thousand cubic meters	4,516	4,611	4,315	3,992
Total net fresh water consumption	Thousand cubic meters	4,075	4,863	6,285	6,490
Water withdrawal intensity	Cubic meter per passenger	0.072	0.073	0.076	0.074

Note: Reported data covers all 6 airports

Solid Waste

Solid Waste

	Unit	2016	2017	2018	2019
Total waste generated [1]	Metric tonnes	26,525.78	30,932.00	31,852.56	35,619.59
Total waste used/recycled/sold [2]	Metric tonnes	0	2581.47	3,055.08	2,762.65
Total waste disposed	Metric tonnes	26,526	28,351	28,798	32,857
Waste disposal intensity	kg per passenger	0.22	0.22	0.21	0.23

Note: [1] Reported data covers all 6 airports

[2] Recycled waste data is based on BKK only. AOT is under process of scope expansion and will report a more comprehensive data in the future.

Return on Environmental Investments

Return on Environmental Investments

Environmental Investments	Unit	2016	2017	2018	2019
Capital Investments	THB	515,519,830.32	316,686,586	672,624,750	65,155,360
Operating Expenses	THB	81,521,000	72,296,534	82,268,000	22,992,932
Total Expenses	THB	597,040,830.32	388,983,120	709,351,611	88,148,292
Savings, cost avoidance, income, tax incentives, etc.	THB	8,615,971	90,270,795	13,083,143	16,283,331

Note: Reported data covers all 6 airports