



Environmental Performance

2018

Airports of Thailand PCL

Environmental Key Performance Indicators and Targets



Key Performance Indicator	Unit	2014*	2015	2016	2017	Target 2020
GHG emission intensity (Scope 1+2) of Suvarnabhumi Airport	kgCO2e per passenger	1.81	2.67	2.54	2.28	2.40

Key Performance Indicator	Unit	2015	2016	2017	2018	Target 2020
Electricity consumption intensity of Suvarnabhumi Airport	kWh per passenger	6.60	6.33	5.98	5.57	2.16

Key Performance Indicator	Unit	2015	2016	2017	2018	Target 2033
Installation of real time noise monitoring station	Number of airports	-	-	-	2	6

Note: * Reported GHG emission in 2014 is prior to scope expansion to include cooling water

Energy Consumption



Energy Consumption

	Unit	2015	2016	2017	2018
Electricity consumption	MWh	473,686	554,330	571,775	569,745
Purchased Cooling	MWh	81,651	82,383	80,175	79,083
Total Energy consumption	MWh	555,337	636,713	651,950	648,828
Energy intensity	kWh per passenger	5.89	5.31	5.05	4.65
Costs of energy consumption	THB	2,350,026,327	2,438,309,329	2,454,467,557	2,557,724,241

Note: Reported data covers all 6 airports except in 2015 where HKT electricity consumption is excluded.

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

	Unit	2014	2015	2016	2017
Direct GHG emissions (Scope 1)	tCO2e	2,597.04	2,494.99	2,755.94	2,808.41
Indirect GHG emissions from electricity (Scope 2)	tCO2e	139,557.97	198,701.80	215,570.34	210,634.57
Total GHG Emission (Scope 1+2)	tCO2e	142,155.01	201,196.79	218,326.28	213,442.97
Emission intensity	kgCO2e per passenger	1.80	2.07	2.02	1.84

Note: Reported data covers 5 airports (HKT excluded). Large increase in 2016 scope 2 emission is due to scope expansion to include cooling water of BKK. 2018 Data is not available yet due to 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 30% 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	2015	2016	2017	2018
Total municipal water withdrawal	Thousand cubic meters	6,261	8,052	9,000	10,299
Total fresh surface water (lakes, rivers, etc.) and groundwater withdrawal	Thousand cubic meters	1,971	539	474	301
Treated water discharge	Thousand cubic meters	4,272	4,516	4,611	4,315
Total net fresh water consumption	Thousand cubic meters	3,959	4,075	4,863	6,285
Water withdrawal intensity	Cubic meter per passenger	0.077	0.072	0.073	0.076

Note: Reported data covers all 6 airports

Solid Waste

	Unit	2015	2016	2017	2018
Total waste generated ¹	Metric tonnes	29,115	26,526	30,932	31,853
Total waste used/recycled/sold ²	Metric tonnes	-	-	2581.47	3,055.08
Total waste disposed	Metric tonnes	29,115	26,526	28,351	28,798
Waste disposal intensity	kg per passenger	0.27	0.22	0.22	0.21

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	2015	2016	2017	2018
Capital Investments	THB	1,021,829,006	515,519,830.32	316,686,586	672,624,750
Operating Expenses	THB	81,635,000	81,521,000	72,296,534	82,268,000
Total Expenses	THB	1,103,464,006	597,040,830.32	388,983,120	709,351,611
Savings, cost avoidance, income, tax incentives, etc.	THB	n/a	8,615,971	90,270,795	13,083,143

Note: Reported data covers all 6 airports