



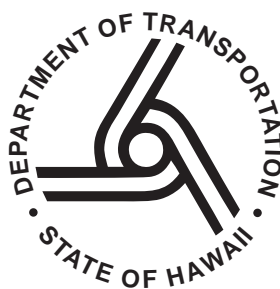
**DRAFT**

# sustainable**HNL**

## Annual Report for 2017

Reporting sustainability progress at

*Daniel K. Inouye International Airport*



Published 2019



# A MESSAGE FROM THE AIRPORT MANAGER

*Aloha!*

The Daniel K. Inouye International Airport sustainability initiative, known as Sustainable HNL (sHNL) is led by the Oahu Airports District Manager and supported by the diverse and dynamic HNL Sustainability Committee. The Committee accomplished several noteworthy sustainability measures in 2017:

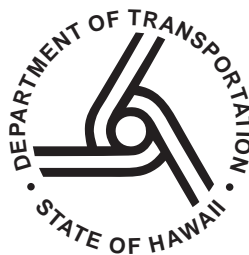
- Reduced airport-wide energy consumption by 10% per passenger (measured in kWh) from 2016. From 2015 to 2017, the airport reduced electricity costs by 47%, which has saved them \$39.6M on electricity bills.
  - Savings primarily due to an energy savings performance contract with Johnson Controls Inc, using lighting upgrades, solar panels, HVAC upgrades, and building automation.
    - Phase 2 of the Energy Savings Performance Contract started in 2017, with more solar panels and lighting upgrades expected to save millions of dollars for the airport.
- The cost of energy went up by 1% due to increased utility rates from the year prior. The cost of energy will continue to go up due to the islands dependence on fossil fuel.
- Compiled a greenhouse gas emissions inventory for HNL, and received Airport Carbon Accreditation from the Airports Council International.
  - Achieved Level 2 Accreditation (Reduction) by reducing the emissions from airport controlled operations within the operational boundary of the airport by 7% from 2016.
- We held four airport cleanup events; two FOD Walks and two Recycle Drives. Both events bring the airport employees donated food and sponsored raffle prizes after they return for cleaning up trash, recycling bulky items and keep the airport safe.

We have been making big and small improvements to the airport with the goal of sustainability guiding the decisions. We want to be able to sustain our way of doing business without compromising the ability of future generations to conduct airport business.

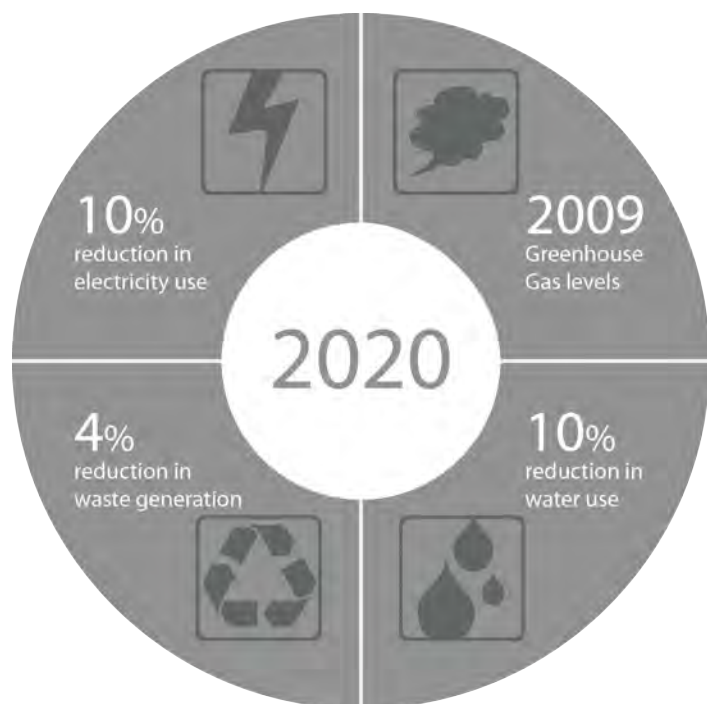
Sincerely,



Roy K. Sakata  
Oahu Airports District Manager  
State of Hawai'i Department of Transportation



# SUSTAINABILITY GOALS AND TARGETS



- ✈ To plan for **sustainable growth**, HNL completed the Federal Aviation Administration (**FAA**) funded Sustainable Management Plan (SMP) in 2016.
- ✈ The goal was to **incorporate sustainability** holistically into airport planning and operations using the EONS model, which stands for Economic Viability, Operational Efficiency, Natural Resource Conservation and Social Responsibility.
- ✈ This is accomplished by identifying goals and objectives, prioritizing initiatives, and **implementing initiatives** and policies.
- ✈ The SMP brought together DOT-A stakeholders and was published in October 2016.
- ✈ Goals and targets identified by the Sustainable HNL Committee are committed to by the Director of the Department of Transportation.

## SUSTAINABLE MANAGEMENT PLAN TARGETS

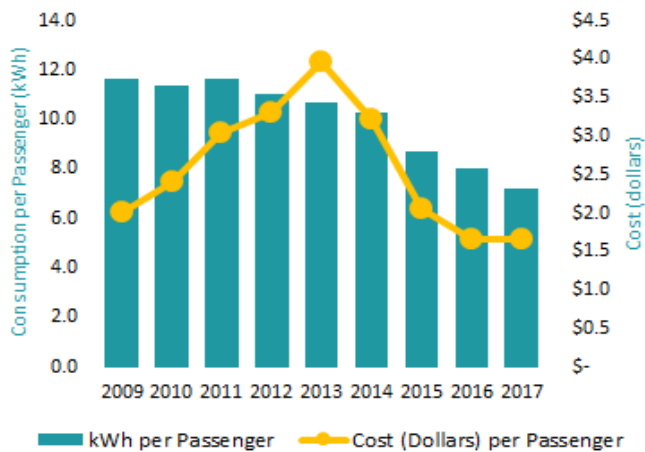
CATEGORY	INDICATOR	BASE LINE	2020 TARGET	ANNUAL	PROGRESS
ENERGY	kWh / passenger	10.3	9.3	7.2	Exceeding
CARBON	lbs. CO <sup>2</sup> / passenger	17.6	15.8	11.6	Exceeding
WATER	gal. / passenger	45.6	41.0	45.2	In Progress
WASTE	waste diversion rate	0.9%	4%	1.2%	In Progress



# SUSTAINABILITY HIGHLIGHTS



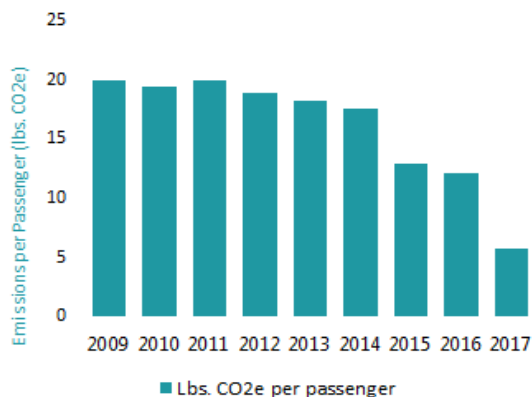
## ENERGY



- ✈ The graph shows how energy use (**blue**) and energy costs (**yellow**) have decreased since 2014.
- ✈ Decreased energy consumption by **10%** from 2016 due to various **renewable energy, conservation, and efficiency** projects completed the 2015.
- ✈ Thousands of on-site solar PV panels generated **3%** of HNLs electricity needs in 2017.
- ✈ Energy bills went up by **2%** from 2016 as a result of increasing utility energy prices.
- ✈ More lighting and solar panels are now underway and expected to be completed in 2019.



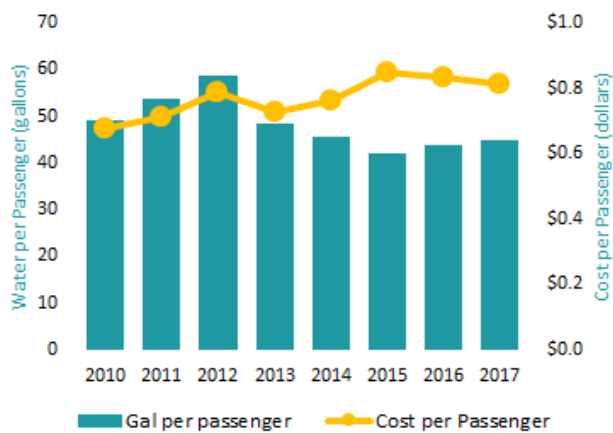
## CARBON



- ✈ Reduced airport-generated carbon emissions by **7%** from 2016 due to energy savings projects.
- ✈ Purchased 6,500 gallons of **biodiesel** for shuttles.
- ✈ Decreased diesel and gasoline purchased by **10%** the Wiki Wiki shuttle vehicles.
- ✈ Received worldwide recognition via **Airport Carbon Accreditation** renewing at Level 2. A third party verified process was undertaken to document efforts to account for and reduce carbon dioxide emissions from airport managed operations. Launched by Airports Council International, the program info can be found at [airportco2.org](http://airportco2.org).



## WATER



- ✈ The graph shows how water costs (**yellow**) have not gone down because essentially water use (**blue**) has stayed the same since 2014.
- ✈ Finished work to **upgrade** the garden ponds and landscaped areas, reducing water leaks.
- ✈ Conducted a study on Water Scalping potential for HNL and other airports.
- ✈ The airport is looking to implement water scalping as a way to reuse water onsite.



## WASTE



- ✈ Coordinated two Airport-Wide Foreign Object Debris (**FOD**) **Walks**, in the spring and fall.
- ✈ **3,420 lbs.** of trash on the AOA cleaned up
- ✈ **350** total volunteers
- ✈ Coordinated bulky item **recycling drive** for tenants and state offices for a **90%** diversion from landfill:
  - ✈ E-Waste **5,319 lbs.**
  - ✈ Scrap Metal **30,840 lbs.**
  - ✈ Incinerator **21,820 lbs.**
- ✈ The airport recycled about **720 cubic yards** of aluminum cans and plastic bottles from terminals in 2017.
- ✈ Rolled out new recycle bin branding to encourage participation.

# RESOURCES

## GUIDING DOCUMENTS



Sustainable  
Management Plan



Sustainable DOT-A  
Program Profile



Cultural  
Appropriateness  
Guidelines (CAG)



Hawai'i Sense-of-Place  
Primer (HSPP)



Sustainable High  
Performance  
Guideline (SHPG)



## REFERENCES

**Sustainable HNL:**

**Sustainable DOT-Airports:**

**Federal Aviation Administration Sustainability Plans:**

**The Hawaii Aloha + Challenge:**

**Sustainable Hawaii Initiative:**

**Hawaii Clean Energy Initiative:**

**Hawaii Storm Water Airport Tenant Training Video:**

<http://airports.hawaii.gov/hnl/airport-info/sustainablehnl/>

<http://tinyurl.com/susDOTA>

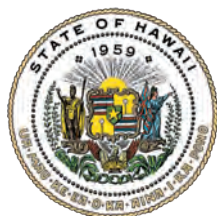
<https://www.faa.gov/airports/environmental/sustainability/>

<https://dashboard.hawaii.gov/aloha-challenge>

<http://governor.hawaii.gov/sustainable-hawaii-initiative/>

<http://www.hawaiicleanenergyinitiative.org/>

<https://www.youtube.com/watch?v=YSE54E2cUIE>



sustainable**DOT-A**

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STATE OF HAWAII

2019

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