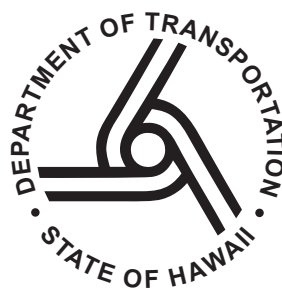
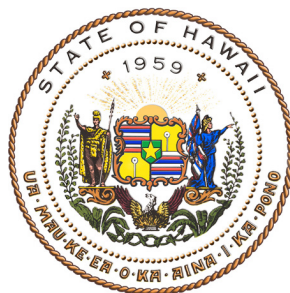




# sustainable**HNL**

## Annual Report for CY2021

Reporting sustainability progress at  
*Daniel K. Inouye International Airport*



Published 2022



# A MESSAGE FROM THE AIRPORT MANAGER

*Aloha!*

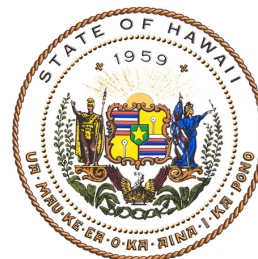
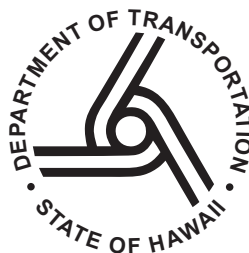
The Daniel K. Inouye International Airport sustainability initiative, known as Sustainable HNL (sHNL) is led by the Oahu Airports District Manager and supported by the diverse and dynamic HNL Sustainability Committee. The Committee accomplished several noteworthy sustainability measures in 2021:

- From 2011 to 2021, the airport reduced electricity use by 43%, which have saved millions of dollars 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 finished in 2021, with more solar panels and lighting upgrades expected to save millions of dollars for the airport.
- Compiled a greenhouse gas emissions inventory for HNL, and received Airport Carbon Accreditation from the Airports Council International.
- We held one airport cleanup event despite COVID Challenges. The Recycle Drive is sponsored by the airport in order to give tenants a free and easy way to dispose of large bulky items responsibly. The one day event cleared 200 cubic yards of waste from the airport property.

While challenges from the pandemic are still lingering, we have been continuing to use sustainability goals to guide the way. We want to be able to sustain our way of doing business without compromising the ability of future generations to conduct airport business.

Sincerely,

Rosemary Neilson-Nenezich  
Oahu District Airports Acting Manager  
State of Hawai'i Department of Transportation

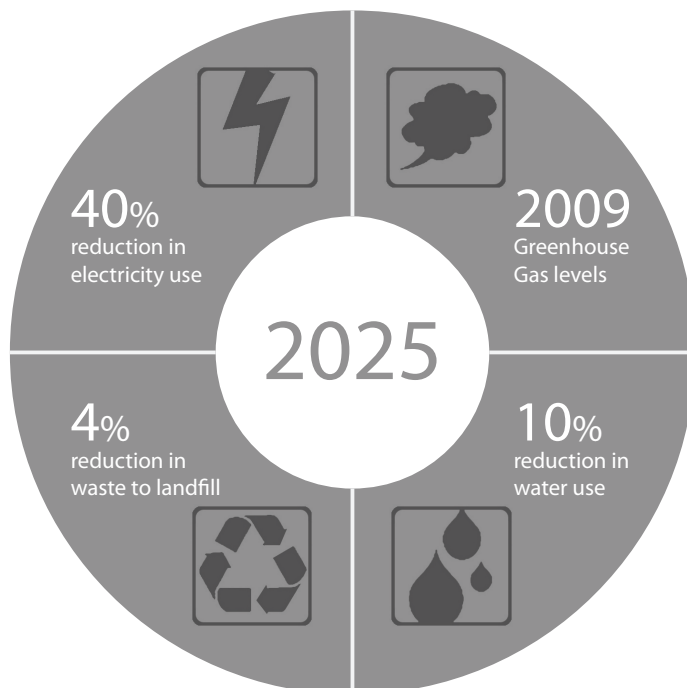


# SUSTAINABILITY GOALS AND TARGETS

---

## GOALS

✈ HNL is guided by the Sustainable Management Plan which set goals for 4 priority categories.



## TARGETS

✈ The goals have specific targets for 2025 and are tracked on an annual basis.

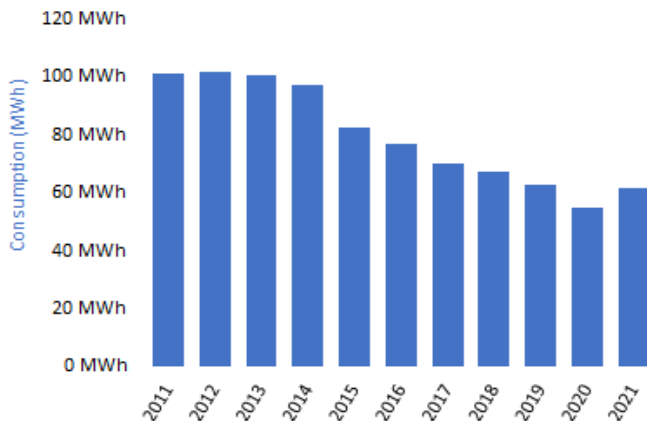
CATEGORY	INDICATOR	2025 TARGET	ANNUAL	PROGRESS
ENERGY	kWh / passenger	3.0	5.1	In Progress
CARBON	lbs. CO <sup>2</sup> / passenger	9.5	4.4	Meeting Goal
WATER	gal. / passenger	19.8	8.2	Meeting Goal
WASTE	waste diversion rate	4%	1.0%	In Progress

# SUSTAINABILITY HIGHLIGHTS



## ENERGY

Energy Consumption  
(2011-2021)

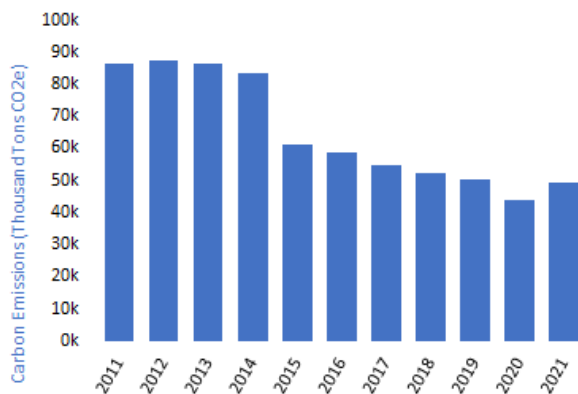


- ✈ The chart to the left overlaps energy consumption with cost for comparison. It shows how energy use has decreased **43%** since 2011.
- ✈ However, the chart shows increased energy use as compared to 2020 because there was a recovery in number of passengers from the COVID19 Pandemic.
- ✈ Thousands of on-site solar PV panels offset **14%** of HNLs purchased electricity in 2021.
- ✈ New Construction projects were completed and energized, which will add to airport energy use.



## CARBON

Carbon Emissions from Airport Owned Sources & Electricity (2011-2021)

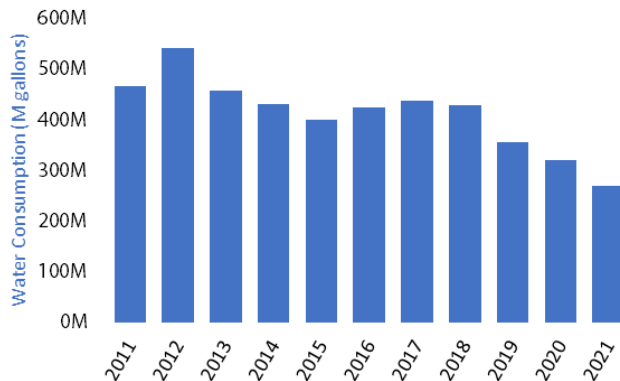


- ✈ Reduced overall airport-generated carbon emissions by **43%** from 2014 due to energy savings projects and COVID19 impacts.
- ✈ However, as the airports main carbon emissions is the electricity it purchases, carbon emissions have gone up with energy use.
- ✈ Received worldwide recognition via **Airport 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](https://airportco2.org).



## WATER

Water Consumption (2011-2021)



- ✈ Water use has been steadily reduced by **42%** since 2011 as shown in the chart.
- ✈ Water and sewer cost is down by **20%** from pre-pandemic levels in 2019. This is due in part to DOTA efforts finding and fixing water leaks as less passengers overall.



## WASTE



**RECYCLE**  
DRIVE 

- ✈ Unfortunately due to COVID19, there was no large gatherings allowed and so there was no large **FOD Walk**.
- ✈ However, volunteers still conducted small FOD Walks with the support of the airport providing trash bags and gloves.
- ✈ Coordinated one bulky item **Recycling Drive** in the Fall for tenants and state offices for a **95%** diversion from landfill:
  - ✈ Scrap Metal **150 Cubic Yards**
  - ✈ Incinerator **50 Cubic Yards**
- ✈ The airport recycled about **200 cubic yards** of aluminum cans and plastic bottles from terminals and concourses in 2021. This number is down due to less passengers than 2019.

# SUSTAINABILITY HIGHLIGHTS



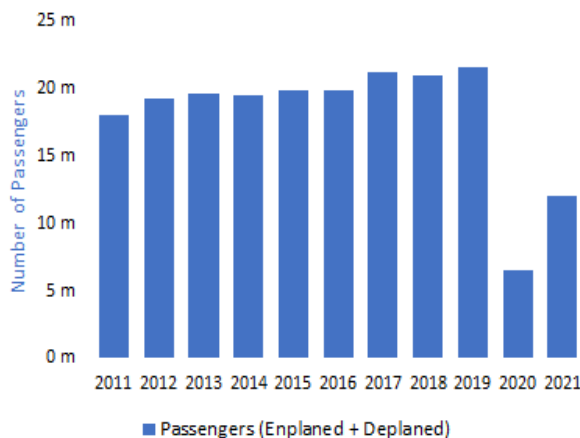
## STORM WATER



- Staff, tenants, consultants and contractors participated in the second virtual edition of the annual Department of Transportation storm water training event, the **Protect Our Water Conference**.
- Training sessions focused on construction BMPs, regulation, technologies and techniques for reducing the **downstream impacts** of storm water in the environment.



## DAY-TO-DAY OPERATIONS

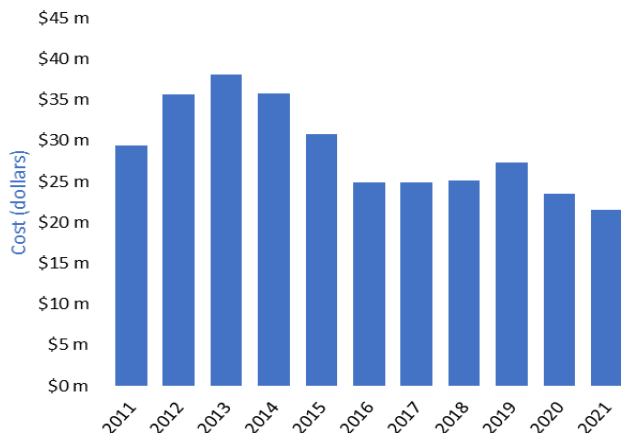


- Passengers increased by **84%** from 2020. However, still down by **44%** from 2019 levels. It was a better year for airlines as people started traveling again.
- Cargo and mail weight landed increased **2%** from 2020 and is up **70%** since 2011.
- The hope is that by 2023 passenger numbers will rebound to pre-pandemic levels.

# SUSTAINABILITY HIGHLIGHTS



## FINANCIAL SUSTAINABILITY



- Utilities costs did go down, but were still a large cost burden.
- Completed Phase 2 of the **Energy Savings Performance Contract**.
- Guarantees **\$65.5** million dollars in savings over the remaining 15 years of the contract.
- Includes rooftop **solar** canopies on parking garages and apron **lighting** upgrades.



## DESIGN AND CONSTRUCTION



- **\$2.3** Billion Dollar Airport Modernization; Sustainability highlights:
- Construction in progress on the 250,000 sq. ft. Mauka Concourse pursuing **LEED Silver** certification.
- Construction completed on Consolidated Rental Car Facility pursuing **LEED Silver** certification.
- Completed **renovating restrooms**, including foam soap dispensers and sensor faucets.



## GROUND TRANSPORTATION



- Continued to support electric vehicles with charging stations and preferred parking. However there is no more free parking allowed.
- The airport is piloting electric shuttle buses for its CONRAC facility as well as compressed natural gas (CNG) buses.

# SUSTAINABILITY HIGHLIGHTS



## CLIMATE RESILIENCY



- ✈ The Airport Modernization Program projects have taken the following steps to mitigate impacts of **climate change**:
  - ✈ All project components are being constructed in existing development areas of the airport.
  - ✈ Located more than **0.5** miles from the shoreline.
  - ✈ Located outside tsunami **evacuation zone**.
  - ✈ Located on ground surface elevations greater than **10 ft** above sea level.
- ✈ Operating **renewable energy** generation systems on every airport roof and parking garage.

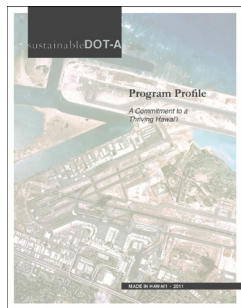
# RESOURCES

---

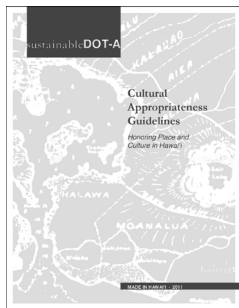
## GUIDING DOCUMENTS



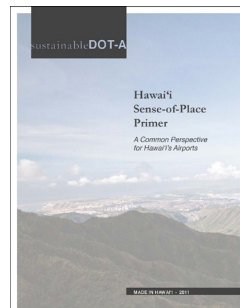
Sustainable  
Management Plan



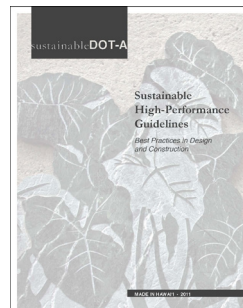
Sustainable DOT-A  
Program Profile



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>

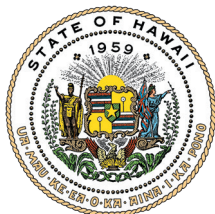
<https://www.faa.gov/airports/environmental/sustainability/>

<https://alohachallenge.hawaii.gov/>

<https://planning.hawaii.gov/sustainability>

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

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



sustainable**DOT-A**

Created in partnership between the Department of Transportation-Airports Division and  
the KYA Design Group.

STATE OF HAWAII

2022

*printed on recycled content paper*