



UNIVERSITY of HAWAII®  
**WINDWARD**  
COMMUNITY COLLEGE



Hale La'akea, WCC's Library is a LEED Silver Building

### **Sustainability Mission:**

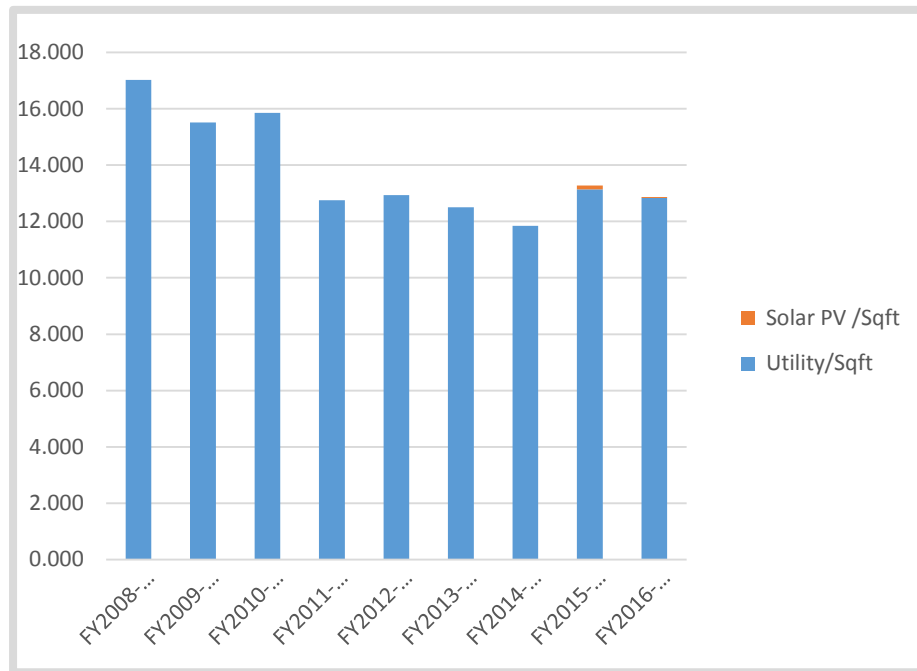
Windward Community College developed a sustainability plan around five areas including operations, curriculum, research, cultural connections, and community outreach. As part of this plan a Campus Sustainability Committee was created with faculty, staff, and student members to implement the plan on campus. Sustainability aligns closely with the Windward Community College mission to “offer innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai’i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O’ahu’s Ko’olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.”

### **Energy Efficiency:**

As part of an energy contract with Johnson Controls Inc. a number of energy saving measures were put into effect including:

- ✚ Lighting
- ✚ Exterior – pole lighting retrofitted with long-life, high efficiency Beta LED fixtures; 143 fixtures replaced for savings of 48,839 kWh annually
- ✚ Interior – fluorescent lamps and ballasts were replaced with either T-8, LED and other efficient lighting fixtures and bulbs
- ✚ Occupancy sensors were installed on both interior and exterior fixtures
- ✚ An Energy Management System was installed on campus to monitor and control building occupancy schedules, chiller plant operations, building energy consumption, and building equipment operation such as VAV, FCU, and AHU components
- ✚ HVAC improvements were made to the Imaginarium building as well as replacement of exhaust fans in Imiloa
- ✚ Central Chilled Water Plant improvements
- ✚ Both chiller plants were converted to variable primary pumping systems
- ✚ Creation of a central chilled water loop connecting 7 buildings
- ✚ A kitchen exhaust fan was equipped with sensors to operate at variable speeds as needed
- ✚ 17 sub-meters were incorporated on campus to measure segment energy consumption
- ✚ PC computers were equipped with software to manage power settings and schedules for networked PCs. 720 licenses were acquired by the campus
- ✚ Four vending machines were equipped with controls to power down during hours of non-use
- ✚ An electric vehicle charging station was installed on campus
- ✚ A small solar PV system was installed on the library roof, producing 60,000 kWh from 2015-2017

- ✦ Energy usage per square foot since 2008: 24% reduction in overall power consumption; 25% reduction in HECO power usage; 0.5% of power is produced by solar



#### Water Conservation:

- ✦ Water fixtures on 110 toilets, 32 urinals, and 79 sink faucets were replaced with more water-efficient fixtures. 2327 kGal are saved every year through these measures

#### Recycling and Waste Reduction:

- ✦ Worked with IT services on campus to set all printing and copying to duplex.
- ✦ Created a purchasing policy to incentivize purchasing recycled paper
- ✦ WCC students researched recycling practices on campus then revamped the current system through an education campaign, installing wire recycling basket of every outdoor trashcan, and boxes for paper recycling near all printers

#### Run-off Prevention:

- ✦ Hui o Koolaupoko has partnered with WCC students, faculty, and staff help maintain a rain garden to capture run-off from Hale Imiloa and landscape with native plants.
- ✦ The WCC Student Sustainability Hui labelled all of the storm drains on campus to educate the campus community about run-off prevention

#### Transportation

- ✦ Information on bicycling, bus transportation, and walking was posted on the WCC website
- ✦ Parking spots are provided for carpool and electric vehicle charging

### Community Involvement

- ✚ Windward Community College had a Battle of the Building Energy saving competition to encourage energy conservation and education across different buildings on campus
- ✚ WCC has been designated a Blue Zone Approved Worksite
- ✚ Windward Community College has a robust service learning program where students work with community organizations like Waikalua Loko I'a, He'eia Fishpond, Papahana Kuaola, Kako'o 'O 'Iwi, Maunawila Heiau, Hui 'O Ko'olaupoko and other community organizations dedicated to preserving and protecting the natural and cultural environments of Ko'olaupoko
- ✚ Faculty have created 31 sustainability designated courses across a variety of academic disciplines that teach students about different aspects of sustainability