



UNIVERSITY
of HAWAII®
SYSTEM

DEPT. COMM. NO. 109

David Lassner
President

December 19, 2016

The Honorable Ronald D. Kouchi,
President and Members of the Senate
Twenty-Ninth State Legislature
Honolulu, Hawai'i 96813

The Honorable Joseph Souki, Speaker
and Members of the House of Representatives
Twenty-Ninth State Legislature
Honolulu, Hawai'i 96813

Dear President Kouchi, Speaker Souki, and Members of the Legislature:

For your information and consideration, the University of Hawai'i is transmitting one copy of the Annual Report on Net-Zero Energy for the University of Hawai'i (Section 304A-119, Hawai'i Revised Statutes) as requested by the Legislature.

In accordance with Section 93-16, Hawai'i Revised Statutes, this report may be viewed electronically at: <http://www.hawaii.edu/offices/government-relations/2017-legislative-reports/>.

Should you have any questions about this report, please do not hesitate to contact Stephanie Kim at 956-4250, or via e-mail at scskim@hawaii.edu.

Sincerely,

A handwritten signature in black ink that reads 'David'.

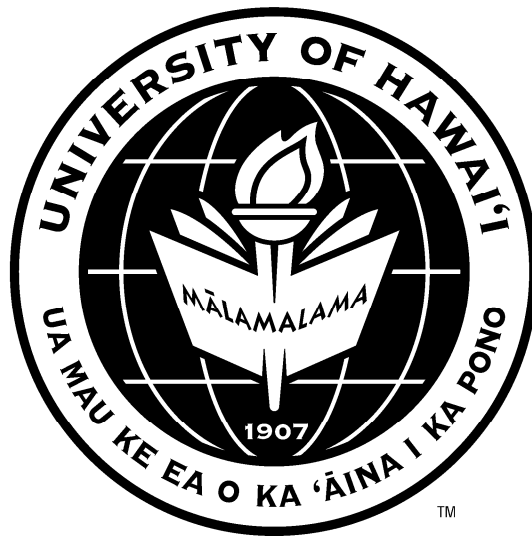
David Lassner
President

Enclosure

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UNIVERSITY OF HAWAI‘I SYSTEM ANNUAL REPORT



REPORT TO THE 2017 LEGISLATURE

Annual Report on Net-Zero Energy for
the University of Hawai'i

HRS 304A-119

December 2016



UNIVERSITY of HAWAI'I®

Report to the Hawai'i State Legislature Pursuant to Act 99, SLH 2015 HRS 304A-119

The governor signed into law Act 99 (SLH 2015) which established a collective goal for the University of Hawai'i “*to become net-zero with respect to energy use, producing as much (renewable) energy as the system consumes across all campuses by January 1, 2035.*”

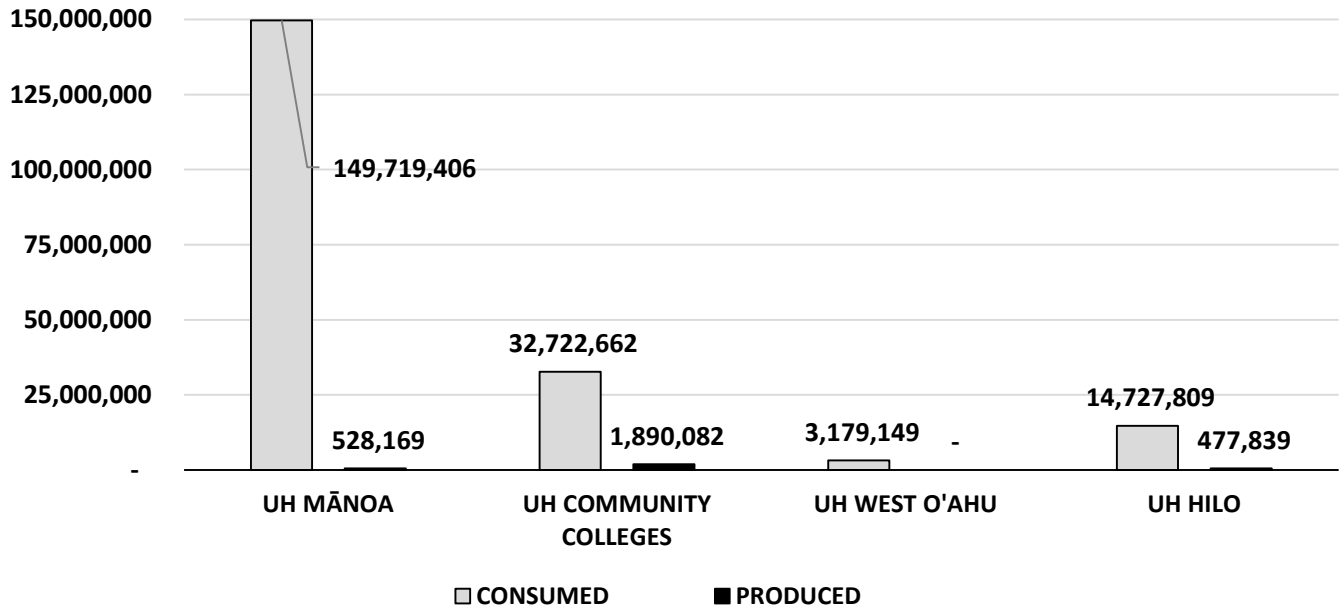
This report details the activities, plans, improvements made and overall progress made to advance the Net-Zero energy goal for calendar year 2016 compared to the baseline established in calendar year 2015; and supports proposed legislation that helps shape the energy landscape at UH in the 2017 legislative session.

NET-ZERO DASHBOARD <i>for 2016</i>	KWh
Total Energy Consumed ¹	200,877,194,620
Total Renewable Energy Provided	2,896,090

¹ Includes non-campus facilities



2016 Energy Consumption and Production by Campus (kWh)

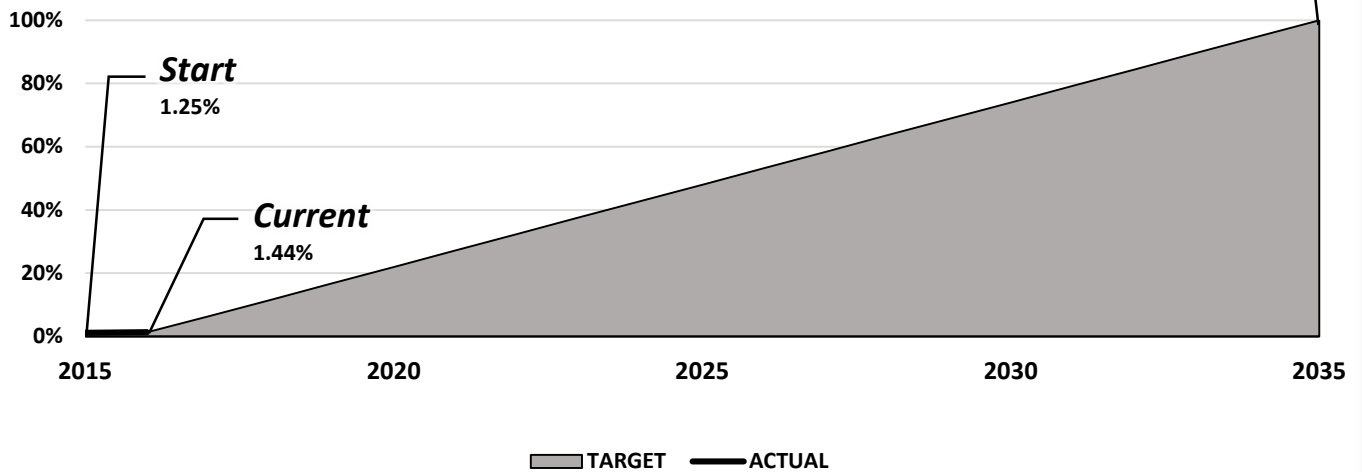


Net-Zero Energy Goal Progress (Percent of UH Energy Usage Produced by UH)

1.44% Net-Zero as of Jan. 2017

Target
100%*

*198MWh Consumed/
Produced Per Year)



PLANS AND ACHIEVEMENTS

There are four key components to reaching Net-Zero by 2035: Energy Management, Efficiency, Renewable Generation, and Social Initiatives including policy. Highlights of this year's achievements in these areas are listed below.

1. Energy Management:
 - Office of Energy Management established
 - Energy Management System (EMS) acquired; EMS currently being implemented across multiple campuses to measure and manage energy utilization and generation

2. Increase Efficiency:
 - “Mānoa Green Days” continue – building electricity is shut off over the weekends and during holidays
 - Space Utilization Assessment in progress to maximize efficient use of existing space

3. Expand Renewable portfolio (and Storage)
 - UH Hilo more than doubled energy production via additional PV
 - 100kW Power Purchase Agreement (PPA) awarded for the Institute for Astronomy on Maunakea.
 - 2MW PPA awarded for the UH Mānoa campus

4. Social Initiatives:
 - Green Revolving Fund (GRF) established to track and re-invest energy savings
 - Building Design and Performance Standards finalized for new construction and renovations
 - Student-driven Community Based Social Marketing pilot program established to foster sustainable behavior in office environments

LEGISLATIVE OUTLOOK

The UH System continues to support legislative bills that help shape the energy landscape of the future. These measures include, but are not limited to, micro-grids, smart grids, wheeling, time-of-use pricing, and storage incentives.

UH urges appropriations efficiency and renewable generation as an upfront cost that pays for itself over the course of the life of the facility.