REPORT TO THE 2017 LEGISLATURE

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

HRS 304A-119

December 2016
Report to Hawai‘i State Legislature
Pursuant to Act 99, SLH 2015
HRS 304A-119

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

1.44% Net-Zero as of Jan. 2017

Target 100%*

*195MWh Consumed/Produced Per Year)

FY 2015-16 Energy Consumption and Production by Campus (kWh)

<table>
<thead>
<tr>
<th>Campus</th>
<th>Consumed</th>
<th>Produced</th>
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<tbody>
<tr>
<td>UH MĀNOA</td>
<td>149,719,406</td>
<td>-</td>
</tr>
<tr>
<td>UH COMMUNITY COLLEGES</td>
<td>32,722,662</td>
<td>1,890,082</td>
</tr>
<tr>
<td>UH WEST O‘AHU</td>
<td>3,179,149</td>
<td>-</td>
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<tr>
<td>UH HILO</td>
<td>-</td>
<td>14,727,809</td>
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Net-Zero as of Jan. 2017: 1.44%
PLANS AND ACHIEVEMENTS

There are four key components to reaching Net-Zero by 2035: Energy Management, Efficiency, 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” continues – building electricity is shut off over the weekends and during holidays
   - Space Utilization Assessment in progress to maximize efficient use of existing space
   - Energy Savings Performance Contract (ESPC) Request for Quotation (RFQ) announced in December 2016

3. **Expand Energy Generation (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.