



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committee on Higher Education
March 12, 2019 at 2:45 p.m.

By
John Morton
Vice President for Community Colleges
University of Hawai'i System

HB 560 HD1 – RELATING TO ENERGY TRAINING

Chair Kim, Vice Chair Kidani, and members of the committee:

Thank you for the opportunity to testify in support of HB 560 HD1. This measure would require the University of Hawai'i community colleges to, among other things, establish energy systems and technology training courses for county officers and employees responsible for permitting, inspecting, licensing, and approving construction projects that contain renewable energy systems and related technology.

Honolulu Community College is the leader of the construction and trades related training on the island of O'ahu and mandated by law to provide construction and trades apprenticeship training. The College has experience in delivering curriculum around new energy system technologies and equipment. The electrical installation and maintenance technology program and the Pacific Center for Advanced Training and Technology (both Honolulu CC programs), have partnered to create new green technology training, including solar installation and maintenance. These customized programs have been geared for active duty military personnel and veterans, and have been offered on our military bases. They have also been offered to business organizations and is available through open enrollment. The community colleges also have a unique partnership with Johnson Controls Inc. through a performance based contract to lower the campus energy costs, waste, and implementation of new energy systems. This performance based contract includes an educational component where resources are provided for curriculum development, short-term instructional classes, and professional energy management consultation.

Honolulu Community College is poised to implement HB 560 HD1 to provide the necessary training for county officers and employees responsible for permitting, inspecting, licensing, and approving projects, including officers and employees at county public works departments, planning and permitting departments, and fire departments. The College has years of experience in offering long-term and short-term training programs for specific energy related industries.

The University of Hawai'i supports the intent of HB 560 HD1 on the condition that any funds do not supplant any portion of the University's Supplemental Budget Request.



DAVID Y. IGE
GOVERNOR

MIKE MCCARTNEY
DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of
MIKE MCCARTNEY
Director

Department of Business, Economic Development, and Tourism
before the
SENATE COMMITTEE ON HIGHER EDUCATION

Tuesday, March 12, 2019
2:45 PM
State Capitol, Conference Room 229

In consideration of
HB 560, HD1
RELATING TO ENERGY TRAINING.

Chair Kim, Vice Chair Kidani, and members of the Committee. The Department of Business, Economic Development, and Tourism (DBEDT) **supports** HB 560, HD1, which requires University of Hawaii (UH) community colleges to establish energy systems and technology training courses for County officers and employees. UH is required to establish an advisory committee, including industry and County representatives, to provide input to UH community colleges on the energy systems and technology training courses and assist with outreach.

DBEDT is committed to achieving Hawaii's statutory goal of 100% Renewable Portfolio Standards (RPS) by 2045 as a means of decarbonizing our economy from fossil fuels, amongst other environmental and economic benefits. Training for County officers and employees responsible for permitting, inspecting, licensing, and approving energy systems and technology construction projects would support Hawaii's ambitious RPS goal as education on industry standards and new innovations for County workers involved in energy construction projects can inform and expedite the permitting process.

DBEDT defers to UH community colleges on the level of funding required to develop and implement the energy systems and technology training program. We support this bill provided that its passage does not replace or adversely impact priorities indicated in our Executive Budget.

Thank you for the opportunity to testify.

DAVID Y. IGE
GOVERNOR

JOSH GREEN
LIEUTENANT GOVERNOR



SCOTT T. MURAKAMI
DIRECTOR

LEONARD HOSHIJO
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS
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March 11, 2019

The Honorable Donna Mercado Kim, Chair
Committee on Higher Education
The State Senate
State Capitol, Room 218
Honolulu, Hawaii 96813

Dear Chair Kim:

Subject: House Bill (HB) 560, House Draft (HD) 1 Relating to Energy Training

I am Manuel P. Neves, Chair of the Hawaii State Fire Council (SFC) and Fire Chief of the Honolulu Fire Department (HFD). The SFC and the HFD support HB 560 HD 1, which seeks to establish energy systems and technology training courses for county officers and employees, who are responsible for permitting, inspecting, licensing, and approving construction projects, and an advisory committee of industry stakeholders and submit a report to the legislature.

The SFC and the HFD recognize that the alternative/renewable energy industry in Hawaii is experiencing rapid growth and technological innovation. Therefore, appropriate first responder training to properly manage emergency incidents involving these potentially high-voltage systems are a significant life safety priority. Furthermore, county officials and personnel must acquire and maintain the knowledge, skills, and abilities to properly inspect, approve, and license projects containing these systems.

The SFC and the HFD believes in a comprehensive approach to statewide training for first responders, county officers, and other employees and urges your committee's support on the passage of HB 560, HD 1.

Should you have questions, please contact SFC Administrative Specialist Lloyd Rogers at 723-7176 or lrogers@honolulu.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "M. Neves".

MANUEL P. NEVES
Chair

MPN/LR:clc

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Email: communications@ulupono.com

SENATE COMMITTEE ON HIGHER EDUCATION
Tuesday, March 12, 2019 — 2:45 p.m. — Room 229

Ulupono Initiative Strongly Supports HB 560 HD 1, Relating to Energy Training

Dear Chair Kim, Vice Chair Kidani, and Members of the Committee:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and better manage waste and fresh water resources. Ulupono believes that self-sufficiency is essential to our future prosperity and will help shape a future where economic progress and mission-focused impact can work hand in hand.

Ulupono strongly supports HB 560 HD 1, which requires University of Hawai'i community colleges to establish energy systems and technology training courses for county government employees, because it aligns with our goal of increasing the production of clean, renewable energy in Hawai'i.

For the State to meet its ambitious clean energy goals, there needs to be more renewable energy projects approved and developed. Approving projects can often take years, which disincentivizes developers and financiers. If regulators were able to have energy training courses available, this should assist them in analyzing renewable energy projects at a faster rate with better efficiency. This would be a win-win situation for all stakeholders.

As Hawai'i's energy issues become increasingly complex and challenging, we appreciate this committee's efforts to look at policies that support renewable energy production.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay
Managing Partner

Investing in a Sustainable Hawai'i



SENATE COMMITTEE ON HIGHER EDUCATION

March 12, 2019, 2:45 P.M.

Room 229

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 560 HD1

Aloha Chair Mercado Kim, Vice Chair Kidani, and Committee members:

Blue Planet Foundation **supports** House Bill 560 HD1, which requires University of Hawaii community colleges to establish energy systems and technology training courses for county government employees, and appropriates funds.

Hawaii's shift to a 100% renewable energy future is already underway. But to keep up with the pace of innovation, our processes for approval and implementation of renewable energy projects and technologies must also be reimagined. The type of training proposed in HB 560 should be an integral part of Hawaii's progress towards 100% renewable energy—and can help us reach our clean energy goals even faster.

County government employees who are tasked with permitting, inspecting, licensing, and approving renewable energy technologies and equipment face the difficult hurdle of remaining constantly informed about new technologies, equipment, codes, and standards. Yet, there are not adequate resources available to set them up for success in the rapidly changing energy sector, which can lead to unnecessary delays in the approval and implementation of the projects we need to reach our clean energy goals.

Blue Planet Foundation supports this measure to bolster county workforce training and retraining for clean energy.

Thank you for the opportunity to testify.

HB-560-HD-1

Submitted on: 3/10/2019 5:43:37 PM

Testimony for HRE on 3/12/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Graham	Testifying for 350.org	Support	No

Comments:

I support HB560. To reach our clean energy goals, we need enough people trained to inspect and approve distributed energy systems and the newer clean energy technology that is continually emerging.

These systems must be safe and reliable. More PV and battery storage, for example, will require inspectors qualified to approve the latest technologies.

No one wants accidents or expensive mistakes in our clean energy equipment. HB560 HD1 will ensure that we avoid them.

Thank you for considering this testimony.



To: The Senate Committee on Higher Education
From: Sherry Pollack, 350Hawaii.org
Date: Tuesday, 3/12/19

In support of HB 560 HD1

Aloha Chair Mercado Kim, Vice Chair Kidani, and members of the HRE committee,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. On behalf of our 6,000 members and supporters, 350Hawaii.org **supports HB560 HD1.**

To reach our clean energy goals, we need enough people trained to inspect and approve distributed energy systems and the newer clean energy technology that is continually emerging.

These systems must be safe and reliable. More PV and battery storage, for example, will require inspectors qualified to approve the latest technologies.

No one wants accidents or expensive mistakes in our clean energy equipment. HB560 HD1 will ensure that we avoid them.

Thank you for the opportunity to testify in **support** of this important bill.

Sherry Pollack
Co-Founder, 350Hawaii.org



Hawai'i Energy

YOUR CONSERVATION & EFFICIENCY PROGRAM

1132 Bishop Street, Suite 1800 • Honolulu, Hawai'i 96813 • HawaiiEnergy.com • P: (808) 839-8880 • F: (808) 441-6068

Before the Senate Committee on Higher Education
Tuesday, March 12, 2019, 2:45 PM, Conference Room 229
HB560 HD1: Relating to Energy Training

Chair Kim, Vice-Chair Kidanim, and members of the committee:

The Hawai'i Energy program would like to testify in **support** for HB560 HD1.

Hawai'i Energy works to empower island families and businesses on behalf of the Hawai'i Public Utilities Commission (PUC) to make smart energy choices to reduce energy consumption, save money, and pursue a 100% clean energy future.

Hawai'i Energy finds professional development in the forms of trainings an effective way to raise the workforce and industry knowledge baseline. Hawai'i Energy sponsors trainings for a variety of energy-related subjects such as building operations, energy management, lighting, lighting controls, HVAC, etc. to name a few. Said trainings are attended by facility managers, equipment installation contractors, energy sales professionals and others whom have responded well in feedback surveys.

Establishing energy systems and technology training courses for officers and employees of the counties would likewise empower said employees to make the best decision making and analysis when regarding energy projects. Needless to say that due to the lifetime of certain equipment, making the right choice can go a long ways toward helping the state reach its clean energy goals.

Thank you for the opportunity to provide comments on HB560 HD1.

Karen Shishido
Transformational Program Manager
Hawai'i Energy

HB-560-HD-1

Submitted on: 3/9/2019 4:44:23 AM

Testimony for HRE on 3/12/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Kunitake	Individual	Support	No

Comments:

Aloha,

Please support HB560 HD1. We need to increase energy training in our UH Community College Systems.

Mahalo,

Caroline Kunitake

HB-560-HD-1

Submitted on: 3/10/2019 3:03:39 AM

Testimony for HRE on 3/12/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jonathan Boyne	Individual	Support	No

Comments:

To reach our clean energy goals, we need enough people trained to inspect and approve distributed energy systems and the newer clean energy technology that is continually emerging.

These systems must be safe and reliable. More PV and battery storage, for example, will require inspectors qualified to approve the latest technologies.

No one wants accidents or expensive mistakes in our clean energy equipment. HB560 HD1 will ensure that we avoid them.

HB-560-HD-1

Submitted on: 3/10/2019 8:09:25 AM

Testimony for HRE on 3/12/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Culbertson	Individual	Support	No

Comments:

HB-560-HD-1

Submitted on: 3/10/2019 9:53:54 AM

Testimony for HRE on 3/12/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Rene Umberger	Individual	Support	No

Comments:

HB-560-HD-1

Submitted on: 3/10/2019 9:50:26 PM

Testimony for HRE on 3/12/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Janet Pappas	Individual	Support	No

Comments:

HB-560-HD-1

Submitted on: 3/11/2019 1:05:55 AM

Testimony for HRE on 3/12/2019 2:45:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Joan Gannon	Individual	Support	No

Comments:

To whom it may concern

From Joan Gannon Hawaii Island resident

Re: HB560 to reach our clean energy goals we need enough people trained to inspect and approve distributed energy systems in the newer clean energy technology that is continually emerging.

No one wants accidents or expensive mistakes in our clean energy equipment. "Tis bill will ensure that we avoid them.

Thank you



KAUA'I FIRE DEPARTMENT
THE COUNTY OF KAUA'I
DEREK S. K. KAWAKAMI, MAYOR
MICHAEL A. DAHLIG, MANAGING DIRECTOR

KILIPAKI VAUGHAN
DEPUTY FIRE CHIEF

LATE

March 11, 2019

The Honorable Donna Mercado Kim, Chair
Committee on Higher Education
The State Senate
State Capitol, Room 218
Honolulu, Hawaii 96813

Aloha Chair Kim:

Subject: House Bill (HB) 560 House Draft (HD) 1 Relating to Energy Training

I am Kilipaki Vaughan, Deputy Fire Chief of the Kauai Fire Department (KFD). The KFD **supports** HB 560 HD 1, which seeks to establish energy systems and technology training courses for county officers and employees, who are responsible for permitting, inspecting, licensing, and approving construction projects, and an advisory committee of industry stakeholders and submit a report to the legislature.

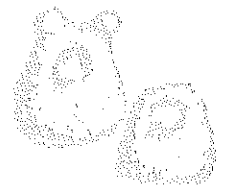
The KFD recognizes that the alternative/renewable energy industry in Hawaii is experiencing rapid growth and technological innovation. Therefore, appropriate first responder training to properly manage emergency incidents involving these potentially high-voltage systems are a significant life safety priority. Furthermore, county officials and personnel must acquire and maintain the knowledge, skills, and abilities to properly inspect, approve, and license projects containing these systems.

The KFD believes in a comprehensive approach to statewide training for first responders, county officers, and other employees and urges your committee's support on the passage of HB 560 HD 1.

www.kauai.gov

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KAUA'I FIRE DEPARTMENT
THE COUNTY OF KAUA'I
DEREK S. K. KAWAKAMI, MAYOR
MICHAEL A. DAHLIG, MANAGING DIRECTOR

KILIPAKI VAUGHAN
DEPUTY FIRE CHIEF

Honorable Donna Mercado Kim, Chair
Page 2
March 11, 2019

Should you have questions, please contact me at (808) 241-4980 or via email at kvaughan@kauai.gov

Ke aloha nui

A handwritten signature in black ink, appearing to read "Kilipaki Vaughan".

Kilipaki Vaughan
Deputy Fire Chief
Kauai Fire Department, County of Kauai

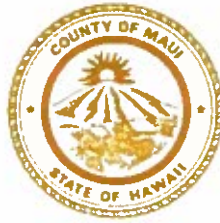
KV/dg



MICHAEL P. VICTORINO
Mayor

DAVID C. THYNE
Fire Chief

BRADFORD K. VENTURA
Deputy Fire Chief



DEPARTMENT OF FIRE & PUBLIC SAFETY

COUNTY OF MAUI
200 DAIRY ROAD
KAHULUI, HI 96732

LATE

March 11, 2019

The Honorable Donna Mercado Kim, Chair
Committee on Higher Education
The State Senate
State Capitol, Room 218
Honolulu, Hawaii 96813

Dear Chair Kim:

Subject: House Bill (HB) 560, House Draft (HD) 1 Relating to Energy Training

I am David C. Thyne, member of the Hawaii State Fire Council (SFC) and Fire Chief of the Maui Fire Department (MFD). The SFC and the MFD support HB 560 HD 1, which seeks to establish energy systems and technology training courses for county officers and employees, who are responsible for permitting, inspecting, licensing, and approving construction projects, and an advisory committee of industry stakeholders and submit a report to the legislature.

The SFC and the MFD recognize that the alternative/renewable energy industry in Hawaii is experiencing rapid growth and technological innovation. Therefore, appropriate first responder training to properly manage emergency incidents involving these potentially high-voltage systems are a significant life safety priority. Furthermore, county officials and personnel must acquire and maintain the knowledge, skills, and abilities to properly inspect, approve, and license projects containing these systems.

The SFC and the MFD believes in a comprehensive approach to statewide training for first responders, county officers, and other employees and urges your committee's support on the passage of HB 560, HD 1.

Should you have questions, please contact SFC Administrative Specialist Lloyd Rogers at (808) 723-7176 or lrogers@honolulu.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "D.C. Thyne".

DAVID C. THYNE
Fire Chief



To: The Senate Committee on Higher Education
From: Brodie Lockard, Hawaii State Climate Lead, Organizing for Action
Date: Tuesday, March 12, 2019, 2:45 pm

In support of HB 560 HD1

LATE

Dear HRE Chair Kim, Vice Chair Kidani, and Committee Members—

Organizing for Action supports HB 560 HD1.

We can't move far enough, fast enough, toward zero emissions without enough people trained to inspect and approve distributed energy systems and the newer clean energy technology that will keep emerging in the next decades. Training people is well worth the expense to prevent costly mistakes and systems that don't work safely and correctly.

Whether these systems are safe and work as designed cannot be left up only to their owners and installers. As Hawaii adds more distributed generation and new technology like battery storage, qualified inspectors need to be ready and available to ensure they are up to standards.

We need trained officers and employees to avoid expensive delays and accidents as Hawaii moves to zero emissions. HB 560 HD1 is an indispensable step in that movement.

Thank you for the opportunity to testify.

Brodie Lockard
Hawaii State Climate Lead, Organizing for Action