



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee on Energy & Environmental Protection
January 29, 2019 at 8:30 a.m.

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

HB 560 – RELATING TO ENERGY TRAINING

Chair Lowen, Vice Chair Wildberger, and members of the committee:

Thank you for the opportunity to testify in support of HB 560. 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 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 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

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
Web site: www.hawaii.gov/dbedt

Telephone: (808) 586-2355
Fax: (808) 586-2377

Statement of
MIKE MCCARTNEY
Director

Department of Business, Economic Development, and Tourism
before the

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, January 29, 2019
8:30 AM

State Capitol, Conference Room #325

In consideration of
HB 560
RELATING TO ENERGY TRAINING.

Chair Lowen, Vice Chair Wildberger, and members of the Committee. The Department of Business, Economic Development, and Tourism (DBEDT) **supports** HB 560 which requires University of Hawaii (UH) community colleges to establish energy systems and technology training courses for County officers and employees and appropriates \$130,000 out of State general revenues to UH for this training. 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.

Thank you for the opportunity to testify.



John Uekawa, President
Dave Roll, Executive Director

HADA testimony in **Strong Support** of HB 560
Relating to Energy Training

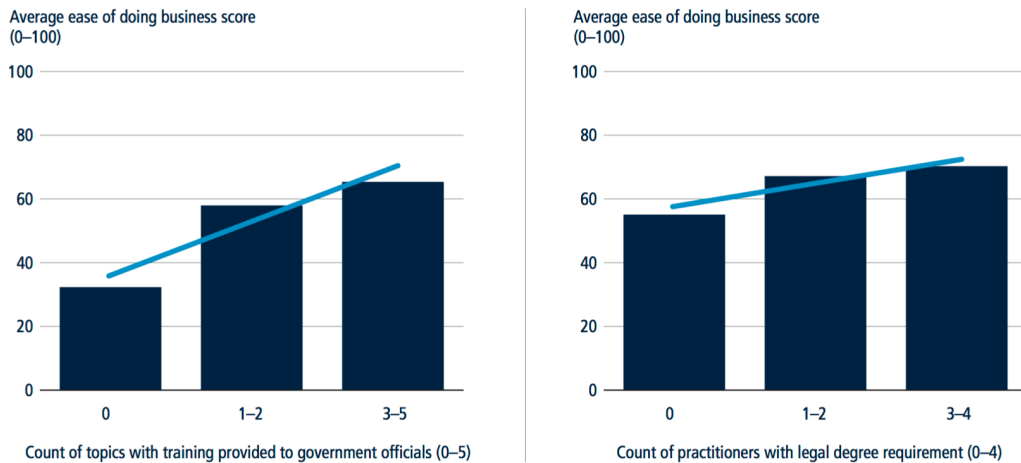
Submitted to the Committee on Energy & Environmental Protection For the public hearing
8:30 a.m. Tuesday, January 29, 2019 in Conference room 325, Hawaii State Capitol

Chair Lowen, Vice Chair Wildberger and members of the committee:

This bill, HB 560, proposes to require UH community colleges to establish energy systems and technology training courses for county officers and employees responsible for permitting, inspecting, licensing, and approving construction projects and an advisory committee of industry stakeholders and to submit a report to the Legislature. Appropriates funds. HADA is in strong support of measures which will facilitate an efficient and helpful permitting, inspecting, licensing and approving process.

A study by the World Bank reported that training programs are associated with a higher ease of doing business score.

FIGURE 1.10 More training opportunities for public officials are associated with a higher ease of doing business score



Source: *Doing Business* database.

Note: The count of *Doing Business* topics for which training is offered to public sector officials ranges from 0 to 5, where each topic with government-provided training counts as 1 (left-hand figure). The topics are as follows: starting a business (+1), registering property (+1), getting electricity (+1), paying taxes (+1) and trading across borders (+1). The relationship is significant at the 1% level after controlling for income per capita. The sample comprises 166 economies. The legal degree requirement count (right-hand figure) ranges from 0 to 4 where each type of legal practitioner required to hold an advanced degree counts as 1. The types of legal practitioner are as follows: practicing lawyers (+1), judges (+1), insolvency representatives (+1) and law clerks (+1). The relationship is significant at the 1% level after controlling for income per capita. The sample comprises 86 economies.

HADA respectfully asks the committee to favorably consider HB560 and move the measure on to its next committee.

Respectfully submitted,

David H. Rolf (on behalf of the members of HADA)



To: The House Committee on Energy & Environmental Protection
From: Sherry Pollack, Co-Founder, 350Hawaii.org
Date: Tuesday, 1/29/19

In support of HB 560

Aloha Chair Lowen, Vice Chair Wildberger, and Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org supports **HB560**.

Training on renewable energy systems is a key and necessary component for the success of Hawaii's zero-emissions future. A lack of trained officers and employees could lead to unnecessary delays and hamper us from achieving our renewable portfolio goals.

This bill will contribute to the speed, efficiency and safety of our transition to distributed energy generation, and the opening of more zero-emissions installations. It's an obvious need that will only become greater.

Please pass HB 560 so we continue our leadership toward a cleaner energy future.

Mahalo for the opportunity to testify in **support** of this bill.

Sherry Pollack
Co-Founder, 350Hawaii.org



To: The House Committee on Energy & Environmental Protection
From: Brodie Lockard, Hawaii State Climate Lead, Organizing for Action
Date: Tuesday, January 29, 2019, 8:30 am

In support of HB 560

Dear EEP Chair Lowen, Vice Chair Wildberger and Committee Members—

Organizing for Action supports HB 560.

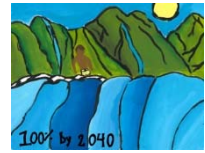
We can't move far enough, fast enough, toward zero emissions without enough people trained to inspect and approve distributed energy systems and the newer clean energy technology that will keep emerging in the next decades.

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 delays and accidents as Hawaii moves to zero emissions. HB 560 is an indispensable step in that movement.

Thank you for the opportunity to testify.

Brodie Lockard
Hawaii State Climate Lead, Organizing for Action



HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

January 29, 2019, 8:30 A.M.

Room 325

(Testimony is 1 page long)

TESTIMONY IN SUPPORT OF HB 560

Aloha Chair Lowen, Vice Chair Wildberger, and Committee members:

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

Hawai'i'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 Hawai'i'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.



Email: communications@ulupono.com

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Tuesday, January 29, 2019 — 8:30 a.m. — Room 325

Ulupono Initiative Supports HB 560, Relating to Energy Training

Dear Chair Lowen, Vice Chair Wildberger, 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 management of waste and fresh water. 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 supports HB 560, which requires University of Hawai'i community colleges to establish energy system 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. Obtaining all the permits and entitlements for renewable energy 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 project. This should provide all stakeholders with a win-win situation.

As Hawai'i's energy issues become more 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

HB-560

Submitted on: 1/28/2019 11:43:57 AM

Testimony for EEP on 1/29/2019 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	We Are One, Inc. - www.WeAreOne.cc - WAO	Support	No

Comments:

There is no rational reason to pollute our own environment or destroy ecosystems.

www.WeAreOne.cc

HB-560

Submitted on: 1/28/2019 3:01:33 PM

Testimony for EEP on 1/29/2019 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	Oahu County Committee on Legislative Priorities of the Democratic Party of Hawai'i	Support	No

Comments:

HB-560

Submitted on: 1/27/2019 7:50:31 PM

Testimony for EEP on 1/29/2019 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Noel Morin	Individual	Support	No

Comments:

HB-560

Submitted on: 1/27/2019 11:45:59 PM

Testimony for EEP on 1/29/2019 8:30:00 AM

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

Comments:

LATE

HB-560

Submitted on: 1/28/2019 8:04:42 PM

Testimony for EEP on 1/29/2019 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanea Lo	Individual	Support	No

Comments:

To Whom It May Concern:

I am writing in strong support of this bill. I am a student at UH and I believe that there should be a lot more regulations whenit comes to energy.

Thank you,

Nanea Lo

LATE

HB-560

Submitted on: 1/29/2019 6:49:20 AM

Testimony for EEP on 1/29/2019 8:30:00 AM

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

Comments:

Please support HB560 to require UH community colleges to establish energy systems and technology training courses. We need to promote greater awareness on how to best use and maintain our energy systems throughout the state.

Mahalo,

Caroline Kunitake

HB-560

Submitted on: 1/29/2019 7:27:16 AM

Testimony for EEP on 1/29/2019 8:30:00 AM

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

Comments:

LATE

LATE