HB 1543, HD2

RELATING TO ENERGY TRAINING.

Requires the establishment of energy systems and technology training courses for state and county employees responsible for permitting, inspecting, licensing, and approving construction projects that contain renewable energy systems and related technology. Appropriates funds. (HB1543 HD2) The OF HAMP

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of LUIS P. SALAVERIA Director Department of Business, Economic Development and Tourism before the SENATE COMMITTEES ON TRANSPORTATION AND ENERGY and ECONOMIC DEVELOPMENT, TOURISM, AND TECHNOLOGY Friday, March 17, 2017 2:00 p.m. State Capitol, Conference Room 414

in consideration of HB1543, HD2 RELATING TO ENERGY TRAINING.

Chairs Inouye and Wakai, Vice Chairs Dela Cruz and Taniguchi, and Members of the Committees.

The Department of Business, Economic Development and Tourism (DBEDT) **supports with amendments HB1543, HD2**, which requires DBEDT to establish an optional energy training course for state and county employees responsible for permitting, inspecting, licensing, and approving construction projects that contain renewable energy systems and related technology.

DBEDT is fundamentally not a curriculum development agency. As such, DBEDT is not equipped in its current budget with the appropriate human and financial resources to develop the ongoing curriculum required by this measure. For example, in order to implement the requirements of this measure, DBEDT would need ongoing (not just one time) funding and additional staff. However, recognizing the prevailing need to equip County personnel with appropriate training on the inspection and permitting of energy systems and technology, DBEDT proposes the attached amendments that: (1) would allow for the establishment and deployment of energy

DAVID Y. IGE GOVERNOR

LUIS P. SALAVERIA DIRECTOR

MARY ALICE EVANS DEPUTY DIRECTOR systems and technology training courses by the University of Hawaii Community College System; (2) create a committee comprised of industry stakeholders such as representatives to support the development and deployment of such training; and (3) appropriately resource the University of Hawaii Community College System to meet the requirements of this measure. DBEDT worked with the Pacific Center for Advanced Technology Training and Continuing Education and Lifelong Learning (PCATT) at Honolulu Community College on the proposed amendments. It is our understanding that PCATT has experience working with industry to develop and deploy energy related curriculum. For the above reasons, we respectfully request that the Legislature adopt our proposed amendments.

Thank you for the opportunity to offer testimony on HB1543, HD2.

HOUSE OF REPRESENTATIVES TWENTY-NINTH LEGISLATURE, 2017

H.B. NO.

1543 H.D. 2 PROPOSED AMENDMENTS

STATE OF HAWAII

A BILL FOR AN ACT

RELATING TO ENERGY TRAINING.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The State's ambitious clean energy goals, along
 with advances in energy technology, have created incentives for
 the adoption of new [technology] energy system technologies and
 equipment, including distributed electrical systems such as
 solar panels and energy storage [batteries].

Installation of these modern energy systems has been an 6 economic driver [of the economy], reduced the State's dependence 7 on imported oil, and helped to protect the environment, but the 8 9 increased construction has placed additional burdens on some county [and state] employees. Employees responsible for 10 permitting, inspecting, licensing, and approving projects, 11 12 including employees at county public works departments, employees at planning and permitting departments, and 13 14 [firefighters] fire departments, must [now remain constantly] be 15 better informed of new technology in the energy sector. However, the legislature finds that many of these 16

employees are not provided with the proper training and must
 either research the standards themselves or pay for their own
 training. In addition, the lack of training can lead to
 unnecessary delays in the approval or implementation of a
 project.

6 The purpose of this Act is to create a program to provide 7 training to the [state and] county employees responsible for 8 permitting, inspecting, licensing, and approving energy systems 9 and related technology.

SECTION 2. Chapter 196, Hawaii Revised Statutes, is amended by adding a new section to part I to be appropriately designated and to read as follows:

13 "<u>§196-</u> Energy systems and technology training. (a)

14 Energy systems and technology training courses shall be

15 established as needed to educate relevant officers and employees

16 of the [State and] counties on the various standards and

17 requirements for renewable energy systems and related

18 [technology] distributed electricity technologies, including

19 energy storage. The courses, including any materials necessary

20 to implement the courses, [may] shall be developed, designed,

21 prepared, and conducted by [the department of business, economic

22 <u>development, and tourism</u>] the University of Hawaii Community

23 College System, or by a public or private entity contracted by

9

1 <u>[the department]</u> the University of Hawaii Community College
2 System.

3	(b) The energy systems and technology training courses
4	[shall] may include, but not be limited to, information on:
5	(1) New innovations in energy systems and technology, such
6	as recent advancements in [energy storage and the] distributed
7	electricity technologies and related interaction of these
8	[energy] systems and [technology] technologies with the
9	electrical grid;
10	(2) The implementation of new and existing energy systems
11	and technology in compliance with international, national,
12	state, and county standards, including building, electrical and
13	fire codes; and
14	(3) Any other relevant topic pertaining to the various
14 15	(3) Any other relevant topic pertaining to the various standards and requirements for renewable energy systems and
15	standards and requirements for renewable energy systems and
15 16	standards and requirements for renewable energy systems and related technology.
15 16 17	standards and requirements for renewable energy systems and related technology. (c) The [department of business, economic development, and
15 16 17 18	<pre>standards and requirements for renewable energy systems and related technology. (c) The [department of business, economic development, and tourism may] University of Hawaii Community College System</pre>
15 16 17 18 19	<pre>standards and requirements for renewable energy systems and related technology. (c) The [department of business, economic development, and tourism may] University of Hawaii Community College System shall:</pre>
15 16 17 18 19 20	<pre>standards and requirements for renewable energy systems and related technology. (c) The [department of business, economic development, and tourism may] University of Hawaii Community College System shall: (1) Administer the energy systems and technology training</pre>
15 16 17 18 19 20 21	<pre>standards and requirements for renewable energy systems and related technology. (c) The [department of business, economic development, and tourism may] University of Hawaii Community College System shall: (1) Administer the energy systems and technology training courses;</pre>

1	permitting departments, [firefighters] fire departments, and
2	others involved in the permitting, inspecting, licensing, or
3	[and] approving of construction projects; and
4	(3) Provide the courses at [at no cost] no cost or for a
5	fee to the participants, which may be offset to the extent
6	permitted by the appropriated budget in section 3 of this Act.
7	(d) The [department of business, economic development, and
8	tourism] University of Hawaii Community College System may
9	designate its staff to conduct the energy systems and technology
10	training courses or contract with a public or private entity to
11	conduct the courses."
12	(e) The University of Hawaii Community College System
13	shall establish a committee comprised of stakeholders, including
14	local and national industry representatives from distributed
15	energy systems providers, including solar and energy storage
16	systems and county representatives from each county, who will
17	work closely with the University of Hawaii Community College
18	System staff and subject-matter-experts to do the following:
19	(1) Provide input and guidance on identifying the
20	training areas needed to provide to county employees;
21	(2) Provide input and guidance on identifying the related
22	and required training equipment needed to be incorporated in to
23	training content;

1	(3) Help with outreach and buy-in from county employees
2	and constituents to get them to participate in training.
3	SECTION 3. There is appropriated out of the general
4	revenues of the State of Hawaii the sum of $\frac{$125,000}{100}$ or so much
5	thereof as may be necessary for fiscal year 2017-2018 and the
6	same sum or so much thereof as may be necessary for fiscal year
7	2018-2019 for energy systems and technology training as provided
8	for in this Act.
9	The sums appropriated shall be expended by the [department
10	of business, economic development, and tourism] University of
11	Hawaii Community College System for the purposes of this Act.
12	SECTION 4. New statutory material is underscored.
13	SECTION 5. This Act shall take effect on July 1, [2050]
14	2017.

Report Title:

Energy Systems and Technology; Training; [State Employees;] County Employees; Appropriation

Description:

Requires the establishment of energy systems and technology training courses for [state and] county employees responsible for permitting, inspecting, licensing, and approving construction projects that contain renewable energy systems and related technology. Appropriates funds. (HB1543 HD2 PROPOSED AMENDMENTS)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.



Before the Senate Committee on Economic Development, Tourism, and Technology, and the Senate Committee on Transportation and Energy Friday, March 17, 2017, 2 p.m., Room 414 HB 1543 HD 2: Relating to Energy Training

Aloha Chairs Wakai and Inouye, Vice Chairs Taniguchi and Dela Cruz, and members of the Committees,

On behalf of the Distributed Energy Resources Council of Hawaii ("DER Council"), I would like to testify in strong support for HB 1543 HD 2 which authorizes DBEDT to establish an optional training course for state and county employees responsible for permitting, inspecting, licensing and approving construction projects that contain renewable energy systems and related technology, and appropriates an unspecified amount to establish the training course.

The DER Council is a nonprofit trade organization formed to assist with the development of distributed energy resources and smart grid technologies which will support an affordable, reliable, and sustainable energy supply for Hawaii.

In the last few years, the renewable energy industry has been undergoing a rapid technological evolution. Both the components of renewable energy installations and the configurations of the installations have continued to evolve, and inspectors and plan checkers need to be informed and up to date to do their jobs. They are expected to understand a very wide variety of system and component variables ranging from smart inverters, AC and DC configurations, various battery chemistries, fire safety and enforcement protocol, and the many battery management systems that ensure safe and efficient operation of systems that include battery energy storage, just to name a few.

Unfortunately, there is no formal or ongoing means in place by which inspectors and plan checkers who work for the state and county can learn about the ongoing changes in the renewable energy industry. This means that state and county employees have different levels of understanding about renewable energy installations, resulting at times in the inconsistent application of the rules and an inefficient process where plans and inspections can be greatly delayed if the installation has unfamiliar technology

The state and county employees who work to ensure that renewable energy installations are safe and properly designed and installed should be given the option of trainings in renewable energy so that they can get the information that they need. In addition, we believe that the state energy office under DBEDT is the best entity to facilitate these trainings. Right now, the permitting and inspection process is one of the main impediments to renewable energy projects getting installed and energized. Without the necessary training, Hawaii's 100% RPS goal will be adversely compromised. We therefore urge this committee to support HB 1543 HD 2.

Thank you for the opportunity to testify Leslie Cole-Brooks Executive Director Distributed Energy Resources Council of Hawaii