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SHAN S. TSUTSUI  
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**STATE OF HAWAII  
DEPARTMENT OF TAXATION**

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To: The Honorable Chris Lee, Chair  
and Members of the House Committee on Energy & Environmental Protection

Date: January 25, 2018  
Time: 8:30 A.M.  
Place: Conference Room 325, State Capitol

From: Linda Chu Takayama, Director  
Department of Taxation

Re: H.B. 1864, Relating to Renewable Energy Technologies.

The Department of Taxation (Department) appreciates the intent of H.B. 1864, but has concerns about its ability to administer the provisions of this bill and offers the following comments for your consideration.

H.B. 1864 amends Hawaii Revised Statutes (HRS) section 235-12.5, which governs the Renewable Energy Technologies Income Tax Credit (RETITC). This bill adds “ocean thermal energy conversion research and development system[s]” to the RETITC, allowing individual and corporate taxpayers who install such a system to claim a tax credit up to thirty-five percent of the actual cost of the system, or a cap of \$1.5 million, whichever is less.

The bill defines “ocean thermal energy conversion research and development system” as an energy conversion system that is “[d]esigned to use temperature differences in ocean water to produce electricity” and is “[c]onstructed and used for research and development purposes.” It also limits the applicability of the RETITC to those ocean thermal energy conversion and development systems for which construction began after December 31, 2017. The bill requires the Director of Taxation to prepare any forms necessary to claim a tax credit for ocean thermal energy conversion, and includes a provision allowing the director to “require the taxpayer to furnish reasonable information to ascertain the validity of the claim” for their tax credit.

First, the Department notes that the inclusion of an entire new category of “systems” for eligibility under the RETITC creates a number of potential issues. The Department has stated in prior testimony that the RETITC has historically been very difficult to administer, primarily due to the fact that the statute contains no definition for the word “system,” but still caps credit amounts on a per-system basis. The term “system,” which is not statutorily defined has caused much confusion and uncertainty for taxpayers and industry participants and has resulted in a much larger than anticipated number of RETITC claims.

The ambiguity in the statute was addressed by the Department's enactment of administrative rules pertaining to this tax credit in November 2012. However, the addition of this new RETITC category, without a more detailed explanation of what does and what does not qualify, may create new uncertainty and confusion for taxpayers and industry.

Ocean thermal energy conversion is a relatively new technology that is still being refined; there is no comparable tax credit at the federal level. To resolve any ambiguity, the Department recommends statutorily defining the term "system". The federal Bureau of Ocean Energy Management may be able to provide information and guidance on defining the term.

Finally, the Department notes that this measure applies to taxable years beginning after December 31, 2017. The Department requests that the effective date be changed to taxable years beginning after December 31, 2018, to allow time for changes to forms and the Department's computer system.

Thank you for the opportunity to provide comments.

**HB-1864**

Submitted on: 1/23/2018 10:22:17 PM

Testimony for EEP on 1/25/2018 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	OCC Legislative Priorities	Support	Yes

Comments:

**PRESENTATION OF THE**  
**OAHU COUNTY COMMITTEE ON LEGISLATIVE PRIORITIES**  
TO THE [COMMITTEE ON ENERGY](#) & ENVIRONMENTAL PROTECTION  
HOUSE OF REPRESENTATIVES  
THE TWENTY-NINTH LEGISLATURE  
REGULAR SESSION OF 2018

Thursday, January 25, 2018  
8:30 a.m.

Hawaii State Capitol, Conference Room 325

**RE: TESTIMONY IN SUPPORT OF HB 1864, RELATING TO RENEWABLE ENERGY TECHNOLOGIES**

To the Honorable Chris Lee, Chair; the Honorable Nicole E. Lowen, Vice Chair; and Members of the Energy & Environmental Protection Committee:

Good morning. My name is Melodie Aduja. I serve as Chair of the Oahu County Committee (“OCC”) on Legislative Priorities. Thank you for the opportunity to provide written testimony on House Bill No. 1864, relating to Renewable Energy Technologies. The OCC Legislative Priorities Committee is strongly in favor of House Bill No. 1864.

Ocean Thermal Energy Conversion (OTEC) produces electricity by using the temperature difference between deep cold water and warm tropical surface waters. OTEC plants pump large quantities of deep cold seawater and surface seawater to run a power cycle and produce electricity. OTEC is firm power (24/7), a clean energy source, environmentally sustainable and capable of providing massive levels of energy.

The Environmental Caucus favors measures that support renewable sustainable energy sources; therefore, expanding renewable energy tax credits to include the OTEC industry is highly recommended as the OTEC industry reduces dependency on fossil fuels which pose an increase to the carbon footprint and increased risk of greenhouse emissions contributing to climate change.

The Oahu County Legislative Priorities Committee encourages the OTEC industry, and thus, favors expanding tax credit incentives to renewable energy technologies including OTEC.

Thank you very much for your kind consideration.

Sincerely yours,

/s/ **Melodie Aduja**

Melodie Aduja

Chair, OCC Legislative Priorities Committee

Email: [legislativepriorities@gmail.com](mailto:legislativepriorities@gmail.com), Tel.: (808) 258-8889



# NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY



*An Authority of the State of Hawaii attached to the Department of Business, Economic Development & Tourism*

Statement of  
**Gregory P. Barbour**  
**Executive Director**

Natural Energy Laboratory of Hawaii Authority  
before the

## **COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION**

Thursday, January 25, 2018  
8:30 am  
State Capitol, Conference Room 325

in consideration of

### **HB 1864 RELATING TO RENEWABLE ENERGY TECHNOLOGIES.**

The Natural Energy Laboratory of Hawaii Authority (NELHA) supports the intent of HB 1864 which would encourage private sector investment in renewable energy technologies that would broaden the States diverse portfolio in energy technologies.

We defer to the Department of Taxation and Department of Budget and Finance as to the impact on the States Financial plan.

Thank you for the opportunity to offer these comments.

# TAX FOUNDATION OF HAWAII

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126 Queen Street, Suite 304

Honolulu, Hawaii 96813 Tel. 536-4587

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**SUBJECT:** INCOME, Extend Renewable Energy Credit to Ocean Thermal

**BILL NUMBER:** HB 1864

**INTRODUCED BY:** EVANS, LOWEN

**EXECUTIVE SUMMARY:** Expands the income tax credit for renewable energy technologies to include ocean thermal energy conversion systems constructed for the purposes of research and development.

**BRIEF SUMMARY:** Amends HRS section 235-12.5 to provide a credit of 35% of actual cost of an ocean thermal energy conversion research and development system, up to a cost limit of \$1.5 million.

Defines “Ocean thermal energy conversion research and development system” as an energy conversion system: (1) designed to use temperature differences in ocean water to produce electricity; (2) constructed and used for research and development purposes; and (3) for which construction commenced after December 31, 2017.

**EFFECTIVE DATE:** Upon approval, applies to taxable years beginning after December 31, 2017.

**STAFF COMMENTS:** Lawmakers need to keep in mind two things. First, the tax system is the device that raises the money that they, lawmakers, like to spend. Using the tax system to shape social policy merely throws the revenue raising system out of whack, making the system less than reliable as there is no way to determine how many taxpayers will avail themselves of the credit and in what amount. The second point to remember about tax credits is that they are nothing more than the expenditure of public dollars, but out the back door. If, in fact, these dollars were subject to the appropriation process, would taxpayers be as generous about the expenditure of these funds when our kids are roasting in the public school classrooms, there isn't enough money for social service programs, or our state hospitals are on the verge of collapse?

If lawmakers want to subsidize the purchase of this type of technology, then a direct appropriation would be more accountable and transparent.

Furthermore, the additional credit would require changes to tax forms and instructions, reprogramming, staff training, and other costs that could be massive in amount. A direct appropriation, or adding on to an existing program such as Hawaii Energy, may be a far less costly method to accomplish the same thing.

Digested 1/23/2018



SIERRA CLUB OF HAWAII  
MĀLAMA I KA HONUA. *Cherish the Earth.*

**HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION**

Thursday, January 25, 2018 8:30AM Conference Room 325

**In SUPPORT of HB 1864** Renewable energy technologies

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Aloha Chair Lee, Vice Chair Lowen and members of the Committee,

On behalf of our 20,000 members and supporters, the Sierra Club of Hawai'i **supports HB 1864**, which seeks to expand the income tax credit for renewable energy technologies to include ocean thermal conversion systems in addition to solar and wind renewable energy systems. This means that if ocean thermal conversion systems were installed (e.g., for air conditioning cooling purposes on a large building), the individual or corporation could claim a tax credit up to 35% of the cost of installation on their tax return the following year for projects not exceeding \$1.5 million.

Ocean thermal conversion systems, also known as "SeaWater Air Conditioning", provide an air cooling system that has a fraction of the energy footprint as conventional air conditioning systems<sup>1</sup>. These systems can demonstrate energy savings that approach 90%.<sup>1</sup>

Hawai'i Revised Statutes section 269-92 mandates a 100% renewable energy portfolio standard by year's end 2045. This means that the State must transition away from imported fuels and intend toward renewable sources, preferably local, to provide a source of secure, local energy. This measure broadens the playing field for individuals and corporations to shift to renewable energy alternatives to achieve this goal in part by contributing to the reduction of overall energy consumption.

Thank you very much for this opportunity to provide testimony on this important issue.

Mahalo,

Marti Townsend  
Director

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<sup>1</sup> <http://www.makai.com/pipelines/ac-pipelines/>



# Hawaii Automobile Dealers' Association

Brian Kitagawa, President  
Dave Rolf, Executive Director

HADA TESTIMONY IN STRONG SUPPORT  
FOR HB1864  
RELATING TO RENEWABLE ENERGY TECHNOLOGIES  
Presented to the House Committee on Energy & Environmental Protection  
At the Public Hearing, 8:30 a.m. Wednesday, January 25, 2018  
Conference Room 325, Hawaii State Capitol

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

The members of the Hawaii Automobile Dealers Association, Hawaii's franchised new car dealers, appreciate the opportunity to offer strong support for this bill which proposes to expand a tax credit for renewable energy technologies to include ocean thermal energy conversion (OTEC) for the purposes of research and development. The legislature's support for renewable energy development is much appreciated. Hawaii is home to some of the world's best renewable energy sources, which can provide renewable energy-generated power for electric vehicles. See HADA's Cars & Energy exhibit from a recent First Hawaiian International Auto Show.

**650,000 T. Sato tiles**  
**654,000 vehicles on Oahu**

**Hawaii's Cars & Energy**

**ANNUAL FUEL USE: 500 MILLION GAL.**  
of gasoline are used annually by vehicles in Hawaii

WIND WAVE GEO THERMAL OTEC SOLAR H-PWR

CHEVROLET NISSAN MITSUBISHI TOYOTA FIRST HAWAIIAN INTERNATIONAL AUTO SHOW



HADA TESTIMONY, HB1864, page 2

Developing “firm” sources of renewable energy, like OTEC, is key.

Respectfully submitted,

David H. Rolf

For the Members of the Hawaii Automobile Dealers Association

**HB-1864**

Submitted on: 1/23/2018 8:07:05 PM

Testimony for EEP on 1/25/2018 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Shannon Rudolph		Support	No

Comments:

SUPPORT

**HB-1864**

Submitted on: 1/24/2018 4:14:12 AM

Testimony for EEP on 1/25/2018 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Mary Lacques		Support	No

Comments:

**HB-1864**

Submitted on: 1/24/2018 10:08:48 AM

Testimony for EEP on 1/25/2018 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Richard Reed		Support	No

Comments:

**HB-1864**

Submitted on: 1/24/2018 11:33:05 AM

Testimony for EEP on 1/25/2018 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Phil Barnes		Support	No

Comments:

OTEC has been one of the first renewable energy sources to be studied here on Hawaii Island. This long term project needs to be included as a source of renewable energy.

**HB-1864**

Submitted on: 1/24/2018 3:17:09 PM

Testimony for EEP on 1/25/2018 8:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Javier Mendez-Alvarez		Support	No

Comments: