



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

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DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

(808) 587-3807

Testimony of SCOTT J. GLENN, Chief Energy Officer

before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Thursday, March 12, 2020
8:30 AM
State Capitol, Conference Room 325

LATE

Comments in consideration of **SB 1431, SD2** **RELATING TO RENEWABLE ENERGY TECHNOLOGIES TAX CREDITS.**

Chair Lowen, Vice Chair Wildberger, and Members of the Committee, the Hawaii State Energy Office (HSEO) offers comments on SB 1431, SD2, which amends the renewable energy technologies income tax credit (RETITC) to include commercial seawater air conditioning systems, requires the HSEO to certify tax credits involving commercial seawater air conditioning systems, and applies to taxable years beginning after 12/31/2020.

The HSEO's comments are guided by its mission to promote energy efficiency, renewable energy, energy resiliency, and clean transportation to help achieve a decarbonized economy.

The HSEO is concerned about its responsibility under this bill to certify tax credits, due to some unclear provisions within the bill and a lack of resources to carry out the requirements for certification.

It is unclear what is meant (starting on page 2, line 20, through page 3, line 2) by:

"the actual cost of connecting the commercial seawater air conditioning system to the seawater air conditioning district cooling system"

It may be necessary to add a definition of "connecting," as the other sections imply that the taxpayer is one of the owners of the system. It is unclear if "connecting" is a one-time fee, a portion of construction cost, or a fee assessed periodically.

Although the HSEO is required (starting on page 7, line 10) to “collect and maintain a record of all qualified expenses for each taxpayer claiming a credit,” it is unclear if those records would be made public or for how long the HSEO would need to maintain the records.

The HSEO is also concerned that resources for rulemaking, and the potential need to contract for expertise in this area, are not provided for in this measure.

The HSEO recommends the Legislature provide clarity and details on the requirements of the certification process. In light of these concerns, and should the Legislature aspire to pursue a certification requirement, the HSEO suggests exploring the use of the same process that is associated with the existing solar and wind RETITC, leveraging a process that is currently operational and potentially more efficient.

The HSEO recognizes that sea water air conditioning can contribute to achieving Hawaii’s clean energy goals, directly reducing the use of electricity for cooling buildings while also reducing the demand for fresh water and reducing the volume of wastewater from traditional cooling methods. Projects like this (district cooling systems) have been installed and used successfully for many years, in other locations all over the world, and have great potential for Hawaii.

Although it is unknown whether the proposed level of support for this technology is either necessary or sufficient, the HSEO appreciates the opportunity to participate in discussions on this topic if desired.

Thank you for the opportunity to testify.

DAVID Y. IGE
GOVERNOR

JOSH GREEN M.D.
LT. GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TAXATION
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RONA M. SUZUKI
DIRECTOR OF TAXATION

DAMIEN A. ELEFANTE
DEPUTY DIRECTOR

To: The Honorable Nicole E. Lowen, Chair;
The Honorable Tina Wildberger, Vice Chair;
and Members of the House Committee on Energy & Environmental Protection

From: Rona M. Suzuki, Director
Department of Taxation

Re: **S.B. 1431, S.D. 2, Relating to Renewable Energy Technologies Tax Credits**

Date: Thursday, March 12, 2020

Time: 8:30 A.M.

Place: Conference Room 325, State Capitol

The Department of Taxation (Department) appreciates the intent of S.B. 1431, S.D. 2, and offers the following comments.

S.B. 1431, S.D. 2, amends section 235-12.5, Hawaii Revised Statutes (HRS), which governs the Renewable Energy Technologies Income Tax Credit (RETTTC). It adds a new category of credits to the RETTTC for commercial air conditioning systems connected to a seawater air conditioning district cooling system. The credit, which will be certified by the Hawaii State Energy Office, has a cap of \$250,000 per system on commercial or multi-family residential property, and a \$5,000,000 total aggregate cap on all credits in a taxable year. The measure has a defective effective date of July 1, 2050 and would otherwise apply to taxable years beginning after December 31, 2020.

The Department notes that the Senate Committee on Ways and Means amended a previous version of this measure to designate the Hawaii State Energy Office as the certifying agency for this credit. The Department appreciates this change and recommends that it remain in place, as the Department is unable to administer and certify credit aggregate caps on its own while simultaneously processing and examining returns for the same tax year. The Department **defers to the Hawaii State Energy Office regarding the policy need for this credit.**

In addition, because seawater air conditioning is significantly different from the other types of renewable energy installations that qualify for the credit, the Department suggests specifying the costs that will qualify (and not qualify) for this new RETTTC provision.

Notwithstanding the measure's lack of specificity on costs that will qualify or not qualify for this new credit provision, the Department is able to administer the measure for taxable years beginning after December 31, 2020, as currently written.

Thank you for the opportunity to provide comments.

TAX FOUNDATION OF HAWAII

126 Queen Street, Suite 304

Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: INCOME, Renewable Energy Technologies Credit for Seawater A/C

BILL NUMBER: SB 1431, SD-2

INTRODUCED BY: Senate Committee on Ways and Means

EXECUTIVE SUMMARY: Amends the renewable energy technologies income tax credit to include commercial seawater air conditioning systems.

SYNOPSIS: Amends section 235-12.5, HRS, to allow a credit for 100% of the cost of connecting the commercial seawater air conditioning system to the seawater air conditioning district cooling system, up to \$250,000 per multi-family residential or commercial property, with a statewide aggregate cap of \$5 million.

Defines “commercial seawater air conditioning system” as a building air conditioning system for a commercial, office, or residential building or collection of buildings connected to a seawater air conditioning district cooling system.

Defines “seawater air conditioning district cooling system” as an identifiable facility, equipment, apparatus, or the like that utilizes naturally occurring cold, deep seawater as its primary source of cooling that centralizes chilled water production into a single central chiller plant for distribution of the chilled water to multiple commercial air conditioning systems.

Amends the definition of “renewable energy technology system” to include cold deep seawater as a source of renewable energy.

Tasks the Hawaii state energy office with certifying claims for the tax credit.

EFFECTIVE DATE: This Act shall take effect on July 1, 2050 and shall apply to taxable years beginning after December 31, 2020.

STAFF COMMENTS: This measure offers taxpayers a 100% credit for the cost of connecting to a district cooling system. To ensure that a taxpayer purchasing this service has skin in the game, we would recommend a lesser percentage.

Regarding this type of credit generally, it needs to be remembered that the tax system is there to raise revenue to keep the government moving. 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.

Furthermore, tax credits 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. The credit as currently drafted is very complex. Complexity makes proper administration of the credit very difficult. There will be taxpayers who will not claim the credit properly because of honest mistakes or misunderstandings, as well as bad actors who will intentionally claim the credit improperly for profit. Less complexity reduces the number of the former and makes it easier to catch the latter.

Digested 3/9/2020



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Testimony on

S.B. 1431 SD2

RELATING TO RENEWABLE ENERGY TECHNOLOGIES TAX CREDITS

Before the

House of Representatives

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, March 12, 2020

By

Eric Masutomi, CEO and President
Honolulu Seawater Air Conditioning, LLC

Chair Lowen, Vice Chair Wildberger, and Members of the Committee:

Honolulu Seawater Air Conditioning (HSWAC) strongly supports this measure which would provide for a renewable energy tax credit income tax credit (ITC) for building owners connecting to a seawater air conditioning district cooling system.

This bill bolsters the State's strong policy commitment to encouraging investment in renewable energy systems.

The significance of seawater as a renewable energy resource cannot be overstated. HSWAC's Downtown Honolulu District Cooling System, alone, is the largest energy efficiency project to be undertaken in the State. When it begins operation, HSWAC's privately financed and developed infrastructure project has the potential to significantly "move the needle" in meeting the State's renewable energy goals, displacing the need for 178,000 barrels of oil per year, saving enough electricity to power more than 10,000 homes annually.

Deepwater district cooling systems have been successfully implemented in numerous localities throughout the U.S., Canada and Europe. Despite this proven record of success, our experience has shown that when district energy systems such as that being developed by HSWAC are introduced in a community, potential customers are frequently wary about the costs of converting to the new system, the risk of higher costs in the initial years of operation and the uncertainties of adapting to a new system. As in the case of solar and wind technology, the availability of such credits is effective in not only ameliorating such concerns, but in accelerating the State's transition to a renewable energy future.

If passed, this bill will assist potential customers of seawater air conditioning district cooling systems in making the critical decision to eliminate existing inefficient cooling systems – currently responsible for more than forty percent of a building's electricity consumption - in favor of utilizing a district cooling system that takes benign advantage Hawaii's abundant surrounding ocean waters. With the potential to reduce electricity consumption used for air conditioning by up to 75%, this technology promises to significantly contribute to the State's sustainability objectives and reduce our dependence on imported fossil fuels.

Discounting the substantial energy and environmental benefits associated with seawater cooling, from a cost-benefit standpoint the estimated maximum amount of credits that might be incurred under this bill should be weighed against the projected economic benefits, including: a) over \$300 million in construction spending, b) 1.348 construction-related jobs, and c) over \$55 million in net increase in State revenues over 25 years from GET and income taxes.ⁱ In addition, it would create long-term, highly-skilled employment opportunities and establish the State as a leading authority on the development and installation of seawater air conditioning systems throughout the Asia-Pacific region. Other local economic benefits would accrue from money that stays in Hawaii and is not exported outside the State to purchase oil.

The State Legislature should be applauded for its foresight in the establishing these renewable energy tax credits to promote Hawaii's transition to a clean energy future. It has proven to be an effective and successful tool in this regard. We encourage your support of H.B. 1431 to expand eligibility of the credits to users of seawater cooling technology.

Thank you for the opportunity to testify in support of this measure.

ⁱ Source: Analysis of Honolulu Seawater Air Conditioning Economic Benefits, John M. Knox and Associates Inc., February 15, 2017.



Email: communications@ulupono.com

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Thursday, March 12, 2020 — 8:30 a.m. — Room 325

Ulupono Initiative supports SB 1431 SD 2, Relating to Renewable Energy Technologies Tax Credits.

Dear Chair Lowen and Members of the Committee:

My name is Amy Hennessey, and I am the Senior Vice President of Communications & External Affairs at Ulupono Initiative. We are a Hawai'i-based impact investment firm that strives to improve our community's quality of life by creating more locally produced food; increasing affordable clean renewable energy and transportation options; and better managing waste and fresh water resources.

Ulupono supports SB 1431 SD 2, which amends the renewable energy technologies income tax credit to include commercial seawater air conditioning systems.

Ulupono is an investor with the Honolulu Seawater Air Conditioning (HSWAC) project. We support HSWAC as it is a proven technology that will replace the energy-intensive central refrigeration system of a traditional air-conditioning system. HSWAC is targeting buildings that could benefit from substantial savings on electricity and water consumption, system replacement costs, and maintenance costs. By using 44-degree seawater via a freshwater loop instead of electricity to cool buildings, electricity costs can be cut by 75 percent and save an estimated 77 million kilowatt-hours of power a year, which is equivalent to a 20-megawatt wind farm or a 40-megawatt solar farm. That is enough to power more than 10,000 homes and eliminate the need to burn 178,000 barrels of oil a year. HSWAC is one of the State's largest energy efficiency projects.

This technology is known to provide substantial savings of energy and freshwater, both of which are critical to our economy and sustainability. HSWAC will reduce potable water consumption for air conditioning by 260 million gallons, reduce sewage production up to 84 million gallons per year, and avoids 84,000 tons of carbon dioxide (15,000 cars). In addition, it will also help the State move closer to its clean energy goals. To date, the project has been supported entirely by private capital. Seawater air conditioning's inclusion as a qualifying technology in the existing renewable energy tax credit will help to spur greater success in energy efficiency projects that can help Hawai'i become less dependent on imported fossil fuels.

Investing in a Sustainable Hawai'i



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,

Amy Hennessey, APR
Senior Vice President, Communications & External Affairs



183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The House Committee on Energy & Environmental Protection
From: Brodie Lockard, Founder, 350Hawaii.org
Date: Thursday, March 12, 2020, 8:30 am

In strong support of SB 1431 SD

LATE

Aloha Chair Lowen and members,

350Hawaii.org's 6,000 members strongly support SB 1431 SD2.

Seawater Air Conditioning (SWAC) deserves the support of the renewable energy technologies income tax credit. It is very well-suited to Hawaii because of our warm climate, and the proximity of so many large buildings to water, particularly in downtown Honolulu.

SWAC lowers electrical costs and provides rate stability. It will soon cool eight state buildings in downtown Honolulu, reducing electricity use by over 5.3 million kilowatt hours yearly. (The average U.S. utility customer uses about 11,000 kilowatt hours yearly.) [1]

SWAC is clean, renewable, and has no significant environmental impact. It cools air directly, requiring no conversion to electricity. It reduces fossil fuel use and greenhouse gas emissions.

District Cooling provides high reliability (generally 99.99% or greater) and can cool 24hrs/day, 365 days/year.

A local company is close to creating a District Cooling system to air-condition about 40 buildings, mostly in downtown Honolulu [2].

SWAC reduces sewer production and water usage, and requires minimal on-site equipment and maintenance.

Please support this bill so SWAC can get the tax credit it deserves, save more electricity, and reduce Hawaii's greenhouse gas emissions.

Brodie Lockard
Founder, 350Hawaii.org

[1] <http://bigislandnow.com/2018/10/09/8-state-facilities-to-be-cooled-by-ocean-water/>

[2] http://www.honoluluswac.com/_assets/_pdfs/20190603%20HonStarAd%20-%20Officials_move_on_seawater_AC_project%20pages.pdf

SB-1431-SD-2

Submitted on: 3/11/2020 8:22:40 AM

Testimony for EEP on 3/12/2020 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Ha	Individual	Support	No

Comments:

SB-1431-SD-2

Submitted on: 3/11/2020 7:48:10 AM

Testimony for EEP on 3/12/2020 8:30:00 AM

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

Comments:

LATE

SB-1431-SD-2

Submitted on: 3/11/2020 9:53:24 PM
Testimony for EEP on 3/12/2020 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
John Nix	Individual	Support	No

Comments:

Aloha Chair Lowen and members,

As one of 350Hawaii's 6,000 members, I strongly support SB 1431 SD2.

Seawater Air Conditioning (SWAC) deserves the support of the renewable energy technologies income tax credit. It is very well-suited to Hawaii because of our warm climate, and the proximity of so many large buildings to water, particularly in downtown Honolulu.

SWAC lowers electrical costs and provides rate stability. It will soon cool eight state buildings in downtown Honolulu, reducing electricity use by over 5.3 million kilowatt hours yearly. (The average U.S. utility customer uses about 11,000 kilowatt hours yearly.) [1]

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A local company is close to creating a District Cooling system to air-condition about 40 buildings, mostly in downtown Honolulu [2].

SWAC reduces sewer production and water usage, and requires minimal on-site equipment and maintenance.

Please support this bill so SWAC can get the tax credit it deserves, save more electricity, and reduce Hawaii's greenhouse gas emissions.

Dr. John and Debra Nix, Kihei

SB-1431-SD-2

Submitted on: 3/11/2020 11:12:50 PM

Testimony for EEP on 3/12/2020 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
tlaloc tokuda	Individual	Support	No

Comments:

To: The House Committee on Energy & Environmental Protection

From: **Tlaloc Tokuda**

Date: Thursday, March 12, 2020, 8:30 am



In strong support of SB 1431 SD2

Aloha Chair Lowen and members,

Chair Lowen you are my Rep and i am glad your considering this innovative bill. As one of 350Hawaii's 6,000 members, I strongly support SB 1431 SD2.

Seawater Air Conditioning (SWAC) deserves the support of the renewable energy technologies income tax credit. It is very well-suited to Hawaii because of our warm climate, and the proximity of so many large buildings to water, particularly in downtown Honolulu.

SWAC lowers electrical costs and provides rate stability. It will soon cool eight state buildings in downtown Honolulu, reducing electricity use by over 5.3 million kilowatt hours yearly. (The average U.S. utility customer uses about 11,000 kilowatt hours yearly.) [1]

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Please support this bill so SWAC can get the tax credit it deserves, save more electricity, and reduce Hawaii's greenhouse gas emissions.

[1] <http://bigislandnow.com/2018/10/09/8-state-facilities-to-be-cooled-by-ocean-water/>

[2] [http://www.honoluluswac.com/_assets/_pdfs/20190603_HonStarAd - Officials_move_on_seawater_AC_project 2pages.pdf](http://www.honoluluswac.com/_assets/_pdfs/20190603_HonStarAd_Officials_move_on_seawater_AC_project_2pages.pdf)

Mahalo for your consideration

Tlaloc Tokuda

Kailua Kona HI 96740

SB-1431-SD-2

Submitted on: 3/12/2020 5:30:49 AM

Testimony for EEP on 3/12/2020 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Mary Morioka	Individual	Support	No

Comments:

Support Seawater Air Conditioning (SWAC) getting the tax credit it deserves, save more electricity, and reduce Hawaii's greenhouse gas emissions.

LATE

SB-1431-SD-2

Submitted on: 3/12/2020 7:51:38 AM

Testimony for EEP on 3/12/2020 8:30:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
donald erway	Individual	Support	No

Comments:

LATE