



February 15, 2018

To: Honorable Sylvia Luke, Chair
Honorable Ty J. K. Cullen, Vice Chair
Committee on Finance

Subject: Support for HB 2108 H.D. 1 – Relating to the issuance of Special purpose revenue bonds to assist a seawater air conditioning project in Hawaii

NOTICE OF HEARING

DATE: Friday, February 16, 2018
TIME: 2:00p.m.
PLACE: Conference Room 308
State Capitol
415 South Beretania Street

Dear Chair Luke and Vice Chair Cullen,

I come to you in Strong Support of extending the authorization period for the approval and issuance of these Special Revenue Bonds to assist Kaiuli Energy, LLC with the development of seawater air conditioning projects (SWAC) in the State of Hawaii. Passage of this bill will extend the authorization period from July, 2018 to July 2023.

My name is Lance Wilhelm and I am the partner in charge of the development of the SWAC project in Waikiki, Kaiuli's cornerstone project. These revenue bonds are critical to financing the planning, design and construction of a SWAC, a district cooling facility and chilled water distribution system. SWAC projects are not rocket science. They are basic infrastructure improvements that exist in many cities where the technology has been tested and expanded over the last two decades. The largest system in the world is in Toronto, fulfilling about 25% of that City's cooling requirements; it's over three times the size of our Waikiki system and it continues to grow. Kaiuli's has had the good fortune of interfacing with the Toronto system's original developers and tapping their know-how in the design of our system.

SWAC offers many benefits to Waikiki. Our initial plans call for a 25,000 ton system. At its peak it will substantially reduce Waikiki's carbon footprint by:

- Reducing fossil fuel consumption by up to 170,000 barrels of oil each year;
- Reducing electrical usage by up to 75,000,000 kWh each year;
- Reducing harmful emissions by up to 80,000 tons each year;
- Reducing sewer production by up to 110,000,000 gallons each year; and

1701 Ala Wai Boulevard | Honolulu, Hawaii 96815

www.kaiulienergy.com



- Reducing potable water usage by up to 250,000,000 gallons each year.

We have had very favorable discussions with every major hotel operator in Waikiki as they see both the opportunity to market Waikiki as a green visitor destination area and the opportunity to experience substantial financial savings. And we have also enjoyed favorable discussions with the utilities as the SWAC system will reduce the burden on their facilities and resources.

There is very little downside to extending this authorization period. No bonds will be sold or funds released until the State regulators are convinced that we are prepared to succeed and that we have assembled all the other necessary resources.

We are excited about the opportunity to develop a SWAC system here in Hawaii and appreciate your favorable consideration.

Mahalo,

A handwritten signature in black ink, appearing to read 'Lance Wilhelm', is written over a faint, larger version of the signature.

Lance Wilhelm
Partner
Kaiuli Energy, LLC

HB-2108-HD-1

Submitted on: 2/15/2018 2:21:53 AM

Testimony for FIN on 2/16/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Melodie Aduja	OCC Legislative Priorities Committee, Democratic Party of Hawaii	Support	No

Comments:

**PRESENTATION OF THE
OAHU COUNTY COMMITTEE ON LEGISLATIVE PRIORITIES
DEMOCRATIC PARTY OF HAWAII
TO THE COMMITTEE ON FINANCE
THE HOUSE OF REPRESENTATIVES
TWENTY-NINTH LEGISLATURE
REGULAR SESSION OF 2018
Friday, February 16, 2018
2:00 a.m.**

Hawaii State Capitol, Conference Room 308

RE: **Testimony in Support** of HB 2108 HD1 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST A SEAWATER AIR CONDITIONING PROJECT IN HAWAII.

To the Honorable Sylvia Luke, Chair; the Honorable Ty J.K. Cullen, Vice-Chair and the Members of the Committee on Judiciary:

Good afternoon, my name is Melodie Aduja. I serve as Chair of the Oahu County Committee ("OCC") Legislative Priorities Committee of the Democratic Party of Hawaii. Thank you for the opportunity to provide written testimony on House Bill No.2108 HD1 relating to special purpose revenue bonds for seawater air conditioning using a chilled water distribution system by Kaiuli Energy, LLC.

The OCC Legislative Priorities Committee is in favor of House Bill No 2108 HD1 and supports its passage.

House Bill No.2108 HD1 is in alignment with the Platform of the Democratic Party of Hawai'i ("DPH"), 2016, as it extends the authorization to issue special purpose revenue bonds to assist Kaiuli Energy, LLC, with the financing of the planning, design, and construction of a seawater air conditioning district cooling facility and chilled water distribution system to June 30, 2023.

The DPH Platform states that "[w]e support energy independence, self-sufficiency, affordability and reliability for Hawai'i through the development of renewable alternative energy sources. Specifically, we need to support policies that foster the development of energy production methods that de-emphasize carbon-based fuels and promote renewable sources such as wind, solar, wave, geothermal and Ocean Thermal Energy Conversion 456 (OTEC). (Platform of the DPH, P. 9, Lines 452-456)).

Given that House Bill No.2108 HD1 extends the authorization to issue special purpose revenue bonds to assist Kaiuli Energy, LLC, with the financing of the planning, design, and construction of a seawater air conditioning district cooling facility and chilled water distribution system to June 30, 2023, it is the position of the OCC Legislative Priorities Committee to support this measure.

Thank you very much for your kind consideration.

Sincerely yours,

/s/ Melodie Aduja

Melodie Aduja, Chair, OCC Legislative Priorities Committee

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



Email: communications@ulupono.com

HOUSE COMMITTEE ON FINANCE
Friday, February 16, 2018 — 2:00 p.m. — Room 308

Ulupono Initiative Strongly Supports HB 2108 HD 1, Relating to the Issuance of Special Purpose Revenue Bonds to Assist a Seawater Air Conditioning Project in Hawaii

Dear Chair Luke, Vice Chair Cullen, 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 strongly supports HB 2108 HD 1, which extends the special purpose revenue bond authorization for Kaiuli Energy, LLC, because it aligns with our goal of increasing the production of clean, renewable energy in Hawai'i.

Ulupono supports Kaiuli's request for an extension because we believe seawater air conditioning (SWAC) technology is proven and will help replace the energy-intensive central refrigeration system of a traditional air conditioning system. Kaiuli is targeting hotels and other buildings in the Waikiki and Ala Moana areas that could benefit from SWAC, which will include substantial savings on electricity and water consumption, system replacement costs, and maintenance costs. This technology is known to provide substantial savings of energy and fresh water, both of which are critical to our economy and sustainability. In addition, it will also help the State move closer to its clean energy goals and support Hawai'i's vital tourism industry.

With State DAGS buildings signing on to participate with Honolulu Seawater Air Conditioning in the downtown Honolulu area over the last few months, there should be more optimism by State government for SWAC projects like Kaiuli for the Waikiki and Ala Moana areas.

As Hawai'i's energy issues become more complex and challenging, we appreciate this

Investing in a Sustainable Hawai'i



committee's efforts to look at policies that support renewable energy production.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay
Managing Partner



To: The House Committee on Finance
From: Brodie Lockard, 350Hawaii.org, 808-262-1285
Date: Friday, 2/16/18

In support of HB 2108 HD1

Dear Chair Luke, Vice Chair Cullen and Committee members,

I am the founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org supports HB 2108.

Seawater Air Conditioning (SWAC) deserves the support of the state. 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 currently cools 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.

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

Please support this bill so SWAC can expand, save more electricity and reduce Hawaii's greenhouse gas emissions even more.

Thank you for the opportunity to testify.

[1] [http://www.honoluluswac.com/assets/pdfs/20171114-2 Chilled water will now cool 8 state facilities in Downtown Honolulu - Hawaii News Now - KGMB and KHNL.pdf](http://www.honoluluswac.com/assets/pdfs/20171114-2_Chilled_water_will_now_cool_8_state_facilities_in_Downtown_Honolulu_-_Hawaii_News_Now_-_KGMB_and_KHNL.pdf)

Brodie Lockard
350Hawaii.org

HB-2108-HD-1

Submitted on: 2/14/2018 3:53:39 PM

Testimony for FIN on 2/16/2018 2:00:00 PM

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

Comments:

Let's chill by using an abundant resource in Hawaii. The more we use / develop it , the better it will become!

HB-2108-HD-1

Submitted on: 2/14/2018 4:56:51 PM

Testimony for FIN on 2/16/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Patricia Blair	Individual	Support	No

Comments:

HB-2108-HD-1

Submitted on: 2/14/2018 5:14:55 PM

Testimony for FIN on 2/16/2018 2:00:00 PM

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

Comments:

Dear FIN Chair Luke and Vice Chair Cullen,

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

Seawater Air Conditioning (SWAC) is clean, renewable, and has no significant environmental impact. It requires no conversion to electricity, instead cooling air directly. It therefore reduces fossil fuel use and greenhouse gas emissions.

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

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

SWAC deserves the support of the state. 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.

[1] <http://www.honoluluswac.com/assets/pdfs/20171114-2> Chilled water will now cool 8 state facilities in Downtown Honolulu - Hawaii News Now - KGMB and KHNL.pdf

Thank you for your support,

Nanea Lo

HB-2108-HD-1

Submitted on: 2/14/2018 6:21:41 PM

Testimony for FIN on 2/16/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Nicholas Chagnon	Individual	Support	No

Comments:

Dear FIN Chair Luke and Vice Chair Cullen,

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HB-2108-HD-1

Submitted on: 2/14/2018 6:46:41 PM

Testimony for FIN on 2/16/2018 2:00:00 PM

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

Comments:

Dear FIN Chair Luke and Vice Chair Cullen,

I belong to 350HI and our mission is to assist polcy in keeping fossil fuels in the ground and to promote renewable energy. HB2108 is a great bill becuae it could provide a prototype for cooling in Hawaii and other cities near oceans.

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

Seawater Air Conditioning (SWAC) is clean, renewable, and has no significant environmental impact. It requires no conversion to electricity, instead cooling air directly. It therefore reduces fossil fuel use and greenhouse gas emissions.

SWAC lowers electrical costs and provides rate stability. It currently cools eight state buildings in downtown Honolulu, reducing electricity use there 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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[1] <http://www.honoluluswac.com/assets/pdfs/20171114-2> Chilled water will now cool 8 state facilities in Downtown Honolulu - Hawaii News Now - KGMB and KHNL.pdf

HB-2108-HD-1

Submitted on: 2/14/2018 7:13:55 PM

Testimony for FIN on 2/16/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Support	No

Comments:

SWAC deserves the support of the state. 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. Please support and pass this bill.

HB-2108-HD-1

Submitted on: 2/14/2018 9:42:36 PM

Testimony for FIN on 2/16/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
L.M. Holmes	Individual	Support	No

Comments:

This type of energy use is perfect for Hawaii and should be supported all over.

HB-2108-HD-1

Submitted on: 2/15/2018 5:31:11 AM

Testimony for FIN on 2/16/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Carolynn Bell-Tuttle	Individual	Support	No

Comments:

Dear FIN Chair Luke and Vice Chair Cullen,

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[1] <http://www.honoluluswac.com/assets/pdfs/20171114-2> Chilled water will now cool 8 state facilities in Downtown Honolulu - Hawaii News Now - KGMB and KHNL.pdf

Carolynn Bell-Tuttle

HB-2108-HD-1

Submitted on: 2/15/2018 5:37:57 AM

Testimony for FIN on 2/16/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Karen M Kimbrell	Individual	Support	No

Comments:

HB-2108-HD-1

Submitted on: 2/15/2018 12:09:58 PM

Testimony for FIN on 2/16/2018 2:00:00 PM

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

Comments:

Finance Committee HB 2108 hearing 2/16/18 at 2:00pm

to: Finance Committee I Joan Gannon support HB2108. Seawater Air Conditioning is clean, renewable, with no significant environmental impact. Thank you for your consideration.

From Joan Gannon Precinct Chair Hawaii Island

LATE

HB-2108-HD-1

Submitted on: 2/15/2018 5:46:22 PM

Testimony for FIN on 2/16/2018 2:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Laura Gray	Individual	Support	No

Comments:

We need to stop using all fossil fuels as soon as possible. This bill will help to replace the old, energy- hog units with renewable sea water.