

Written Statement of
YUKA NAGASHIMA
Executive Director & CEO
High Technology Development Corporation
before the
HOUSE COMMITTEE ON FINANCE
Monday, April 1, 2013
2:00 p.m.
State Capitol, Conference Room 308
In consideration of

**SB 23 SD1 RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE
BONDS TO ASSIST A SEAWATER AIR CONDITIONING PROJECT.**

Chair Luke, Vice Chairs Nishimoto and Johanson, and Members of the Committee on Finance.

The High Technology Development Corporation (HTDC) **supports** SB 23 SD1 which authorizes Special Purpose Revenue Bonds to Kaiuli Energy, LLC to build a seawater air conditioning (SWAC) district cooling system to serve Waikiki and nearby areas on the island of Oahu.

As a manufacturer of energy technology systems, Kaiuli Energy is the type of company HTDC supports. Furthermore, the SWAC cooling system is a positive step for the State in achieving its renewable energy goals.

Thank you for this opportunity to submit comments on this bill.

TESTIMONY BY KALBERT K. YOUNG
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
STATE OF HAWAII
TO THE HOUSE COMMITTEE ON FINANCE
ON
SENATE BILL NO. 23, S.D. 1

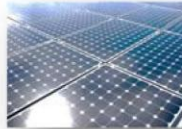
April 1, 2013
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RELATING TO THE ISSUANCE OF SPECIAL PURPOSE REVENUE BONDS TO ASSIST A SEAWATER AIR CONDITIONING PROJECT.

Senate Bill No. 23, S.D. 1 authorizes the issuance of special purpose revenue bonds (SPRB) of up to \$200,000,000, to assist Kaiuli Energy, LLC, in the planning, design, and construction of its seawater air conditioning district cooling system in and around Waikiki, Oahu, pursuant to Part V, Chapter 39A, Hawaii Revised Statutes.

The Department has no position on the issuance of SPRBs as contemplated in this bill. The Department would like to remind the Legislature and prospective issuers that should the legislation be approved, approval of SPRB issuance will still require further discussion and satisfactory review of the financing components involved in the transaction.

Thank you for the opportunity to provide testimony on this measure.



HOUSE COMMITTEE ON FINANCE

April 1, 2013, 2:00 P.M.

Room 308

(Testimony is 2 pages long)

TESTIMONY IN SUPPORT OF SB 23 SD1

Chair Luke, Vice Chairs Nishimoto and Johanson, and members of the Finance Committee:

The Blue Planet Foundation supports SB 23 SD1, authorizing the issuance of special purpose revenue bonds to Kaiuli Energy, LLC, to assist with planning, design, and construction of a seawater air conditioning district cooling facility and chilled water distribution system.

As we consider strategies for kicking Hawai'i's 5-million-gallon-per-day oil habit, our tendency is to focus on alternative sources of fuel and electricity. We look to clean, renewable energy sources to replace dirty fossil fuel power. We also look for ways to reduce the amount we use—and waste—through efficiency and conservation. What we often overlook is the reality that fuel and electricity are means to an end. Electricity is not what we really want. What we really want is light when it's dark, hot water for a shower, and a comfortable temperature indoors. What if we could cut out the middleman and put an abundant natural resource to work in place of electricity? Seawater air conditioning is a clean energy solution that does just that.

Air conditioning is a voracious consumer of electricity. On O'ahu, the cooling of commercial buildings year-round is responsible for a whopping 20 percent of the island's electricity demand. Kaiuli Energy has proposed a solution that precludes the need to cool water with electricity, one that stands to save substantial amounts of electricity—displacing fossil fuel imports—annually.

Applying the same technology that has been cooling buildings in Toronto, Stockholm, Amsterdam, and elsewhere, Kaiuli is proposing district cooling system that will serve the Waikiki, Ala Moana, and University of Hawaii area. The plan will pump seawater from over 1,000 feet deep to an onshore cooling station. There, the 40-some degree water will pass through a heat exchanger that transfers the seawater's coldness to a pipeline of freshwater that circulates in a closed loop. The chilled freshwater connects to buildings' existing air conditioning infrastructure, providing natural AC that doesn't require large, electricity-hungry chillers in each building. The seawater, slightly warmer than when it left the ocean, is returned to the ocean.

Electricity is versatile, but it is difficult and costly to make and store. The genius behind seawater air conditioning technology is that the cold seawater can chill buildings 24/7, much like solar water heaters provide hot showers even after the sun has set. Our ocean directly improves our lives in so many ways: food, therapy, recreation, scenery. Let's also recognize its enormous potential in helping to meet our energy needs. While researchers continue to work on ways to harness wave power and ocean thermal power, buildings in dense areas should readily convert to seawater air conditioning, a renewable energy solution that is practical and proven.

Thank you for the opportunity to testify.



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HOUSE COMMITTEE ON FINANCE
Monday, April 1, 2013 — 2 p.m. — Room 308

Ulupono Initiative Supports SB 23 SD1, Relating to the Issuance of Special Purpose Revenue Bonds to Assist a Seawater Air Conditioning (SWAC) Project

Chair Luke, Vice Chairs, and Members of the Committee:

My name is Murray Clay, 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 grown food, increase renewable energy, and reduce/recycle waste.

Ulupono Initiative seeks to promote and invest in innovative sustainability ideas and business models that have the potential to make a significant difference for Hawai'i. We work with, and invest in, businesses that show this potential for innovation, have local leadership, develop businesses from ideas and inspiration born in Hawai'i to reach the needs of Hawai'i, and use technologies and models that can be replicated and have potential global applicability.

Ulupono is testifying in support of SB 23 SD1, which will allow the State to issue Special Purpose Revenue Bonds (SPRBs) for the development of a seawater air conditioning (SWAC) district cooling system for Waikiki. We support Kaiuli's request because we believe 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 HCEI clean energy goals and support Hawai'i's vital tourism industry.

We appreciate the opportunity to present this testimony in support of SB 23 SD1 and ask for your favorable consideration of this bill.

Thank you very much,

Murray Clay
Managing Partner

