



Written Statement of
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before the
**SENATE COMMITTEE ON
WAYS AND MEANS**

Wednesday, February 19, 2014
9:25 AM
State Capitol, Conference Room 211

In consideration of
SB 3027 RELATING TO ECONOMIC DEVELOPMENT

Date: February 18, 2014

To: Chair Ige

Kaiuli Energy is in support of this measure that will allow the energy resources coordinator and governor to designate areas as energy zones.

Kaiuli Energy was founded in 2011 with the goal to be a global leader in ocean sourced energy development. Its current focus is on developing a 22,500 ton Waikiki based seawater air conditioning (SWAC) system, which is designed to provide district cooling to replace the energy-intensive central refrigeration system of a traditional air conditioning at individual buildings. The natural resource of cold seawater is used to chill freshwater that will be delivered to structures with centralized air conditioning systems.

A 22,500 ton SWAC system offers:

- Conservation of approximately 106,000 barrels of oil/year
- Reduction of approximately 48,000,000 kWh/year
- Reduction of potable water usage by approximately 157,000,000 gallons/year
- Reduction of sewage discharge by approximately 69,000,000 gallons/year
- Reduction of harmful gas emissions of approximately 50,000 tons/year
- Alignment with HCEI's goals of End-Use Efficiency and next generation technologies

There are five parameters that favor potential SWAC project locations. They are: access to cold water, high density of customer load, year-round air conditioning utilization, high electricity rates, and a good marine environment. A Waikiki system satisfies all five parameters. Other locations where SWAC projects are currently in operation are:

- Stockholm, Sweden – 80,000 tons
- Toronto, Canada – 75,000+ tons
- Amsterdam, Netherlands – 35,000 tons
- Cornell University, Ithaca, New York – 20,000 tons
- Bora Bora, French Polynesia – 3,000 tons

Our customers will be hotels and other buildings in and around the Waikiki and Ala Moana areas that have large air conditioning loads. It is estimated that air conditioning usage represents up to 45% of these buildings' total electricity costs. Not only will these SWAC customers benefit through substantial savings on electricity rates, SWAC customers will also realize significant savings on water and sewage consumption. In addition, these hotels, resorts, retail centers and other commercial and residential entities will be able to market themselves as environmentally conscious and friendly consumers.

The project is estimated to take five years to complete with the delivery of chilled water beginning in 2018. The estimated total project cost of the Waikiki SWAC system is projected to be approximately \$225 million.

Kaiuli's management team is comprised of Hawaii business and community leaders with the necessary experience critical to the project's success. As the former CFO of Hoku Corporation, I have over seven years of experience in alternative energy and raising funds for large scale ventures. In addition, Rob Iopa, president of WCIT Architecture, has extensive experience and expertise in entitling, designing and constructing large complex projects in Waikiki and urban Honolulu, and Ray Soon has over 40+ years consulting and delivering on construction projects in Hawaii.

Thank you for the opportunity to share our thoughts with you.