SB 1310

RELATING TO THE GREEN INFRASTRUCTURE LOAN PROGRAM.

Re-directs the Green Infrastructure Loan Program. Designates "all ratepayers" who pay the green infrastructure fee as the primary beneficiaries of the program. Requires $ of green infrastructure loans to be issued for utility-scale renewable energy generation or storage projects. Requires proceeds of the loan repayments, as well as the green infrastructure fee, to be applied to green infrastructure bond debt service payments. Terminates the green infrastructure fee upon the full payment or defeasance of the green infrastructure bonds. Terminates the Green Infrastructure Loan Program and Green Infrastructure Authority shortly thereafter.

DAVID Y. IGE
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TO THE SENATE COMMITTEE ON TRANSPORTATION AND ENERGY
AND
TO THE SENATE COMMITTEE ON
ECONOMIC DEVELOPMENT, TOURISM, AND TECHNOLOGY
AND
TO THE SENTATE COMMITTEE ON
COMMERCE, CONSUMER PROTECTION, AND HEALTH

THE TWENTY-NINTH LEGISLATURE
REGULAR SESSION OF 2017

MONDAY, FEBRUARY 13, 2017
2:00 P.M.

TESTIMONY OF DEAN NISHINA, EXECUTIVE DIRECTOR, DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, TO THE HONORABLE LORRAINE R. INOUYE,
THE HONORABLE GLENN WAKAI, CHAIR,
THE HONORABLE ROSALYN H. BAKER, CHAIR,
AND MEMBERS OF THE COMMITTEES

SENATE BILL NO. 1310 - RELATING TO THE GREEN INFRASTRUCTURE LOAN PROGRAM

<u>DESCRIPTION:</u>

This measure proposes to re-direct the Green Infrastructure Loan Program and designate “all ratepayers” who pay the green infrastructure fee as the primary beneficiaries of the program. This measure proposes to require green infrastructure loans to be issued for utility-scale projects and requires proceeds of the loan repayments, as well as the green infrastructure fee, to be applied to green infrastructure bond debt service payments. This measure also proposes to terminate the green infrastructure fee upon the full payment or defeasance of the green infrastructure bonds and terminates the Green Infrastructure Loan Program and Green Infrastructure Authority shortly thereafter.

POSITION:

The Division of Consumer Advocacy ("Consumer Advocate") supports this bill with reservations and offers the following comments.

COMMENTS:

The Consumer Advocate notes how this bill would designate all ratepayers who pay the Green Infrastructure Fee as the primary beneficiaries of the Green Infrastructure Loan Program. The Consumer Advocate acknowledges that all utility ratepayers have been paying the Green Infrastructure Fee and most customers have been paying the Public Benefits Fee,[1] both of which have supported the Hawaii green infrastructure special fund, through their monthly utility bills. As originally envisioned, GEMS loans would further the state's goals of clean energy and independence, and GEMS beneficiaries would repay the GEMS loans such that the special fund would be replenished and repay the amounts taken from the Public Benefits Fund.

The Consumer Advocate supports how this bill would maintain the Public Utilities Commission jurisdiction over approving loans for qualifying utility-scale projects. Utility-scale projects may have better economies of scale than customer-sited projects, and thus the benefits to all utility customers may increase. Also, given that the GEMS program is essentially insured by general ratepayer contributions to the green infrastructure fund, it is important that there is adequate oversight in place to ensure the use of the funds is in the interest of all ratepayers who have made and will continue to make contributions to GEMS, and not just in the interest of direct program beneficiaries.

The Consumer Advocate has some concerns, however, about placing the proposed restrictions on how the remaining funds may be used, such as limiting loans to generation and energy storage projects, as well as proposing that the funds be loaned out at an interest rate lower than the issuance rate or for a period longer than the bond maturity date. There may be other types of projects that may accelerate the clean energy transition besides generation and storage and overly prescriptive statutory language may adversely affect the ability to loan the remaining GEMS funds. For instance, future energy efficiency projects could not be funded if the proposed measure passes.

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[1] On electric bills, this appears as the PBF Surcharge. Since the PBF Surcharge is based on the amount of electricity consumed, if a customer has a PV system that eliminated all energy charges in any given month, that customer has not contributed towards the Public Benefits Fee for that month.

Also, at the outset of the GEMS program, the risk that electric customers may be asked to contribute more to cover delinquent payments and defaulted loans was present. The proposal to explicitly allow the Hawaii Green Infrastructure Authority to loan out money either at interest rates lower than the original issuance rate and/or for a term greater than the maturity of the bonds would significantly increase that risk. Such risk should be avoided, if possible.

The Consumer Advocate respectfully offers that the current program order already allows the funds to be loaned to parties other than underserved end users. For instance, the Consumer Advocate believes that the existing language would allow the funds to be loaned to a public utility company or third party who may construct a renewable energy facility that could either lower the overall generation cost for a utility company or for a community-based project.

Thank you for this opportunity to testify.

DAVID Y. IGE
GOVERNOR

LUIS P. SALAVERIA
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Statement of
LUIS P. SALAVERIA
Director
Department of Business, Economic Development, and Tourism
before the
SENATE COMMITTEES ON
TRANSPORTATION AND ENERGY
And
ECONOMIC DEVELOPMENT, TOURISM AND TECHNOLOGY
And
COMMERCE, CONSUMER PROTECTION AND HEALTH

Monday, February 13, 2017
2 p.m.
State Capitol, Conference Room 225

in consideration of
SB 1310

RELATING TO THE GREEN INFRASTRUCTURE LOAN PROGRAM.

Chairs Inouye, Wakai, and Baker, Vice Chairs Dela Cruz, Taniguchi, and Nishihara, and Members of the Committees.

The Department of Business, Economic Development, and Tourism (DBEDT) offers comments on SB 1310, which redirects Green Infrastructure loan repayments to the debt service of the Green Infrastructure Bonds and requires the Green Infrastructure Program's to consider issuing loans for utility-scale renewable energy generation or storage projects.

DBEDT supports the bond program as a financing structure that enables low-cost loans for green infrastructure equipment to achieve measurable cost savings in reducing utility bills and achieve Hawaii's clean energy goals. DBEDT offers the following comments on the language referring to Green Infrastructure Bonds:

- In order to reduce the Green Infrastructure Fee collection amount, green infrastructure loan repayments must be deposited into the Green Infrastructure Bond Fund. Therefore, p. 6 lines 1-6 should read, "(4) Requiring, until the green infrastructure bonds are paid in full, any annual green infrastructure loan repayments to be deposited in the green infrastructure bond fund, with a corresponding reduction of the green infrastructure fee as permitted under the financing order."

- The termination of the Green Infrastructure Fee is not done pursuant to statute for the current Green Infrastructure Fee, it is pursuant to the irrevocable Financing Order (Decision and Order No. 32281, Docket No. 2014-0134). Therefore, DBEDT suggests deleting p. 6 lines 7-9.
- Neither DBEDT nor HGIA may modify the Financing Order (see p. 109 of the Financing Order); however, the effectuation of this measure is not likely to require modification of the Financing Order. Therefore, DBEDT suggests removing reference to the modification of the financing order on p. 7 lines 11-12.

DBEDT defers to the Department of Budget & Finance for the impact of these amendments on the State's bond rating and to the Public Utilities Commission on the effect of this measure on the Public Benefits Fee and the Hawaii Energy Program.

DBEDT defers to the Hawaii Green Infrastructure Authority on the effects of the measure to the loan program.

Thank you for the opportunity to offer testimony on SB 1310.

TESTIMONY OF RANDY IWASE
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII
TO THE
SENATE COMMITTEES ON
TRANSPORTATION AND ENERGY,
ECONOMIC DEVELOPMENT, TOURISM, AND TECHNOLOGY,
&
COMMERCE, CONSUMER PROTECTION, AND HEALTH

February 13, 2017
2:00 pm

MEASURE: S.B. No. 1310
TITLE: RELATING TO THE GREEN INFRASTRUCTURE LOAN PROGRAM

Chair Inouye, Chair Wakai, Chair Baker, and Members of the Committees:

DESCRIPTION:

This measure proposes to re-direct the Green Infrastructure Loan Program by requiring that green infrastructure loans be issued for “utility-scale renewable energy generation or storage projects.” This measure also would require the proceeds of the loan repayments, as well as the green infrastructure fee, to be applied to green infrastructure bond debt service payments. Finally, this measure proposes to terminate the green infrastructure fee upon the full payment or defeasance of the green infrastructure bonds and to subsequently terminate the Green Infrastructure Loan Program and the Hawaii Green Infrastructure Authority (“HGIA”) shortly thereafter.

POSITION:

The Commission offers the following comments for the Committee’s consideration.

COMMENTS:

The Commission takes no position on the deployment of green infrastructure loans for the development of “utility-scale renewable energy generation projects or utility-scale renewable energy storage projects.”

However, the Commission notes that, upon the effective date of this proposed act, green infrastructure loans for all other purposes would be prohibited (See p. 15, lns. 1-2), including loans for other types of green infrastructure technology that 1) would be consistent with the current scope and original legislative intent of the Green Infrastructure Loan Program; and 2) could help in the achievement of the State's Renewable Portfolio Standards (See HRS § 269-92) and Energy Efficiency Portfolio Standards (See HRS § 269-96).

Limiting HGIA's flexibility to issue loans may constrain and delay the deployment of green infrastructure loans and the repayments those loans would generate. If it is the intent of the legislature to expedite the deployment of green infrastructure loans, then allowing the flexibility to provide loans for utility-scale renewable energy projects as well as other types of green infrastructure technology may be more effective.

Thank you for the opportunity to testify on this measure.

DAVID Y. IGE
GOVERNOR

GWEN S. YAMAMOTO LAU
EXECUTIVE DIRECTOR

HAWAII GREEN INFRASTRUCTURE AUTHORITY

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TESTIMONY OF GWEN YAMAMOTO LAU
EXECUTIVE DIRECTOR, HAWAII GREEN INFRASTRUCTURE AUTHORITY

BEFORE THE SENATE COMMITTEES ON TRANSPORTATION AND ENERGY, ECONOMIC DEVELOPMENT, TOURISM AND TECHNOLOGY, AND COMMERCE, CONSUMER PROTECTION AND HEALTH

MONDAY, FEBRUARY 13, 2017
2:00 P.M.
STATE CAPITOL, CONFERENCE ROOM 225

SENATE BILL NO. 1310
RELATING TO THE GREEN INFRASTRUCTURE LOAN PROGRAM

Chairs Inouye, Wakai, and Baker, Vice Chairs Dela Cruz, Taniguchi, and Nishihara, and Members of the Transportation and Energy, Economic Development, Tourism and Technology, and Commerce, Consumer Protection and Health Committees:

Thank you for the opportunity to testify on Senate Bill 1310, relating to the green infrastructure loan program. This bill proposes to (1) re-direct green infrastructure loans toward utility-scale renewable energy generation or storage projects; (2) require loan repayments and green infrastructure fees to be applied to bond debt service payments; and (3) terminate the green infrastructure fee and loan programs upon full payment of the bonds.

While the Hawaii Green Infrastructure Authority ("Authority") supports the intent of item (1) of this bill, it would like to respectfully inform the Committees that the mechanisms to finance utility scale renewable energy generation projects or storage projects, subject to Public Utility Commission's ("PUC") approval already exists. Further, the Authority opposes items (2) and (3) of the proposed bill.

In its Decision and Order No. 32318, the PUC indicates that if the Authority seeks to finance utility-scale projects, it shall file a Program Modification[1]. Further, if the Authority seeks to finance the Utility, it must also demonstrate that the use of GEMS funds will be less costly than the costs of regular utility-secured financing. Upon the submission of a Program Modification, the PUC has forty-five (45) business days in which to suspend or deny the Program Modification, or it will automatically become effective. Thus, as long as the Loan Program remains under the oversight of the PUC, the mechanism and procedures are already in place for PUC approval to finance utility scale projects.

[1] See "Decision and Order No. 32318" filed in Docket No. 2014-0135 on September 30, 2014 at p. 60.

Additionally on July 14, 2016, the Authority established an Open Solicitation process to receive proposals for potential clean energy projects to finance, similar to the project sourcing tool offered by the Connecticut and New York Green Banks. Through this Open Solicitation process the Authority received one request to finance a utility scale project. However due diligence for the requested project was being conducted during a period when the Authority received suspension orders[2] from the PUC for two Program Notification requests submitted in July 2016, which resulted in concern over the likelihood of an approval for a Program Modification. The uncertainty of approval, coupled with the lengthy decisioning period, resulted in the Authority being unable to commit to meeting the project's financing timeline.

The Authority also explored the possibility of financing the HECO Companies, having reviewed and analyzed its then most recent financing arrangement filed with the U.S. Securities and Exchange Commission on October 15, 2015[3]. Upon review, the Authority determined that it would be able to meet the PUC's requirement of providing a "less costly financing option" than the cost of regular utility-secured financing. An option of GEMS financing has been communicated to the HECO Companies for consideration, subject to PUC approval of a Program Modification that would need to be submitted once a financing need was identified.

Lastly, the Authority is anxiously awaiting a PUC ruling on the Community-Based Renewable Energy Program, Docket No. 2015-0389, as it has received a number of inquiries regarding financing community solar projects.

While the GEMS program has suffered setbacks and was clearly not able to meet its initial deployment targets, the deployment of loan funds, which began in January 2016, has gained positive momentum that is expected to continue steadily over the remainder of the current fiscal year. As of February 3, 2017, the Authority had $13.4 million in GEMS funds committed. It expects to end fiscal 2017 with approximately $60.0 million in GEMS loans funded and/or approved and committed.

While the PUC Decision and Order requires 51% of the funds to benefit the "underserved,[4]" to date, over 90% of the loans funded benefit this target group. Similarly, the Authority committed up to $9.6 million to finance solar hot water on Molokai, a project which has the potential of transforming and reshaping the energy landscape on the island by reducing energy consumption and lowering energy costs.

On January 31, 2017, the Authority submitted a Program Notification to the PUC seeking approval to finance commercial energy efficiency ("EE") infrastructure as part of the DOE's Ka Hei energy and sustainability program ("Ka Hei"[5]). Of the 25 State agencies participating in a

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[2] See "Order No. 33866 Suspending Program Notification No. 7" and "Order No. 33872 Suspending Program Notification No. 8" filed in Docket No. 2014-0135 on August 12, 2016 and August 15, 2016, respectively.

[3] See "Form 8-K Current Report" pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 dated October 15, 2015, filed with the United States Securities and Exchange Commission.

[4] Defined as renters, low and moderate-income households and nonprofits.

[5] Ka Hei is a comprehensive program, launched in 2014, involving all 256 public schools in the State of Hawaii. The program's goals include but are not limited to achieving an estimated $24 million in operating expense savings over five years and reducing energy consumption by 25 percent over five years. See Ka Hei, Hawaii State Department of Education, http://www.hawaiipublicschools.org/ConnectWithUs/Organization/SchoolFacilities/Pages /Ka-Hei.aspx; Ka Hei FAQs, Hawaii State Department of Education, http://www.hawaiipublicschools.org/ ConnectWithUs /Organization/SchoolFacilities/Pages/Ka-Hei-FAQs.aspx.

DBEDT report to the Legislature, Lead by Example State of Hawaii Agencies' Energy Initiatives FY 2013-2014, the DOE is the second largest consumer of electricity, consuming over 135 million kWh per year from FY2005 through FY2014 at an average cost of $38 million per year.[6] The Ka Hei program has identified almost $60.0 million in EE retrofit opportunities for the DOE. While the Authority is not contemplating financing 100% of the DOE EE projects, due to its mandate for 51% of the funds to benefit the underserved[7], implementing high-impact commercial EE measures that result in a 25% reduction of electricity consumed by the DOE could significantly and positively contribute to the achievement of Hawaii's Energy Efficiency Portfolio Standard ("EEPS") requirements[8] and would also decrease the amount of generation required to achieve the State's Renewable Portfolio Standard ("RPS") target of 100% by 2045.[9]

Based on the scope of this initiative, GEMS financing will result in significant benefits to some 241 campuses located on the islands of Oahu, Maui, Molokai, Lanai and Hawaii, while accelerating the achievement of the state's EEPS goals. Additionally, reductions in energy expenses for these schools increase the availability of State funds for other investments in education or related programs anticipated to net between $4.6 million to $5.2 million, annually. Finally, reducing energy consumption and lowering the kW load may enable classrooms earmarked for the "Cool the Schools" initiative to install air conditioners without requiring expensive and time consuming electrical upgrades in order to provide a better learning environment for the students in a timelier manner. Upon PUC and Board approval, the Authority anticipates closing the DOE loan in mid-March with work commencing shortly thereafter in April 2017.

As a public finance authority that uses limited public dollars to leverage private investment in clean energy, the Authority seeks to accelerate clean energy market growth while making energy cheaper and cleaner for consumers, driving job creation, and preserving taxpayer dollars. By deploying public capital efficiently through financing to maximize private investment, and lower the costs of clean energy to spark consumer demand, rather than having the industry rely on subsidies that cannot bring markets to scale, the Authority's goal is to use the GEMS funds to offer financing that attracts private investment, enabling a wider reach with each public dollar and **the exponential potential for greater impacts by recycling, re-investing and re-lending that same public dollar**.

While the development of GEMS' financing programs had not been an easy or timely process with the first loan being funded in January 2016, more than thirteen (13) months since bond issuance, 2016 has been a pivotal year as the Authority implemented numerous product enhancements and launched a new commercial loan product, resulting in renewed interest in GEMS financing. Nationwide, Green Banks are being created to play a critical role in leveraging public and private capital to finance clean energy infrastructure. The Hawaii Green Infrastructure Authority is working to expand its financing options to include residential and commercial energy efficiency, PV plus Storage, on-bill repayment, and community solar. In addition, the Authority also has the mechanisms in place to seek approval to finance utility scale renewable energy projects.

Thank you for this opportunity to testify.

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[6] DBEDT, Lead by Example State of Hawaii Agencies' Energy Initiatives FY 2013-2014, at 21, January 2015, available at, http://files.hawaii.gov/dbedt/annuals/2014/2014-seo-lbe.pdf.
[7] "Underserved" for the GEMS program is defined as renters, low and moderate income households and nonprofits.
[8] See HRS § 269-96.
[9] See HRS § 269-92.

DERC
DISTRIBUTED ENERGY RESOURCES COUNCIL

Before the Senate Committee on Transportation and Energy, the Senate Committee on Economic Development, Tourism, and Technology & the Senate Committee on Consumer Protection and Health

Monday, February 13, 2017, 2:00 p.m., Room 414
SB 1310: Relating to the Green Infrastructure Loan Program

Aloha Chairs Inouye, Wakai, and Baker, Vice Chairs Dela Cruz, Taniguchi, and Nishihara, members of the Committees,

On behalf of the Distributed Energy Resources Council of Hawaii ("DER Council"), I would like to testify in partial support for SB 1310 which re-directs the Green Infrastructure Loan Program to establish that "all rate payers" who pay the GIF fee are the primary beneficiaries and it requires that funds from the GEMS program be designated for low interest loans for utility scale generation and/or storage at 10 MW or above.

The DER Council is a nonprofit trade organization formed to assist with the development of distributed energy resources and smart grid technologies which will support an affordable, reliable, and sustainable energy supply for Hawaii.

The investment in energy storage is seen as a crucial next step towards the development of a resilient and reliable electrical grid which can contribute to grid modernization in a variety of ways and benefit all ratepayers. We realize that SB 1310 concerns both generation and storage, but we have focused our testimony today on energy storage as the GEMS program does not currently have a loan product for energy storage.

SB 1310 provides an allocation for energy storage, but it restricts the allocation only to utility scale generation and/or energy storage. We believe that this allocation is too narrow and does not serve the interests of all ratepayers. First, although utility scale generation and energy storage will have its place on the electrical grid as we move towards more renewables, utility scale storage is limited in terms of the services that it can provide. For instance, utility scale storage cannot provide distribution deferral, time of use bill management, demand charge reduction, increased PV self-consumption, or back up power for individual residential or commercial customers. In addition, a utility scale development would be rate based and paid for in full by all ratepayers, where distributed energy storage is customer invested and maintained and still provides services that benefit all ratepayers.

Also, the DER Council is concerned that restricting the allocation to systems over 10 MW will slow or prevent the use of this allocation. So far, no energy storage at or above 10 MW has been installed in Hawaii, and based upon the utilities' power supply improvement plan, it is unlikely that any will be installed in the next few years.

Therefore, the DER Council respectfully requests that the scope of the allocation for energy storage in SB 1310 include both distributed and utility scale installations so that all ratepayers will receive the maximum benefit.

Thank you for the opportunity to testify

Leslie Cole-Brooks
Executive Director
Distributed Energy Resources Council of Hawaii

IMUALLIANCE

46-063 Emepela Pl. #U101 Kaneohe, HI 96744 · (808) 679-7454 · Kris Coffield · Co-founder/Executive Director

TESTIMONY FOR SENATE BILL 1310, RELATING TO THE GREEN INFRASTRUCTURE LOAN PROGRAM

Senate Committee on Transportation and Energy
Hon. Lorraine R. Inouye, Chair
Hon. Donovan M. Dela Cruz, Vice Chair

Senate Committee on Economic Development, Tourism, and Technology
Hon. Glenn Wakai, Chair
Hon. Brian T. Taniguchi, Vice Chair

Senate Committee on Commerce, Consumer Protection, and Health
Hon. Rosalyn H. Baker, Chair
Hon. Clarence K. Nishihara, Vice Chair

Monday, February 13, 2017, 2:00 PM
State Capitol, Conference Room 225

Honorable Chair Inouye, Chair Wakai, Chair Baker, and committee members:

I am Kris Coffield, representing IMUAlliance, a nonpartisan political advocacy organization that boasts over 350 members. On behalf of our members, we offer this testimony **in support of** Senate Bill 1310, relating to the green infrastructure loan program.

If school is cool, then our classrooms should be, too. Yet, last year, classroom temperatures regularly exceeded 90 degrees, reaching as high as 108 degrees in one Kalaheo High School classroom. Studies show that the achievement gap between cooled and non-cooled classroom environments can reach 17 percent on standardized tests. While local schools' outdated electrical infrastructure often cannot support traditional air conditioning technology, experiments in renewable energy cooling systems have lowered the cost of comprehensive cooling. We continue to believe that available energy efficient technology–including on-grid, off-grid, microgrid, and photovoltaic technology–*should* reduce the cost of classroom cooling to $20,000, or a total of $140 million for the approximately 7,000 classrooms currently in need.

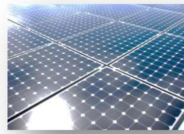
Therefore, we have worked, this session, to pass legislation allowing the Hawai'i State Department of Education and Department of Budget and Finance to borrow funds from the Hawai'i green infrastructure loan program to expand energy-efficient heat abatement in public schools. During the 2016 legislative session, lawmakers appropriated $100 million for heat abatement, heeding Gov. David Ige's call to cool 1,000 classrooms by the end of the 2016-2017 school year. Available estimates of $20,000 per classroom indicated, at the time, that $100 million would cover heat abatement for thousands of classrooms beyond the governor's call. Unfortunately, contractor bids have been higher than expected. During the initial round of bidding, the "highest low bid," meaning the highest bid on a project that was also lower than all bids on the same project, was $135,000. Other bids were even higher. Contech Engineering submitted a bid of $360,770, for example, to install solar-powered air conditioning in one portable at Ewa Beach Elementary, a project for which the lowest initial bid was $102,000.

DOE officials subsequently rejected all exorbitant bids and expanded their pool of pre-qualified applicants. Since that time, the average cost of heat abatement projects has declined, with projects now running $60,000 to $70,000 per classroom. Contractors cite labor shortages and the cost of upgrading energy efficiency infrastructure as reasons for the extra expense, noting that policymakers also required the DOE, last year, to set a goal of becoming net-zero with regard to energy use by 2035. Again, we believe that these costs are excessive. That said, the process of awarding contracts for heat abatement work during a booming construction market, along with the need to maximize renewable energy reliance throughout the state, clearly demonstrate the need for an additional, dedicated, and recurrent funding mechanism for the DOE's heat abatement program. Allowing green funds to be used for classroom cooling not only provides comfort to thousands of children at risk of heat exhaustion, but ensures that future cooling upgrades will comport with the state's goal of reducing carbon emissions.

While this measure seems largely geared toward incentivizing installation of renewable energy upgrades to residential units and developments, to the extent that heat abatement remains a state education priority and with an understanding that the DOE is Hawai'i's second largest energy user (consuming over 135 kWh per year from FY2005-FY2014, at an average cost of $38 million per year), <u>this measure may hasten the extension of green funds to subsidize large-scale and costly heat abatement projects, which would subsequently advance the goal of providing green infrastructure loans that maximize impact and generate immediate energy savings.</u> According to the Hawai'i Green Infrastructure Authority, the DOE's Ka Hei energy and sustainability program has identified almost $60 million in potential energy efficiency retrofit opportunities, which HGIA estimates could result in a 25 percent reduction in the department's energy consumption. <u>We hope that you will consider both the need for continuing heat abatement upgrades and the potential positive impact of related DOE renewable energy upgrades on the state's Hawai'i Energy Efficiency Portfolio Standard as this proposal moves forward.</u>

Mahalo for the opportunity to testify <u>**in support**</u> of this bill.

Sincerely,
Kris Coffield
Executive Director
IMUAlliance



SENATE COMMITTEE ON TRANSPORTATION & ENERGY
SENATE COMMITTEE ON ECONOMIC DEVELOPMENT, TOURISM, AND TECHNOLOGY
SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH
Feb. 13, 2017, 2:00 P.M.
Room 225
(Testimony is 3 pages long)

TESTIMONY IN OPPOSITION TO SB 1310

Aloha Chair Inouye, Chair Wakai, Chair Baker, Vice Chair Dela Cruz, Vice Chair Taniguchi, Vice Chair Nishihara, and Committee Members,

Blue Planet Foundation strongly **opposes** SB 1310. This measure would abolish the Green Energy Market Securitization (GEMS) loan program, and re-direct the funds to finance utility-scale energy projects. The measure is premised upon erroneous assumptions. It proposes a solution for a problem that doesn't exist. And it would abolish a program that is targeted at benefiting low- and middle-income consumers (to date, **more than 90% of the energy upgrades financed by GEMS have been provided for the benefit of low-income and middle-income consumers**).[1] We urge you to defer this measure.

SB 1310 IS ERRONEOUSLY FOCUSED ON ROOFTOP SOLAR; THE GEMS PROGRAM IS BROADER, E.G. SOLAR HOT WATER, ENERGY EFFICIENCY, AND ENERGY STORAGE

Section 1 of the bill attempts to describe the barriers faced by GEMS. But that description is narrowly—and erroneously—focused solely on solar photovoltaic (PV) installations.[2] Although GEMS initial program offerings were for rooftop solar installations, the program's more recent developments include solar hot water, energy efficiency, and energy storage. The factors identified in the bill are not barriers to those clean energy solutions. In fact, GEMS can fund solutions that can help to solve the solar PV issues identified in the bill.

As an example, on January 27, 2017, the Hawaii Green Infrastructure Authority approved using up to **$9.6 million of GEMS funds to finance solar hot water for households on Molokai**. This type of program has a transformative power to reshape the energy landscape on Molokai,

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[1] This information was provided at the Hawaii Energy Policy Forum's legislative briefing in January 2017.

[2] Section 1 of the bill states: "The factors contributing to the disappointing performance of the green infrastructure loan program will likely continue to inhibit loans for underserved electric utility customers to purchase and install photovoltaic systems. These factors include the following: the termination of the net energy metering program, high availability of competitive commercial loan products, interconnection issues, and a permitting backlog."

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by reducing energy demand, lowering energy costs, and providing more consumer options. The same solution can be applicable in other communities as well. This can only happen if GEMS retains its ability to finance such projects. **SB 1310 would foreclose this option.**

SB 1310 WOULD HALT THE PROGRESS OF ON-BILL REPAYMENT

At the direction of the PUC, GEMS is developing an on-bill repayment platform. This is a powerful way of reducing upfront barriers to energy efficiency and other energy upgrades. And it pairs extraordinarily well with GEMS' ability to serve low-income customers (**for example, GEMS' new residential loan program offers an interest rate that is not dependent on credit score**).[3] On-bill repayment was a concept approved long ago by the legislature, and which has itself suffered implementation delays to the detriment of consumers. GEMS is the lone effort to implement the legislature's intent. **SB 1310 would foreclose this option.**

SB 1310 WOULD SLOW THE AVAILBILITY OF ENERGY STORAGE

In its most recent quarterly report, the GEMS program noted that the ability to finance energy storage is "critical" to fulfilling its mission. We agree. We also share the program's hope that its prior program notification regarding energy storage (and other notifications, such as for energy efficiency) will soon proceed. **SB 1310 would foreclose this option.**

SB 1310 WOULD INCREASE CONSUMERS' RISK

The bill asserts that the GEMS bond payments "are dependent primarily on the imposition and collection of the green infrastructure fee, and not on the success of issuing green infrastructure loans to realize loan repayments." This is incorrect. The securitization of the green infrastructure fee was the originating source of the bonds, and it drives down the borrowing costs. But as the funds are deployed, repayments by program participants can service the debt in place of the green infrastructure fee. Or alternatively, the pool of funds can be rolled over to expand the pool of consumers that can benefit from GEMS, while some or all of the green infrastructure fee services the debt. **SB 1310 would foreclose this option.** The bill would also increase the risk that funds will need to be re-paid via the green infrastructure fee. The securitization concept is intended to decrease risk by spreading repayment amongst many small loans. Under SB 1310, repayment of the debt would rest entirely on a small handful of utility-scale energy developers. If even one of those developers defaults on the loans mandated by SB 1310, large portions of the debts will necessarily be re-paid by the green infrastructure fee.

SB 1310 PROPOSES A SOLUTION, BUT FAILS TO IDENTIFY A PROBLEM

The bill would mandate that GEMS funds must be loaned to utility-scale energy developers. Undoubtedly, utility-scale renewable energy and energy storage projects will be an important part of the landscape for Hawaii in the decades to come. But unlike for low- and middle-income customers, there is no evidence that such projects lack access to financing. Indeed, the oft-repeated mantra of investor-owned utilities across the country is that they can provide access to low-cost capital.

[3] Hawaii Energy Policy Forum legislative briefing, January 2017.

Section 1 of the bill explains that the concept of re-directing GEMS funds to utility-scale energy developers is premised on a need for capital to invest in the 100% renewable energy system. However, a review of the power supply improvement plans submitted by the Hawaiian Electric Companies does not suggest that access to capital is a barrier for the plans. Indeed, the plans state that they have only considered resources for which "**financing from capital markets is available** without the need for subsidies." *See* PSIP Update Report at 2-13, filed Dec. 23, 2016 in Docket No. 2014-0183. Accessing the GEMS funds would not transform any part of the five-year plans submitted (i.e. the period during which the GEMS funds would be deployed). In contrast, GEMS *can* transform the energy situation for thousands of households, such as more than 1000 families that could benefit from solar hot water on Molokai.

SB 1310 WOULD TERMINATE GEMS JUST AT THE MOMENT THAT THE REGULATORY PROCESS IS UNSHACKLING ITS POTENTIAL

The development of GEMS has not been an easy process, as the program, and its governing regulatory framework, have been developed, tested, and improved. Thankfully, the program has turned a corner, and the regulatory process is becoming more efficient. Similarly, revisions to the GEMS program offerings[4] have spurred increased interest in the program, with more than $100 million in projects in the pipeline, and **an anticipated $60 million in clean energy financing to be deployed this year**.[5]

The underlying concept of "green bank" revolving funds, such as GEMS and successful programs in New York and elsewhere, is that broadening access to clean energy financing is a public benefit. This broader access is a benefit to everyone, irrespective of whether an individual member of the public participates in the program, or not. To provide this public benefit, the state must be able to access "patient capital" in some form. SB 1310 would turn this concept on its head, trading patience for termination. Acknowledging the slow development of the program, the rational approach is to fix the barriers the program has faced, and thus accelerate the public benefit. Foremost amongst those barriers is the duplicative oversight that has been built into the regulatory process, requiring regulatory filings at every turn. There is little sense in having one government agency (PUC, Consumer Advocate, etc.) oversee every action of another government agency (DBEDT, HGIA)—particularly for solutions like solar hot water. HB 1593 proposes a solution to this problem.

For all of the reasons above, we urge you to reject SB 1310. And even if the GEMS program were to be abolished, re-directing the funds to utility-scale developers would make little sense. In the worst-case scenario, it would make more sense to focus the funds to energy efficiency, with GEMS and the Hawaii Energy program operating in tandem.

Thank you for this opportunity to testify.

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[4] Such as a lower interest rate, which is fixed regardless of the consumer's credit score.

[5] Hawaii Energy Policy Forum legislative briefing, January 2017.

Email: communications@ulupono.com

SENATE COMMITTEES ON TRANSPORTATION & ENERGY, ECONOMIC DEVELOPMENT, TOURISM, & TECHNOLOGY, AND COMMERCE, CONSUMER PROTECTION, & HEALTH
Monday, February 13, 2017 — 2:00 p.m. — Room 225

Ulupono Initiative Opposes SB 1310, Relating to the Green Infrastructure Loan Program

Dear Chair Inouye, Vice Chair Dela Cruz, Chair Wakai, Vice Chair Taniguchi, Chair Baker, Vice Chair Nishihara, and Members of the Committees:

My name is Murray Clay and I am Managing Partner of the Ulupono Initiative, a Hawaiʻi-based impact investment firm that strives to improve the quality of life for the people of Hawaiʻi by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and reduce waste. 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 <u>opposes</u> SB 1310, which seeks to expedite disbursement of funds for utility scale renewable energy or storage projects and then close the Green infrastructure loan program.

The green infrastructure special fund was established in June 2013 to provide low-cost financing for energy technology to ensure all ratepayers receive an opportunity for affordable clean energy. However, it is important to keep in mind that the green energy market securitization program (GEMS) program has only been operational for a year and a half. Furthermore, GEMS's loan programs were severely impeded when the PUC changed the rules to restrict Net Energy Metering for rooftop solar.

Currently, the GEMS program is growing in the number and size of potential projects in its pipeline and is actively working on obtaining more. For example, Hawaiʻi Green Infrastructure Authority and the utility have been working on an on-bill repayment mechanism for GEMS funding and $9.6 million has been committed towards a project to allow homeowners on Molokai to obtain solar hot water heaters. This pilot will leverage the new on-bill repayment mechanism to more effectively reach low and moderate-income homeowners and renters. There are GEMS-funded programs in the works that can help everyday people lower their energy costs, for example through energy efficiency and rooftop solar with energy storage. These programs hold great potential and deserve the opportunity to ramp up.

While Ulupono understands the frustration regarding the GEMS program that is felt by many lawmakers and the public, the effect of this bill would be to cut a needed future financing option for renewable energy projects. For the State to achieve its ambitious 100 percent renewable portfolio standards goals, there will need to be substantial investment for decades in our renewable energy systems.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay
Managing Partner

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COMMITTEE ON TRANSPORTATION AND ENERGY
Senator Lorraine R. Inouye, Chair
Senator Donovan M. Dela Cruz, Vice Chair

COMMITTEE ON ECONOMIC DEVELOPMENT, TOURISM, AND TECHNOLOGY
Senator Glenn Wakai, Chair
Senator Brian T. Taniguchi, Vice Chair

COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH
Senator Rosalyn H. Baker, Chair
Senator Clarence K. Nishihara, Vice Chair

DATE: Monday, February 13, 2017
TIME: 2pm
PLACE: Conference Room 225

SB 1310 RELATING TO THE GREEN INFRASTRUCTURE LOAN PROGRAM **COMMENTS**

Aloha Chairs Inouye, Wakai and Baker, and Members of the Committees,

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 47 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

The 2013 Legislature enacted a bill to create the Hawaii Green Infrastructure Authority (HGIA), which would launch the Green Infrastructure Loan Program, to provide low interest loans to the gap group, to the unserved market, to those who not qualify for other programs, as well as, everyone else. This bill asserts that such an approach is unfair. “This seems unfair to ratepayers who pay the green infrastructure fee but are not the primary program beneficiaries.”

The Green Infrastructure Loan Program has failed to date due to a large number of internal and external factors. This bill overlooks the internal problems. Under pressure, HGIA now asserts they are on the fast track to financing loans. This bill asserts, however, “there is no immediate pressure to deploy green infrastructure loans quickly.”

The bill has obvious good points, it forbids using green loans to finance and “Undersea cable energy transmission project” or “Liquefied natural gas generation, storage, or transmission project.”

There are some provisions that run counter to other agencies.

“The approval of the public utilities commission of the power purchase agreement or capital expenditure for the project shall be required within three hundred sixty-five calendar days of the approval of the loan by the authority.”

HECO`s proposed Power Purchase Agreement with Na Pua Makani Wind Project is currently before the Public Utilities Commission, as it has been since late 2013.

Turtle Bay settled a lawsuit by pledging to increase the number of endangered and threatened species on the North Shore. The proposed second Kahuku Wind facility has asked for the right to kill endangered and threatened species. DLNR is considering a contested case proceeding for the State Incidental Take Permit (ITL). The Feds have yet to rule on the federal ITL.

“If the public utilities commission rejects or fails to approve the power purchase agreement or capital expenditure for the project by the deadline, the green infrastructure loan shall be deemed invalid on the day after the deadline without necessity of further action by the authority.”

There is a tug-of-war between centralized and distributed resources. The Public Utilities Commission is moving ahead with Demand Response programs, whereby customer`s solar water heaters, batteries, solar systems, etc., can be used to stabilize frequency and voltage on the grid. The bill stresses centralized systems. “A re-direction of green infrastructure loans towards utility-scale renewable energy generation or storage projects seems logical.”

Moloka`i and Lana`i are left out, since the bill specifies a minimum project size greater than the total electricity used on those islands.

Mahalo,
Henry Curtis,
Executive Director