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## HAWAII GREEN INFRASTRUCTURE AUTHORITY

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**Testimony of Gwen Yamamoto Lau, Executive Director  
Hawaii Green Infrastructure Authority**  
before the  
**HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE**  
Wednesday, February 13, 2019 at 2:00 P.M.  
State Capitol, Conference Room 329

in consideration of  
**HOUSE BILL NO. 855, HD1**  
**RELATING TO CLEAN ENERGY FINANCING**

Chair Takumi, Vice Chair Ichiyama and Members of the Consumer Protection & Commerce Committee:

Thank you for the opportunity to testify and provide comments on House Bill 855, HD1 relating to clean energy financing. This bill proposes to amend and expand the purpose of the Building Energy Efficiency Revolving Loan Fund to a Clean Energy Revolving Loan Fund (RLF) and transfer administration of Clean Energy RLF to the Hawaii Green Infrastructure Authority (HGIA). HGIA **strongly supports** this bill.

Attracting and leveraging private capital with limited public funds in a sustainable manner is critical to support Hawaii's evolving energy market and provide affordable energy options for all ratepayers. Our collective goal is to reduce energy costs, drive job creation and save taxpayers billions of dollars currently spent on importing petroleum.

While our State is still twenty-six (26) years away from our 100% renewable goal by 2045, with the Federal solar tax credit, also known as the investment tax credit ("ITC"), scheduled to start winding down in 2020, solar projects will be forced to rely more heavily on flexible financing options, like those offered by HGIA, especially for projects serving the low-income population and nonprofit organizations.

Thank you for this opportunity to testify and offer support and comments for HB855, HD1.



Statement of Theodore A. Peck  
CEO and Lead Developer, Holu Energy

before the HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Wednesday, February 13, 2019 2:00 p.m.  
State Capitol, Conference Room 329

in consideration of HB 855 RELATING TO CLEAN ENERGY FINANCING.

Chair Takumi, Vice Chair Ichiyama, and Members of the  
Consumer Protection & Commerce Committee:

My name is Ted Peck. I served as the State Energy Administrator from 2008 through 2011, leading the State Energy Office during the inception of the Hawaii Clean Energy Initiative, and have been developing third party funded power purchase agreements for the difficult-to-penetrate market (non-profits, multiunit dwellings, and small businesses) since 2012.

I strongly support HB 855. The Hawaii Green Infrastructure Authority and the GEMS program have been instrumental in opening up investment opportunities in green energy in Hawaii for middle class taxpaying residents, allowing neighbors to invest in their community. HGIA is uniquely positioned to serve the public interest by providing funding with longer amortizations, which allow tax-incented investors to build systems for the difficult-to-penetrate market. HGIA understands the financial sector for green energy, and is uniquely positioned to design a mechanism to enable projects which release private funding and commitments for Hawaii's clean energy future.

This bill accomplishes the following:

- (1) Transfers the administration of the building energy efficiency revolving loan fund to the Hawaii green infrastructure authority

This is a smart use of an existing asset under control of the state that is currently unused. GEMS, once tuned, has been a successful policy initiative, but is not an evergreen fund. Allowing HGIA to take the existing revolving fund and repurpose it puts a good vehicle in the right hands with the expertise to make it work.

- (2) Expanding the purpose of the building energy efficiency revolving loan fund to include a broader range of clean energy technologies; and



One of the challenges of GEMS is the long, constrained regulatory process for structure and technologies. Today, more than half of the solar systems being installed in Hawaii have energy storage, but GEMS currently cannot fund energy storage, and moreover it is not a revolving, evergreen fund. Taking the existing building energy efficiency revolving loan fund and repurposing it to a flexible revolving fund for the technologies of today and tomorrow.

- (3) Making an appropriation to the clean energy revolving loan fund to make clean energy investment loans or for other approved uses.

Seeding funding will enable HGIA to seek other sources of funding to leverage into this fund.

The reason why GEMS was initially a failure is that it was structured to a single tax equity investor and single lender. Those awardees were not incented to provide aggressive pricing into the market, and funding from other sources (mostly corporate sources from the continental US or high value local companies or high net worth individuals with liquidity) were able outbid local projects. Once GEMS was restructured, it became a resource to all in the market and is helping to drive down the price of solar behind the meter, making the investment opportunity available to a broad range of investors, while benefitting the target market of GEMS – difficult-to-penetrate markets (low income, small businesses, non-profits). GEMS is now a success, and one worthy of reinvestment and expansion to a broader set of technologies. This bill does that.

GEMS was a groundbreaking funding mechanism for its time. A Hawaii Clean Energy Revolving Loan Fund is the next step, and now is the time.

Thank you for your consideration of this important issue for Hawaii's clean energy future.

A handwritten signature in black ink, appearing to read "Theodore Peck".

Theodore Peck  
Chief Executive Officer  
Holu Energy LLC

**HB-855-HD-1**

Submitted on: 2/12/2019 1:16:52 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Melodie Aduja	O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments:

Testimony of Colin A. Yost  
Chief Operating Officer of RevoluSun LLC  
before the HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE  
Tuesday, February 13, 2019 at 2:00 P.M. State Capitol, Conference Room 329 in consideration  
of HOUSE BILL NO. 855 RELATING TO CLEAN ENERGY FINANCING

Chair Takumi, Vice Chair Ichiyama and Members of the Consumer Protection & Commerce Committee: Thank you for the opportunity to provide comments on House Bill 855, relating to clean energy financing. **RevoluSun strongly supports the passage of HB 855.**

RevoluSun is now entering its tenth year as one of the largest, locally-owned and operated solar energy and energy efficiency contractors in the State of Hawaii. In our company's history, the availability of reliable solar system financing for consumers has fluctuated greatly, and the instability of financing has slowed down the state's progress toward 100% renewable energy. Secure and predictable financing has been especially challenging for lower-income members of our community.

In the last few years, the Hawaii Green Infrastructure Authority (HGIA), has made significant strides toward improving the availability of affordable financing for lower-income residents, and this has accelerated integration of solar systems and saved substantial sums of money for rate-payers. We have also worked closely with HGIA to leverage its funds to attract outside investors. The availability of HGIA funds has been so helpful, that we have increased our personnel by 25% over the last two years.

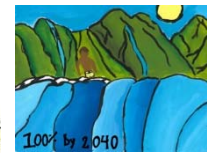
HB 855 is critical, because it enables HGIA to continue its mission even after its current funds are depleted. A Clean Energy Revolving Loan Fund is essential to Hawaii's efforts to reach 100% renewable energy, and we know that HGIA will do an excellent job managing that new fund.

Mahalo for the opportunity to submit comments in support of HB 855.



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**HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE**

February 13, 2019, 2:00 P.M.

Room 329

(Testimony is 2 pages long)

**TESTIMONY IN SUPPORT OF HB 855 HD1**

Aloha Chair Takumi, Vice Chair Ichiyama, and Committee members:

Blue Planet Foundation supports HB 855 HD1, which strengthens and expands the state’s efforts to ensure an equitable transition to our 100% clean energy future.

This measure contains three key elements:

1. Reinvigorating the dormant and unused building energy efficiency revolving loan fund by moving oversight of the fund to the active Hawaii Green Infrastructure Authority (HGIA);
2. Amending (and renaming) the revolving loan fund to expand the potential clean energy technologies that it can support; and
3. Making an appropriation to kick-start the clean energy revolving loan fund.

These policy changes will help to accelerate the adoption of renewable energy and energy efficiency and help businesses and families who are currently underserved by existing market-based clean energy solutions.

The HGIA is an effective entity to implement the clean energy revolving loan fund. The Green Energy Market Securitization (GEMS) loan program—which is governed by the HGIA—was developed as a way to fill underserved gaps and lower the cost of clean energy financing. Moreover, the program has been pointed squarely at addressing the needs of low-income and moderate-income energy customers. While the program initially was hampered with regulatory and marketplace challenges, GEMS is now successfully achieving its mission. According to their most recent quarterly report (October 1, 2018 - December 31, 2018), the HGIA has committed approximately \$76 million in GEMS funds. Nearly 80% of the energy upgrades financed by GEMS have been provided for the benefit of low-income and middle-income consumers. Additional program benefits, according to HGIA's most recent report:

Excess Revenues over Expenses – YTD FY2019	\$1,683,593
Jobs Created / Retained	904.5
State of Hawaii Tax Revenues Generated	\$11,161,009
Total Estimated kWh Production / Reduction Over Lifetime	745,676,011
Total Petroleum Displaced Over Lifetime (Estimated Barrels)	457,976
Total Greenhouse Gas Avoided Over Lifetime (Metric Tons CO <sub>2</sub> )	224,906
Percent Underserved Households Served	78.0%

House Bill 855 HD1 would provide additional funds for HGIA to expand this effective loan program.

The HGIA has a little over \$50 million of the original bond available to lend for approved clean energy projects. Once the bond is exhausted, however, the GEMS program will not be able to continue its effective work, as the funds returned will go to repaying the bond (unless another bond is sought). This measure proposes to continue the GEMS success by overseeing a revolving clean energy loan program, where the repaid funds can then be re-loaned to benefit more businesses and residents. This enables the GEMS loan program—with its requirement to serve at least 51% low- and moderate-income—to continue sustainably.

Blue Planet Foundation supports HB 855 HD1 as a smart policy to strengthen and expand Hawaii's ability to help us all move together toward 100% clean energy.

Thank you for the opportunity to testify.

**HB-855-HD-1**

Submitted on: 2/13/2019 12:23:08 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Phaethon Keeney	Individual	Support	No

Comments:



**HB-855-HD-1**

Submitted on: 2/13/2019 2:11:06 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
ChristopherMcCullough	Individual	Support	No

Comments:

**HB-855-HD-1**

Submitted on: 2/13/2019 2:45:19 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Barbara Hershey	Individual	Support	No

Comments:

**HB-855-HD-1**

Submitted on: 2/13/2019 3:43:08 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Koohan Paik	Individual	Support	No

Comments:

**HB-855-HD-1**

Submitted on: 2/13/2019 4:24:37 PM

Testimony for CPC on 2/13/2019 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
David Hunt	Individual	Support	No

Comments: