State of Hawaii
Department of Business, Economic Development & Tourism
State Energy Office

STATUS OF THE
GREEN INFRASTRUCTURE AUTHORITY'S ACTIVITIES

REPORT TO THE
GOVERNOR AND THE LEGISLATURE
OF THE
STATE OF HAWAII

Pursuant to

Act 211, Session Laws of Hawaii 2013

December 2013

Prepared with

Renewable Funding

and the

State of Hawaii

Department of Business, Economic Development and Tourism

State Energy Office

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Executive Summary

On April 30, 2013, the Hawaii State Legislature passed Senate Bill 1087, CD 1, the "Green Infrastructure" Bill and on June 27, 2013, Governor Neil Abercrombie signed into law Act 211, Session Laws of Hawaii 2013 (Act 211), establishing a green infrastructure financing program known as GEMS, or Green Energy Market Securitization. GEMS is a high impact strategy to deploy clean energy infrastructure and energy efficiency measures that will contribute towards Hawaii's aggressive pursuit of its statutory 70% clean energy goals by 2030 and to help consumers lower their energy costs.

This innovative financing model employs securitization techniques, typically used by the industrial sector, to serve Hawaii's consumers. GEMS enables low-cost financing from the utility surcharge securitization bond market to provide funding to support clean energy financing programs. By making financing more broadly available to Hawaii's consumers, GEMS addresses the financial barriers of investing in and installing energy cost savings devices by working with the market to provide solutions for consumers to invest in clean energy and save on their electricity bills. Due to its innovative structure, GEMS is garnering interest from other political jurisdictions and advocacy groups as a potential financing solution to make clean energy accessible and affordable to a wider audience.

In particular, GEMS is designed to make clean energy improvements, such as solar photovoltaic (PV) installations in its initial deployment, affordable and accessible for Hawaii's consumers, expanding the market to reach underserved segments such as low- and moderate-credit homeowners, renters and nonprofits. GEMS promotes the democratization of solar.

To fully effectuate GEMS, Act 211 stipulates a regulatory process for the Hawaii Public Utilities Commission (PUC) to review and issue two essential regulatory approvals: the GEMS Financing Order and Program Order. These are both new regulatory proceedings in Hawaii, and pursuant to Act 211, the Department of Business, Economic Development & Tourism (DBEDT) is preparing the Financing Order and Program Order Applications to be submitted to the PUC in the first quarter of Calendar Year 2014. Expeditious approval of these regulatory applications by the PUC will ensure the GEMS program can launch, raising low-cost funds to be rapidly deployed to help Hawaii achieve its clean energy goals and provide opportunities for consumers to save on energy costs.

This Legislative Report focuses on the status and update of activities related to the development of the GEMS program.

I. Reporting Pursuant to Act 211, Session Laws of Hawaii 2013

This report is respectfully submitted to fulfill the requirement to report on the status of the Hawaii Green Infrastructure Authority's activities,[1] including approved loan program description and uses; summary information and analytical data concerning implementation of the loan program; summary information and analytical data concerning the deployment of clean energy technology, demand response technology, and energy use reduction and demand-side management infrastructure, programs, and services; and repayments made or credits provided to electric utility customers, pursuant to Section 9 of Act 211. DBEDT respectfully submits this status report, outlining the initial steps taken to design and develop the GEMS program.

II. Introduction and Context

On April 30, 2013, the Hawaii Legislature enacted, and on June 27, 2013, the Governor signed into law, Act 211, authorizing the establishment of a green infrastructure financing program, known as GEMS. GEMS is a high impact strategy to deploy clean energy infrastructure and energy efficiency measures that will contribute towards Hawaii's aggressive pursuit of its statutory 70% clean energy goals by 2030 and to help consumers lower their energy costs.

The Legislature found in Act 211 that "building Hawaii's clean energy infrastructure at the lowest possible cost is vital to the State reaching its seventy percent clean energy goal in 2030." Further:

> "The legislature finds that significant investment in infrastructure installations is required to achieve the State's goals of energy self-sufficiency, greater energy security, and greater energy diversification, and to support the achievement of the renewable portfolio standards and energy efficiency portfolio standards, as established in chapter 269, Hawaii Revised Statutes. These green infrastructure investments are to support Hawaii's evolving energy market and ecosystem and to provide affordable energy options for all of Hawaii's consumers. Further, these infrastructure installations will require significant amounts of capital, and it is in the public interest to minimize these costs. A key component to minimizing costs is reducing the cost of capital required to finance infrastructure installations.
>
> The legislature further finds that the upfront costs of green infrastructure equipment are a barrier preventing many electric utility customers from investing in these infrastructure installations. Existing programs and incentives do not serve the entire spectrum of the customer market, particularly those customers who lack access to capital or who cannot afford the large upfront costs required, thus creating an underserved market. It is in the public interest to make cost-effective green

[1] Until the Authority is duly constituted, DBEDT may exercise all powers reserved to the Authority and shall perform all responsibilities of the Authority, pursuant to HRS 196-63.

infrastructure equipment options accessible and affordable to customers in an equitable way."

Effectuating Act 211: Public Utilities Commission approvals

To effectuate Act 211, GEMS requires the expeditious approval of its Financing Order and Program Order Applications to be filed with the PUC. Successful launch of GEMS will require the regulatory orders to approve the general parameters and program processes in a manner to ensure GEMS has the flexibility to effectively work with the market to provide efficient and effective financing opportunities to enable more of Hawaii's consumers to invest in and benefit from clean energy. While these are new regulatory procedures in Hawaii, prompt review and approval by the PUC is critical to ensuring timely launch and availability of GEMS funds for consumers.

DBEDT will be submitting the Financing Order and Program Order Applications in the first quarter of Calendar Year 2014 with the intent to launch upon approval by the PUC.

GEMS Overview: Democratizing Clean Energy

The State of Hawaii established a 70% clean energy goal to achieve by 2030, as codified in Hawaii Revised Statute (HRS) 269-92 and 269-96—reducing electrical energy consumption by 30% under the Energy Efficiency Portfolio Standard (EEPS) and increasing electrical generation from renewable resources to 40% under the Renewable Portfolio Standard (RPS).

Act 211 establishes a legal structure to enable DBEDT to issue bonds to fund green infrastructure financing programs in a manner to efficiently leverage public and private capital to facilitate the State of Hawaii meeting its aggressive clean energy goals and providing opportunities for consumers to invest in and save money from green infrastructure investments.

Key objectives of the GEMS program are to:

- Advance the State's clean energy policy and mandated goals;
- Increase accessibility and affordability of clean energy, especially for underserved markets; and
- Leverage and attract private capital to prove out a sustainable financing model.

The GEMS program seeks a balance of achieving public policy goals with providing fiscally responsible financing in order to be a sustainable model to finance clean energy. In its initial deployment, GEMS will provide financing for solar PV installations, focusing on expanding the reach of the market to underserved segments such as low- to moderate-credit homeowners, renters and nonprofits. GEMS aims to achieve its key objectives and

deploy capital quickly by leveraging existing channels and market players, while balancing risk and repayments.

GEMS Estimated Impact

Based on initial assumed deployment structures, it can be estimated that more than 54 gigawatt-hours (GWh)[2] of solar energy may be produced annually through projects financed by combining $100M-150M of GEMS funds with private funds. This would represent approximately 0.6% of the State's annual electricity consumption.[3] This estimated energy production from GEMS-financed solar PV projects would have the estimated impact of reducing petroleum consumption by nearly 4M gallons or over 100,000 barrels annually.[4]

GEMS-financed solar PV projects will contribute not only to the RPS, but also to the infrastructure investment needed for Hawaii to meet its 2030 clean energy mandates. An early third party analysis of the Hawaii Clean Energy Initiative (HCEI) revealed the need for upwards of $16 billion in capital expenditures across renewable energy and energy efficiency technologies in order to meet the State's clean energy goals.[5]

Due to its innovative structure, GEMS is garnering interest from other political jurisdictions and advocacy groups as a potential financing solution to make clean energy accessible and affordable to a wider audience. Accordingly, the GEMS funding structure could become a model for other states across the country, bringing together low-cost capital with the flexibility to address financial barriers in the market and deliver energy cost savings to consumers.

Status Update on the Development of GEMS

As of December 2013, the GEMS program is in the design and development phase, including in-depth market analysis, discussions with local and national market stakeholders, financial product design, and drafting of the regulatory Financing Order and Program Order Applications.

Pursuant to HRS 269-162, the Financing Order Application will lay out and seek expeditious regulatory approval for the issuance of low-cost Green Infrastructure Bonds (GEMS Bonds). These funds will be deployed through the GEMS program, as approved in the Program Order.

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[2] Based on an assumption of $100M in GEMS funding could be leveraged to $190M in financed installation value for approximately 33 MW of solar PV. The resulting annual production of this total solar PV capacity after applying a derate factor of 0.77 is 54 GWh.

[3] The calculation uses an annual electricity production in Hawaii of 9,639 GWh for 2012, based in the DBEDT Hawaii Energy Facts & Figures, November 2013, page 2.

[4] Calculated on 542 kWh/barrel and 13 kWh/gallon, as based on the US Energy Information Administration webpage - http://www.eia.gov/tools/faqs/faq.cfm?id=667&t=6 - as of December 6, 2013.

[5] R. Braccio, Booz Allen Hamilton, "Hawaii Clean Energy Initiative Scenario Analysis," March 2012.

Pursuant to HRS 269-170, the Program Order Application will lay out and seek expeditious regulatory approval for the deployment of the funds from the issuance of GEMS Bonds. Included in the Program Order may be general program parameters and deployment strategies to ensure an effective clean energy financing program to best serve Hawaii's consumers.

Concurrent with the development of the regulatory applications, the GEMS team is soliciting feedback from the solar industry, including the network of finance providers and contractors that are actively engaged in the Hawaii market. The feedback serves to inform program design and deployment strategies so that GEMS is designed as an effective public-private deployment model. After submission of the regulatory applications, the GEMS program intends to negotiate term sheets with market players before entering into formal agreements with private entities for the deployment of GEMS funds. The initial deployment of GEMS funds is targeted to occur over the 18-24 months following the GEMS Bond issuance, which is estimated to take place in the summer of 2014.

Figure 1 below represents the key milestones planned for the development and rollout of the GEMS program. Critical to the timing and success of the GEMS program will be expeditious review and approval of the GEMS regulatory orders, pursuant to Act 211. The Program Order and Financing Order Applications are intended to be submitted in the first quarter of Calendar Year 2014, for review and approval by the PUC in order to effectuate the GEMS program.

Figure 1. Planned GEMS Timeline

Planned Date (Calendar Year)	Milestone
Q1 2014	Financing Order Application submitted
Q1 2014	Program Order Application submitted
Q2 2014	PUC approval of Financing Order (90 day review period, per HRS 269-163)
Q2 2014	PUC approval of Program Order (estimated)
Q2 2014	GEMS Bond Issuance (estimated)
Q3 2014	Program Launch/Deployment Begins (estimated)

III. GEMS Program to Serve Target Markets

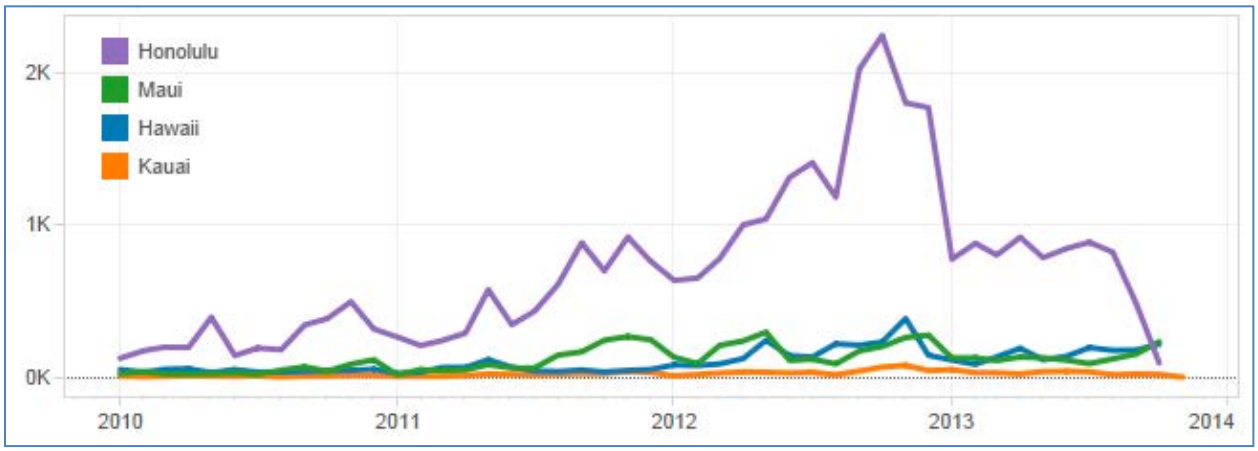
The initial GEMS program deployment plans to be focused, in order to quickly get to market to serve consumers and prove out the financing model. It will initially focus on the financing of solar PV installations with an emphasis on opening up accessibility and affordability to underserved markets that currently have little to no access to financing products to invest in clean energy. The current market conditions and target markets are described below.

Current Market Conditions

At a national level and in Hawaii, the solar market has been growing. According to a recent Solar Energy Industries Association (SEIA) report, the national solar PV market grew 15% from the first to second quarter of 2013.[6] However, the residential market saw no change between the quarters – the positive numbers resulted from utility and commercial market growth. The SEIA report specifically noted that Hawaii's residential solar PV market was down 18% from Q1 to Q2 2013, dropping the State from a third place ranking to sixth place in the country based on total megawatts installed from one quarter to the next. The report indicated this decline was likely due to new building permit fees, uncertainty on the state solar tax credit, and interconnection concerns.

Figure 2 illustrates the changes in the Hawaii solar market based on county building permit data.

Figure 2. Solar Permit Data, by County



Source: Honolulu County, Maui County, Hawaii County, and Kauai County. Includes public data on the number of permits issued for solar projects.[7]

[6] Solar Energy Industries Association, "Solar Market Insight Report," Q2 2013 - http://www.seia.org/research-resources/solar-market-insight-report-2013-q2

[7] Permit data sources are as follows:
Honolulu – http://dppweb.honolulu.gov/DPPWeb/Default.aspx?PossePresentation=BuildingPermitSearch
Maui – http://www.mauicounty.gov/index.aspx?NID=1032

Since the Hawaii solar industry is large and fragmented, county permit data allows a reasonable proxy of aggregate solar industry activity. As shown in Figure 2, in Honolulu County, there was rapid growth in the number of solar PV permits closed in 2012, with a drop off at the end of the year. In addition, in 2013, Honolulu has seen a more moderate level of solar permits being closed with a drop off in the third quarter of the calendar year 2013. As mentioned above, the decline may be related to changes to and uncertainty of the state solar tax credit, as well as utility interconnection issues and changes to related procedures to interconnect solar PV installations.

Current Solar Financing

There have been different ways consumers have been able to invest in solar. In the nascent years of the industry, many property owners had to pay cash upfront or secure a bank loan to finance the installation of solar PV. The latter has evolved from personal loans to in some cases, energy-specific loans. However, many of these types of bank loans are unsecured, provide only short-term financing opportunities, and are limited by traditional underwriting criteria and procedures.

Solar-specific financing products have evolved to include solar leases and power purchase agreements (PPAs) and have seen an increase in prevalence in the last three to five years, especially as these types of offerings may allow a consumer to invest in solar without the need for upfront cash.

However, even with the expansion of these solar financing products, the universe of eligible consumers who can invest in solar has still been limited because solar financing products may still rely on stringent credit and income criteria. Consumers that do not qualify for bank loans or solar financing products are effectively left out of the solar market, as they are unable to take advantage of investing in clean energy. GEMS intends to make financing products more widely available, especially to enable underserved markets to invest in solar PV.

Target Markets Overview

GEMS initially will target the following markets that traditionally have lacked access to clean energy financing:

Hawaii – http://papaaukahi.hawaiicounty.gov/&sa=D&usg=ALhdy2-kOl5DLOEsUW6xH9CsuoeoEHZ2HQ
Kauai - http://egov.kauai.gov/Click2GovBP/SelectPermit.jsp&sa=D&usg=ALhdy28-gsw7DXuVeC6qHmHRB9uIRokInQ
Note: Permit data constrained to closed solar PV or unspecific solar permits on residential and non-residential properties. For Hawaii county, all issued permits were included since the data does not indicate permit completion status. In the overall permit dataset used, a total of 7,261 permits could not be successfully matched to a real parcel, possibly because of errors in the TMK reported on the permit or incomplete/out of date parcel data. As a result, these permits were excluded from the chart.

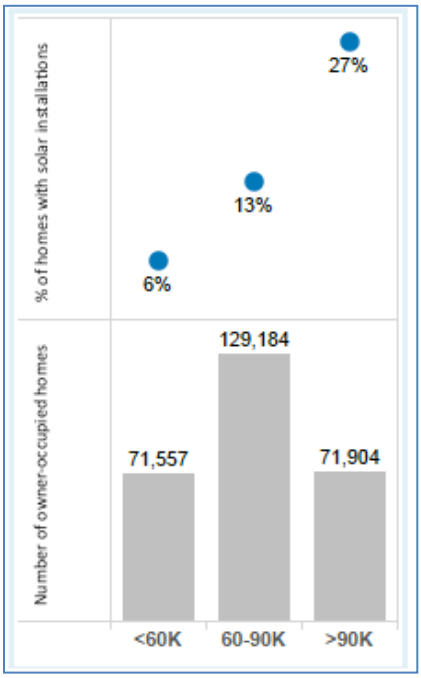
- Homeowners (including those with lower than average credit scores)
- Rental properties
- Nonprofits

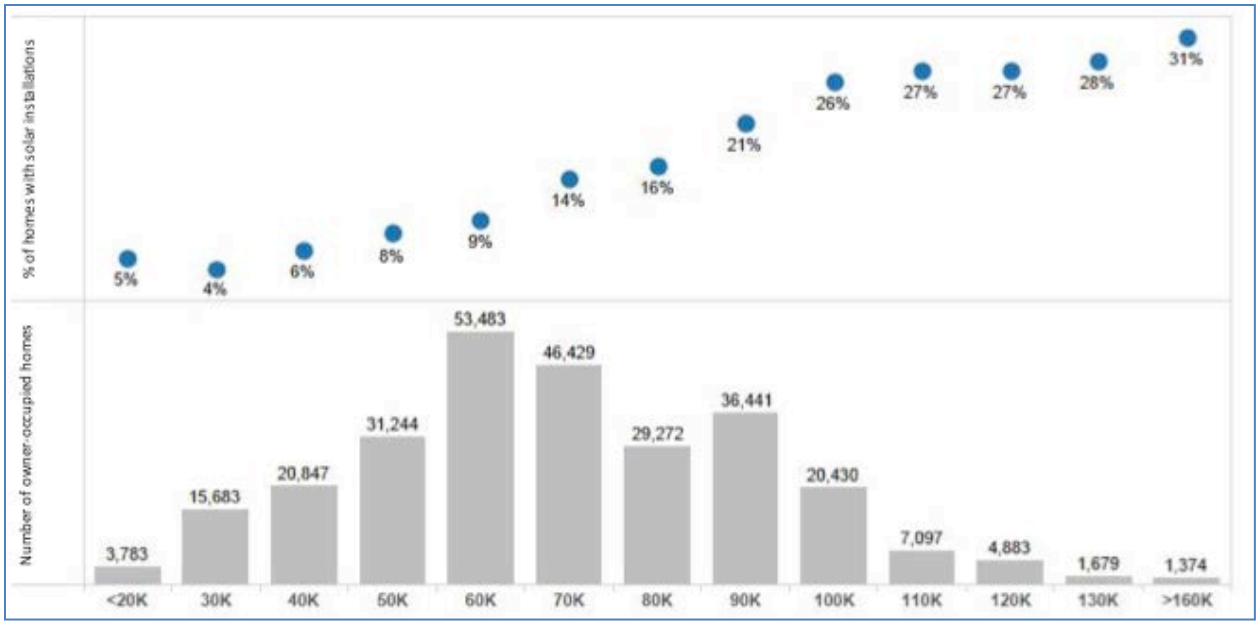
GEMS sees an opportunity to support consumers and the clean energy market by developing financing offerings to serve these target markets. Much of GEMS funds is intended to be deployed to the residential market, especially to expand access to financing, including for individuals with lower credit scores or income. The remaining portion of GEMS funds will focus on supporting growth in the rental property and nonprofit market with a specific focus on developing a replicable financing model.

Homeowners (including those with lower-tier credit scores)
Financing for residential solar PV installations have included multiple types of products such as unsecured short-term debt, secured long-term debt, or third-party ownership such as leases or PPAs; however, homeowners with lower-tier credit scores and/or income may not qualify for these products. In addition, there are often rigorous underwriting criteria that may delay the approval process and may ultimately result in a consumer being deemed ineligible for a financing product.

Initial analysis on county residential solar permit data suggests that solar installation rates show a trend to increase with income (Figure 3). In aggregate, households with the highest income (greater than $90K per household) have an estimated solar penetration rate of 27%, while middle-income households ($60K-90K per household and represent 48% of the market) have an estimated solar penetration rate of only 13%. The lowest income households (less than $60K per household) have an estimated solar installation rate of only 6%.

Figure 3. Estimated Residential Solar Installation Rates by Income





Source: Honolulu County, Maui County, Hawaii County, and Kauai County. Includes public data on the number of permits issued for solar projects.[8] *Census data on number of owner-occupied households by income bracket.*[9]

Rental properties

Many of Hawaii's renters have been left out of realizing direct benefits from clean energy. Most financing for multifamily rental properties is project specific due to a variety of barriers including split-incentives between tenants and owners, metering structure, limited roof space, existing capital structure, and complex ownership structures. This means broader adoption of solar PV and green infrastructure projects is limited typically to those with easy access to capital. Given Hawaii's large rental market (over 40% of households),[10] it is critical to identify financing solutions that can serve this market that has limited

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[8] Permit data sources are as follows:
Honolulu – http://dppweb.honolulu.gov/DPPWeb/Default.aspx?PossePresentation=BuildingPermitSearch
Maui – http://www.mauicounty.gov/index.aspx?NID=1032
Hawaii – http://papaaukahi.hawaiicounty.gov/&sa=D&usg=ALhdy2-kOl5DLOEsUW6xH9CsuoeoEHZ2HQ
Kauai - http://egov.kauai.gov/Click2GovBP/SelectPermit.jsp&sa=D&usg=ALhdy28-gsw7DXuVeC6qHmHRB9uIRokInQ

[9] US Census Bureau 2011 Data Release – American Community Survey 2007-2011, 5 -year estimates: http://www.census.gov/acs/www/data_documentation/2011_release/
Note: Permit data constrained to closed solar PV or unspecific solar permits on residential properties. For Hawaii County, all issued permits were included since the data does not indicate permit completion status. In the overall permit dataset used, a total of 7,261 permits could not be successfully matched to a real parcel, possibly because of errors in the TMK reported on the permit or incomplete/out of date parcel data. As a result, these permits could not be associated with a census tract and were excluded from the chart.

[10] United States Census Bureau - http://quickfacts.census.gov/qfd/states/15000.html

financing options. This market offers an additional challenge, in that there is a split-incentive economic issue – in most cases, the building owner would need to make the investment for the solar PV project, while the savings are realized in the lower utility bills of the tenants. While GEMS may not be able to fully address issues like the split incentive issue and other challenges, GEMS aims to provide a financing solution to enable the installation of solar PV on rental properties to permit and facilitate the sharing of the economic benefits between the landlord and tenants.

Nonprofits

The nonprofit market represent a diverse array of organizations such as more traditional commercial properties or leases, community-based providers, healthcare facilities, academic institutions, and social service buildings. While some established nonprofits may be able to acquire financing for solar PV, many nonprofits are funded by non-traditional revenue streams or lack the robust financials needed to secure financing for solar PV or other green infrastructure projects. Also, nonprofits often do not qualify for traditional solar leases and PPAs and do not have the ability to monetize tax benefits. Because of the limitations on financing options for nonprofits, GEMS aims to work with nonprofits and solar providers to develop financing solutions that will enable greater adoption of solar PV for nonprofits.

Product Deployment Strategies

The initial capital deployment strategies incorporate a market-driven approach that gathers industry feedback to ensure the efficient and effective introduction of GEMS funds into the consumer marketplace.

GEMS fund deployment can be categorized into three product deployment strategies: unleveraged debt, leveraged debt, and credit enhancements. The strategies can meet various objectives of the State and are focused in a manner to best serve each of the target markets. End market product offerings will focus on the benefit to consumers and provide increased access to consumers and options that will expand the implementation of green infrastructure projects. These product deployment strategies and offerings are being developed based on insight from market players such as local and national solar companies, local banks, credit unions, nonprofits, rental property owners, and developers.

Some of the GEMS products may be repaid as a line item on the utility bill, known as on-bill repayment. Customers would pay back the solar PV project financing on the monthly utility bill. This on-bill mechanism is currently being developed by the PUC with the key Program Entities, and is expected to launch in mid-2014.

Impacts of GEMS Funds Deployment

The impact of GEMS will be to expand the solar PV market to consumers and properties that previously had little to no access to clean energy financing. Through the deployment

of GEMS funds in combination with private funds, it is estimated that more than 54 gigawatt-hours[11] (GWh) of solar energy may be produced annually. The resulting clean energy production from solar PV has the impact of reducing petroleum consumption by nearly 4M gallons or over 100,000 barrels annually.[12] This would represent approximately 0.6% of the annual current electricity consumption in Hawaii.

IV. External Risk Factors to GEMS

GEMS aims to offer financing products to overcome barriers to investing in clean energy, but there may be other exogenous challenges. GEMS implementation could be hindered by external factors beyond any program design and development planning, and beyond DBEDT's control and ability to forecast.

- PUC approval: The program launch is contingent on the expeditious PUC approval of the Financing Order and Program Order Applications, which are both new regulatory filings and processes in Hawaii.
- Interest rate risk: Interest rates in the bond markets have been near historic lows over the last 12-18 months; however, the market has already seen an increase in interest rates. Future interest rates cannot necessarily be predicted.
- On-bill mechanism: The timely and successful build-out of the on-bill repayment mechanism by the PUC will impact the ability of GEMS to utilize the mechanism in the initial deployment. GEMS aims to leverage the on-bill mechanism as it is completed and as market players are able to integrate into customer processes.
- Rental property energy offset mechanism: Whereas single family homeowners can access and benefit from net energy metering (NEM) to offset energy usage with solar PV production, many multi-unit rental properties are unable to access the benefits of NEM. Without a regulatory pricing structure to allow for such an energy offset, landlords may be limited from installing solar PV on their property to benefit renters.
- Interconnection: The solar PV market faces several immediate technical challenges with many circuits being highly penetrated with intermittent renewable energy, leading to limits on utility interconnection and changing interconnection procedures.

GEMS is a solution to help overcome the financial barriers to investing in clean energy and opening up accessibility and affordability of solar; however, DBEDT plans to monitor these exogenous challenges to assess their impact on the success of GEMS, and may need to collaborate and pursue other innovative solutions in parallel and in concert with GEMS development and in coordination with the broader evolution of Hawaii's energy ecosystem.

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[11] Based on an assumption of $100M in GEMS funding could be leveraged to $190M in financed installation value for approximately 33 MW of solar PV. The resulting annual production of this total solar PV capacity after applying a derate factor of 0.77 is 54 GWh.

[12] Calculated on 542 kWh/barrel and 13 kWh/gallon, as based on the US Energy Information Administration webpage - http://www.eia.gov/tools/faqs/faq.cfm?id=667&t=6 - as of December 6, 2013.

V. Program Implementation/Operations

GEMS' core mission is to provide financing for energy cost savings installations, and in particular for Hawaii's underserved markets. To maximize the value to consumers, the program is developing products that will have positive impact on the growth of the solar PV market, while being fiscally responsible with the funds from the GEMS Bonds. Below is a summary of initial activities that have been undertaken to support the successful launch of GEMS.

Team

The first step in establishing GEMS was to put together a team of industry experts to advise DBEDT on all aspects of program rollout and initiate the governance of the program.

Renewable Funding was selected to assist with the GEMS program**.** Renewable Funding has been at the forefront of clean energy financing innovation throughout the country. Founded by Francisco DeVries, the pioneer of PACE (Property Assessed Clean Energy), the Renewable Funding team has been together for 5 years, executing on large-scale rollouts of energy efficiency programs and financing in the United States and abroad.

In order to ensure the successful issuance of GEMS Bonds, the State has selected an Underwriter, Bond Counsel, and Financial Advisor who are all experienced in the necessary financing activities to secure low-cost funds through the utility surcharge securitization bond market.

Governance and Quality Assurance

DBEDT is committed to the successful launch of GEMS and the responsible deployment of funds and is overseeing all team members working on launching GEMS.

In addition to the already mentioned regulatory processes required under Act 211, DBEDT is committed to the accountable use of funds through various reporting mechanisms, including submitting Legislative Reports and reporting through PUC processes.

GEMS anticipates engaging in a third-party evaluation, monitoring and verification consultant to analyze the success and impacts of the program as budget allows. If the budget will further permit, a mid-term evaluation may also be conducted to determine appropriate revisions to the program that will best provide benefits to Hawaii's consumers through the proper evolution of the GEMS Program.

VI. Conclusion

In the six months since the signing of Act 211, the GEMS program has been developed in a methodical and targeted manner to ensure quick and effective deployment that will contribute towards meeting the State's energy transformation and economic development

objectives. This focused approach will enable DBEDT to launch GEMS with a strong market based approach and to collect meaningful data to further evolve the program to best achieve its key objectives and to prove out a sustainable financing model to fund green infrastructure investments that will help achieve Hawaii's mandated 70% clean energy goal, including helping underserved markets targeted but with limited access to the clean energy market.

GEMS is being developed to be flexible and future GEMS deployment may be expanded to bring low-cost capital to bridge various market gaps and other green infrastructure equipment and technologies that will help implement and achieve the State's energy policy and goals.

The GEMS structure is the first of its kind in the United States and its effective and timely deployment may serve as a model to other states on how to bring low-cost funding to support clean energy financing programs. With the success of GEMS, Hawaii will further solidify itself as a national leader in clean energy, while delivering the local benefits of energy self-sufficiency, greater energy security, and energy cost reduction to Hawaii's consumers.