

DAVID Y. IGE
GOVERNOR

TARA M. YOUNG
EXECUTIVE DIRECTOR

HAWAII GREEN INFRASTRUCTURE AUTHORITY

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-3868

April 29, 2016

The Honorable Chair and Members of the
Hawaii Public Utilities Commission
465 South King Street, First Floor
Kekuanaoa Building
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Docket No. 2014-0135 – GEMS Program Quarterly Report

The Hawaii Green Infrastructure Authority respectfully submits this Green Energy Market Securitization Program Quarterly Report for the period of January 1, 2016 – March 31, 2016. This report fulfills the requirement for Quarterly Reports as specified in Decision and Order No. 32318, filed on September 30, 2014 in Docket No. 2014-0135.

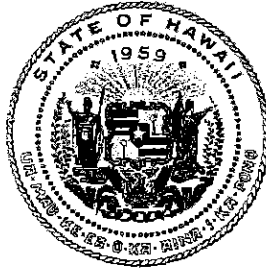
Sincerely,

Tara M. Young
Executive Director

Attachment

cc: Service List

FILED
2016 APR 29 P 1:01
PUBLIC UTILITIES
COMMISSION



State of Hawaii

Department of Business, Economic Development & Tourism

Hawaii Green Infrastructure Authority

GREEN ENERGY MARKET SECURITIZATION PROGRAM

QUARTERLY REPORT:

January 1, 2016 – March 31, 2016

REPORT TO THE
STATE OF HAWAII
PUBLIC UTILITIES COMMISSION

Pursuant to
Decision and Order No. 32318 filed in Docket No. 2014-0135

April 2016

Contents

1	Introduction and Context	3
1.1	Procedural History and Reporting Requirements	3
1.2	Overview of Program Status and Market Outlook	4
2	Summary of Program Activities	5
2.1	Administration	5
2.2	Status of Programs: Consumer PV	6
2.3	Status of Programs: Non-profit Renewables	7
2.4	Status of Programs: Other Programs Under Development	8
2.5	Additional Activities	8
3	Program Metrics	9
3.1	Energy and Environment Impact	9
3.2	Economic Development Impact	10
3.3	Market Expansion Impact	11
3.4	Cost Savings	13
4	Financial Summary of Hawaii Green Infrastructure Authority	14
5	Additional Reporting Requirements	15
5.1	Consumer Protection Policies	15
5.2	Utility-Scale Project Financing	15
5.3	Utility System Cost Information Update	15

1 Introduction and Context

The Green Infrastructure Loan Program (a.k.a. the “Green Energy Market Securitization Program”, “GEMS Program”, “Program”) employs a high-impact strategy to deploy clean energy infrastructure that will contribute towards Hawaii’s pursuit of its statutory 100% clean energy goals by 2045 and to help consumers lower their energy costs. The GEMS Program is the result of Act 211, Session Laws of Hawaii 2013 (“Act 211”), which created the framework for establishing the GEMS Program, including its oversight, governance, and reporting processes. The Program is governed by the Hawaii Green Infrastructure Authority which consists of five members: The Director of Business, Economic Development and Tourism, the Director of Finance, the Energy Program Administrator and two members appointed by the Governor, with the advice and consent of the Hawaii State Senate.

1.1 Procedural History and Reporting Requirements

The State of Hawaii Public Utilities Commission (“Commission” or “PUC”) issued Decision and Order No. 32318¹ (the “Program Order”), which approved the “Application of the Department of Business, Economic Development, and Tourism for an Order Approving the Green Infrastructure Loan Program,”² (“Application”) by the Hawaii Green Infrastructure Authority (“Authority”, “HGIA”).³ The Application requested, and the Program Order approved, the use of funds deposited in the Green Infrastructure Special Fund to establish and institute the GEMS Program, subject to the modifications described within the Program Order.⁴ In addition to complying with reporting requirements mandated by Act 211, the Authority proposed providing the Commission with Quarterly Reports which offer a snapshot of program activities as a part of the Application.⁵ The Commission approved the quarterly reporting proposal made by the Authority, adding additional requirements that arose during the docket process, including one from the Consumer Advocate⁶ that included requirements concerning the financing of utility-scale projects, when applicable.⁷

The Commission’s approval of Quarterly Report process, with modifications, stated that Quarterly Reports must provide information on the progress of the GEMS Program development and include, at a minimum:

¹ Filed on September 30, 2014 in Docket No. 2014-0135

² Filed on June 6, 2014 in Docket No. 2014-0135

³ HRS §196-63 provides that until the Authority is duly constituted, the Department of Business, Economic Development, and Tourism of the State of Hawaii (DBEDT) may exercise all powers reserved to the Authority pursuant to HRS §196-64, and shall perform all responsibilities of the Authority. As the Authority has now been duly constituted, the Authority assumes in its own right, pursuant to statute, all of the functions, powers, and obligations, including responsive or informational submissions in this Docket, which had heretofore been assigned to DBEDT.

⁴ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 1.

⁵ See “Application of Department of Business, Economic Development, and Tourism; Verification; Exhibits; and Certificate of Service,” filed in Docket No. 2014-0135 on June 6, 2014 at p. 17.

⁶ “Consumer Advocate” refers to the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawaii.

⁷ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 93.

- (1) All information proposed in [the] Application or as otherwise indicated by DBEDT in the course of this proceeding to be included in Quarterly Reports;
- (2) Summaries of all metrics approved pursuant to [the] Program Order, and as developed and approved through the metrics and data collection development process;
- (3) Accumulated year-to-date tallies of quantitative, and to the extent possible, non-quantitative metrics provided in preceding Quarterly Reports for the applicable annual reporting period;
- (4) Any additional information required by this Program Order to be included as part of one or more Quarterly Reports; and
- (5) Actuals to date as compared to the immediately preceding Annual Plan budget.⁸

In the Application, the Authority proposed Quarterly Reports include a snapshot of program activities, provide a financial summary, and address adjustments planned or made to the GEMS Program to accommodate market changes.⁹ The Authority indicated in the expected GEMS Program timeline that the Quarterly Report for quarter four of PY 2014-2015 would be submitted to the Commission in July 2015.¹⁰ More information about the procedural background for the GEMS Program can be found in the various filings in Docket No. 2014-0135 on the Commission's website: <http://dms.puc.hawaii.gov/dms/>.

1.2 Overview of Program Status and Market Outlook

As noted in HGIA's recent public filings¹¹, changes have occurred in the renewable marketplace that have profoundly affected all sectors of the renewable energy industry, including HGIA. The end of net metering and the 35MW cap on grid supply, most notably, have dramatically altered the prospects of the programs brought to market by the Authority in 2015. While the Authority funded its first consumer photovoltaic ("PV") loans in January 2016, market demand for this product has declined precipitously. As a market-driven program, it is critical that the Authority adapt to dynamic conditions rapidly to fulfill its mission. HGIA is moving aggressively to re-tool existing programs and develop new means of deploying capital to get ahead of trends in the market.

HGIA and the GEMS program are breaking new ground nationally in the financing and enablement of high-value alternative energy programs. Since HGIA is focused on mobilizing capital into categories of projects that are not currently addressed by the current commercial market, it should be understandable that its largely unprecedented programs take significant time and effort to come to fruition. 2015 marked the first full year of our deployment phase, during which two new programs were brought to market. Several external and internal factors negatively affected the early success of these programs, but HGIA has identified several emerging opportunities in which GEMS funding is uniquely

⁸ See "Decision and Order No. 32318," filed in Docket No. 2014-0135 on September 30, 2014, at p. 97.

⁹ See "Application of Department of Business, Economic Development, and Tourism; Verification; Exhibits; and Certificate of Service," filed in Docket No. 2014-0135 on June 6, 2014 at p. 17.

¹⁰ See "Application of Department of Business, Economic Development, and Tourism; Verification; Exhibits; and Certificate of Service," filed in Docket No. 2014-0135 on June 6, 2014, Exhibit 1.

¹¹ See "Status of the Hawaii Green Infrastructure Authority's Activities Report to the Governor and the Legislature - December 2015," "Green Energy Market Securitization Program Quarterly Report: October 1, 2015 – December 31, 2015," "Annual Plan Fiscal Year 2017: July 1, 2016-June 30, 2017."

positioned to have significant, positive impact in the coming years. As a market-based program, it is critical for GEMS to remain flexible and open to innovation in a rapidly moving sector of the market. We remain confident that the program can be instrumental in achieving the State's energy sustainability.

2 Summary of Program Activities

The following is a summary of the activities that have occurred between January 1, 2016 and March 31, 2016.

2.1 Administration

The following activities pertain to the administration of the GEMS Program:

- The Authority held a board meeting on January 21, 2016, at which the board approved submission of a supplemental budget request to increase the \$1M HGIA expenditure ceiling for FY 2017 by \$500,000. Subsequent to the budget request submission deadlines, Ms. Young was hired in October 2015 and conducted an assessment of FY 2017 budget and details. The challenge of deploying \$145M within the next three years requires additional and experienced staff to get the programs to market in a competitive time frame. The \$500,000 request is for two associate positions and one analyst position, as well as additional contractual services. If HGIA were to get the additional expenditure ceiling increase approved, total expenses over a 3-year period until all capital is deployed would be less than 3% of the total capitalization and less than comparable organizations. The Department of Budget and Finance ("B&F") did not recommend approval and Governor did not include the requested \$500,000 expenditure ceiling in the Executive Supplemental Budget Request for FY 2017.
- Quarterly Report: October 1, 2015 – December 31, 2015 was filed on January 29, 2016 in Docket No. 2014-0135.
- On February 11, 2016, the Authority made a presentation to all docket parties at an Informal Technical Conference to update on current status of the program and discuss proposed future uses and deployment of GEMS funds.
- On February 22, 2016 the Authority approved a capital partner, Metrus Energy, for the Commercial Energy Efficiency Product. Marketing for the program will launch in mid-May. The sales cycle for these loans can be lengthy, because there is considerable engineering work required on the part of the borrower and the transactions tend to be large. The first funding from the pipeline may not materialize until early 2017.
- The Authority is in discussions to finance a \$100M energy efficiency and heat abatement program for the Department of Education ("DOE"). The Authority filed Program Notification No. 6 to deploy capital to government agencies for commercial energy efficiency. Program Notification was filed on February 23, 2016. The fifteen-day review period for the Program Notification ended on March 15, 2016. The Commission conditionally approved the Program Notification, provided that the Legislature and Governor enact legislation authorizing an appropriation out of the GEMS special fund to loan such moneys to DOE and B&F for capital improvement program equipment, installation costs for air conditioning, energy efficiency

lighting, and other energy efficiency measures related to heat abatement at public schools. In the event that such legislation is not enacted, the approval shall be deemed void and of no effect. The Authority shall not deploy any funds to State agencies under Program Notification No. 6 in excess of borrowing amounts authorized by the Legislature. A decision on whether all or a portion of the proposed DOE program will be financed by the Authority is subject to board and legislative approval, expected May 2016.

- The Authority held a board meeting on February 24, 2016, at which the board was scheduled to vote on entering into a loan agreement with DOE and B&F. The vote was deferred pending: (1) agreement on final term sheet with stakeholders; (2) detailed list of improvements that would comprise the program; and (3) Commission approval of Program Notification No. 6.
- Governor’s Message No. 524 nominated Kalbert Young to the Hawaii Green Infrastructure Authority for a term to end June 30, 2018. Mr. Young was confirmed by the Hawaii State Senate on March 11, 2016.
- Annual Plan Fiscal Year 2017: July 1, 2016 – June 30, 2017 was filed on March 31, 2016 in Docket No. 2014-0135.
- The Authority is seeking a \$45M increase in its FY 2017 appropriation ceiling for the issuance of green infrastructure loans. This request was included in Governor’s Message 10 to the Legislature. While, as reported in the FY 2016 Annual Plan, the Authority had already received appropriations from the Legislature in FY 2015 for all funds to be deployed as loan capital in the GEMS Program, the Attorney General’s office has stated that an appropriation ceiling is required for expenditures out of the GEMS special fund. The current FY 2017 appropriation ceiling of \$1M for the GEMS special fund did not account for this.
- The Authority has been testifying on matters at the 29th Legislative Session, 2016 at the Hawaii State Capitol. In addition to the Governor’s Messages mentioned herein, the Authority is/was actively monitoring: H.B. 2726; S.B. 3126; H.B. 2569; H.B. 1524; H.B. 2301; S.B. 2830; S.B. 2738; and H.B. 1700. Several of these bills could have a significant impact on the GEMS Program and are under discussion in Conference Committees.

2.2 Status of Programs: Consumer PV

At a glance (as of 4/27/16)

	Applications	Credit approved	Loan docs out	Funded
# of loans	160	20	20	9
\$ value of loans	n/a	n/a	\$622,912	\$298,110

On a positive note, the first GEMS loans were funded in January and nine consumer PV loans have been funded to date totaling approximately \$300,000. In spite of this positive milestone, uptake of this program has been disappointing. Multiple factors have contributed significantly to the current state of the program:

- End of the net metering tariff
- High availability of commercial loan products with competitive terms and easier administrative processes
- HECO interconnection issues and permitting backlog

We currently have 14 Deployment Partners engaged in the program. Based on feedback from Deployment Partners, we have made some changes in the quarter to broaden the applicability of the program:

- In January the Authority 'relaunched' the program with modifications to underwriting guidelines to broaden the applicability of the program. Changes were made to system sizing restrictions, price cap, flexibility for partial prepayments and reamortization of loans, and acceptance of NEM and DER approvals.
- In March the Authority's underwriting partner, Energy Finance Solutions, launched a customer portal with an online application. Prior to the online application, applicants were required to mail-in or fax applications and feedback from the Deployment Partners was that this was a cumbersome process.

In the next quarter, the Authority will be making further changes to improve the competitiveness of the program:

- Automated-decisioning will be added to the online application process which allows a potential borrower immediate notice of pre-approval, denial or pending status following completion and submission of the online application. This is expected to simplify the sales process for the Deployment Partners.
- Working to address the issue of ineligible properties, notably the exclusion of properties held in a trust, which constitutes almost half of the rejected applications to date.
- Evaluating offering a single interest rate to all borrowers, regardless of credit score. Currently, the interest rate on the Consumer PV loan is 6.5% to 9.875%, depending on the borrower's FICO score. This tiered interest rate structure results in the underserved being charged higher, above market rates.

While we expect these actions to favorably affect the pipeline and approval rates, the long-term growth prospects of the program are limited by the broader market environment.

2.3 Status of Programs: Non-profit Renewables

The Non-profit program partner, Clean Power Finance, notified the Authority in December 2015 that they were dropping their participation in the program due to a loss of tax equity. Consequently, all marketing activities related to the program were suspended. Non-profit entities who had completed applications for the GEMS program were informed of the program's termination and were referred to Deployment Partners who offer PPAs for this market segment.

In the future, non-profit entities may access GEMS capital through individual project finance opportunities (see “Commercial PV” below).

2.4 Status of Programs: Other Programs Under Development

Consumer PV with Battery Solutions

HGIA’s focus will shift to solutions that include PV with battery storage, which will be increasingly compelling solutions for all consumers, not only the affluent or early adopters, in the evolving renewable energy market. PV systems without battery storage will not be viable in the future once grid supply has been fully subscribed, possibly year end 2016 or early 2017. HGIA is actively working with Deployment Partners and energy storage OEM’s to modify the existing Consumer PV program to address the longer term, scalable opportunity to finance renewable solutions with battery storage. Because of the high up-front cost of these assets, financing will be critical to allow access to this technology for underserved and economically vulnerable homeowners. A Program Notification will be submitted for battery storage, including a market analysis and a cost-benefit analysis.

Commercial PV

Despite the termination of the Non-profit/Small Business program with Clean Power Finance, the Authority is committed to financing PV projects for commercial and non-profit institutions. Lending would be conducted in conjunction with local financial institutions, with GEMS funds contributing part or all of the capital. Doing so would allow the Authority to access other institutions’ pipelines for loans, finance projects for that may not otherwise be financed by traditional lending institutions, and compete with agility in a crowded marketplace for renewable energy lending. Such programs may be subject to a further Program Notification, which the Authority will submit.

Government Agencies

HGIA continues to work with the DOE and other government agencies, which constitute some of the largest users of electricity in the State, on opportunities to responsibly finance renewable energy and energy efficiency investments.

Open Solicitation Process

By June 30, 2016, the Authority will have established an Open Solicitation process for proposals related to deployment of GEMS funds. Doing so is consistent with best practice by Green Banks and similar State entities and provides a consistent, transparent approach to sourcing opportunities for capital deployment.

2.5 Additional Activities

The following are some of the activities that have occurred since the end of the quarter (March 31, 2016) and will be reported as activities in the next Quarterly Report.

- On April 8, 2016, the Consumer Advocate filed comments that recommend HGIA provide further information regarding: (1) the modifications made to the existing Consumer PV program and their impact on the types of customers likely to receive GEMS Program financing; (2) the “public benefit” associated with the proposed Consumer PV with Battery program and who is likely to benefit; and (3) how the proposed Consumer PV product will expand access to financing for customers, particularly those who are underserved. The Authority has included additional information regarding the Consumer PV program in this report and a Program Notification will be submitted for the proposed Consumer PV with Battery program which will address the Consumer Advocate’s comments.
- S.B. 2738, SD 2, HD2 proposes using \$50 million of GEMS funds to create an energy storage rebate program. HGIA has testified that while grid-connected energy storage is an eligible clean energy technology that could be financed through a GEMS loan program, an energy storage rebate program is not included in the PUC-approved Program Order. Also, the GEMS law passed in 2013 clearly states that the purpose of the funds are loans, not grants or rebates, and the program loan repayments are committed to replenishing the Public Benefits Fund each year following the payment of necessary cost items. This bill is under discussion in a Conference Committee.
- In April, an Executive Assistant was hired and the Administrative Services Coordinator position became vacant. Two new hires – a Managing Director and a Program Officer – are scheduled to start May 2, 2016.

3 Program Metrics

While GEMS funds have now been deployed, the volume remains sufficiently low that economic and environmental impact KPI’s are difficult to estimate with precision. We have noted below any metrics that can be responsibly reported, and will update estimates of impact in subsequent periods as the volume of loans outstanding grows.

3.1 Energy and Environment Impact

	This Quarter	Program Year-To-Date	Since Program Launch
Clean Energy Production of Projects Financed			
Installed Capacity (Actual kW)	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Total Project Production to Date (Estimated kWh)	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Total Project Production Over Lifetime of Installed PV (Projected kWh)	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Electricity Reductions from Energy Efficiency Projects Financed			
Cumulative Annual Electric Energy Saved (kWh)			
Total Resource Benefit (kWh)			
Petroleum Displaced by Clean Energy and Energy Efficiency Projects			

Total Petroleum Displaced/Saved to Date (Estimated barrels)	TBD	TBD	TBD
Petroleum Displaced to Date by Clean Energy Generation	TBD	TBD	TBD
Petroleum Displaced Over Lifetime of Installed PV (Projected barrels)	TBD	TBD	TBD
Cumulative Annual Petroleum Saved (from efficiency)			
Petroleum Saved from Total Resource Benefit of Efficiency Projects			
Greenhouse Gas Avoided			
Greenhouse Gas Avoided to Date (Estimated metric tons CO ₂)	TBD	TBD	TBD
Greenhouse Gas Avoided from Clean Energy Production	TBD	TBD	TBD
Greenhouse Gas Avoided Over Lifetime of Installed PV (Projected metric tons CO ₂)	TBD	TBD	TBD
Greenhouse Gas Avoided from Energy Efficiency			
Greenhouse Gas Avoided over Lifetime of Energy Efficiency Project			

3.2 Economic Development Impact

Charts and graphs depicting:

- Total Capital Deployed
- Total GEMS vs. Third-Party Capital Deployed
- Total Capital Deployed By Market Segment
- Total Capital Deployed By Technology Type (including division by systems with advanced inverters, smart modules, and monitoring devices)
- Allocation of GEMS Funds By Market Segment
- Allocation of GEMS Funds by Technology Type

<i>(Cash Basis)</i>	This Quarter	Program Year-To-Date	Since Program Launch
GEMS Administrative Costs	\$400,561.84*	\$949,559.30	\$1,599,798.59
GEMS Loans	\$137,436.89	\$137,436.89	\$137,436.89
Total GEMS Administrative Costs and Loans	\$537,998.73	\$1,086,996.19	\$1,737,235.48

* The administrative costs recorded for the quarter include \$255,250 in out-of-period costs dating back to 2015, which were paid in 2016. The funds were for contract services incurred in 2015 for the development of the Consumer PV loan program. Excluding those legacy costs, administrative costs for the quarter were \$145,311.84.

	This Quarter	Program Year-To-Date	Since Program Launch
Projects Financed According to Technology Type/Category			
Solar Photovoltaic Systems	4	4	4
- Systems with Advanced Inverters			
- Systems with Smart Modules			
- Systems with Monitoring Devices			
Energy Storage			
LED Upgrades			
Commercial Efficiency			
- Projects that include HVAC upgrades			
- Projects that include lighting upgrades			
- Projects that include controls and monitoring devices			
- Projects that include mechanical upgrades			
Energy/Water Nexus			
Other Projects			
Total Number of Projects	4	4	4
Indirect Economic Impact of Capital Deployed (\$)	TBD	TBD	TBD
Indirect Economic Impact of Cost Savings To Date (Estimated \$)	TBD	TBD	TBD
Indirect Economic Impact of Cost Savings over Project life (Projected \$)	TBD	TBD	TBD

3.3 Market Expansion Impact

	This Quarter	Program Year-To-Date	Since Program Launch
Total Number of GEMS Loans	4	4	4
Total Number of Loans Serving Underserved Market			
Number of Loans on Oahu	3	3	3
Number of Loans on Maui	1	1	1
Number of Loans on Molokai			
Number of Loans on Lanai			
Number of Loans on Hawaii			
Profile of Customers			
Number of Customers By Customer FICO Credit Score			
700 and above	1	1	1
675-699	1	1	1
650-674	2	2	2
620-649			
600-619			
Number of Customers By Income Distribution (self-reported by customers)			
Under \$15,000			
\$15,000-\$24,999			

\$25,000-\$34,999			
\$35,000-\$49,999			
\$50,000-\$74,999	1	1	1
\$75,000-\$99,999	2	2	2
\$100,000 and Above	1	1	1
Number of Nonprofits Participating in GEMS			
Number of Nonprofits by Total Assets or Gross Receipts			
Up to \$9,999			
\$10,000-\$24,999			
\$25,000-\$99,999			
\$100,000-\$499,999			
\$500,000-\$999,999			
\$1,000,000-\$4,999,999			
Above \$5,000,000			
Number of Nonprofits by Average Number of Employees (past 12 months from Application)			
≤10 Employees			
11-50 Employees			
51-100 Employees			
101-250 Employees			
251-500 Employees			
501-1,000 Employees			
>1,000 Employees			
Number of Rental Units Supported by GEMS			
Profile of Nonprofits by Type (may also be provided)			
	This Quarter	Program Year-To-Date	Since Program Launch
Total Number of Completed Applications Received	21	157	186
Number of Nonprofit PV Applications Received		14	43
Number of Nonprofit PV Applications Approved			
Number of Nonprofit PV Applications Declined	41	43	43
Number of Nonprofit PV Applications Withdrawn			
Number of Nonprofit PV Applications Under Review			
Number of Commercial PV Applications Received		1	1
Number of Commercial PV Applications Approved			
Number of Commercial PV Applications Declined		1	1
Number of Commercial PV Applications Withdrawn			
Number of Commercial PV Applications Under Review			
Number of Residential PV Applications Received	21	142	142
Number of Residential PV Applications Approved	9	23	23
Number of Residential PV Applications Declined	6	60	60
Number of Residential PV Applications Withdrawn	27	42	42
Number of Residential PV Applications Under Review	17	17	17

Number of Commercial EE Applications Received			
Number of Commercial EE Applications Approved			
Number of Commercial EE Applications Declined			
Number of Commercial EE Applications Withdrawn			
Number of Commercial EE Applications Under Review			

3.4 Cost Savings

Charts, graphs or tables depicting:

- Average Estimated Electricity Cost Savings from Energy Production (\$)
- Average Estimated Electricity Cost Savings from Energy Efficiency (\$)
- Percent Savings of Original Utility Costs from Energy Production (%)
- Percent Savings of Original Utility Costs from Energy Efficiency (%)
- System Cost per Watt for All Consumers – Energy Production (\$)
- Average System Size for All Consumers – Energy Production (kW)
- System Cost per Watt for Underserved Consumers – Energy Production (\$)
- Average System Size for Underserved Consumers – Energy Production (kW)
- Project Cost per Watt for All Consumers – Energy Efficiency (\$)
- Average Project Size for All Consumers – Energy Efficiency (kW)
- Project Cost per Watt for Underserved Consumers – Energy Efficiency (\$)
- Average Project Size for Underserved Consumers – Energy Efficiency (kW)

4 Financial Summary of Hawaii Green Infrastructure Authority

State of Hawaii
Hawaii Green Infrastructure Authority
Financial Summary
FY 2016

**STATEMENT OF NET POSITION
AS OF MARCH 31, 2016**

Current Assets	
Cash in Bank	\$ 143,034,971.66
Cash in Treasury	1,923,386.99
Non Current Assets	
Total Assets	<u>\$ 144,958,358.65</u>
Liabilities	
Total Liabilities	<u>\$ -</u>
Fund Balance	
Fund Balance - State Treasury	1,923,386.99
Fund Balance - GEMS Program	<u>143,034,971.66</u>
Total Fund Balance	<u>\$ 144,958,358.65</u>
Total Liabilities & Fund Balance	<u>\$ 144,958,358.65</u>

**STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
PERIOD OF JANUARY 1, 2016 TO MARCH 31, 2016**

Revenues	
Investment Interest	\$ 35,285.17
Other Income	-
Expenditures	<u>(537,998.73)</u>
Excess/(Deficiency) of Revenues Over(Under) Expenditures	\$ (502,713.56)
Other Financing Sources & Uses	
Total Other Sources	<u>\$ -</u>
Net Change in Fund Balance	\$ (502,713.56)
Fund Balance, Beginning of Period	<u>145,461,072.21</u>
Fund Balance, Ending of Period	<u>\$ 144,958,358.65</u>

5 Additional Reporting Requirements

5.1 Consumer Protection Policies

The Program Order directed the Authority to “provide full details of the GEMS Program consumer protection policies it develops to the [C]ommission with its quarterly reporting and Program Notifications”¹² and to “report the details of any failure on the part of any Deployment Partner to comply with these consumer protection policies to the [C]ommission, including the number of complaints and the steps taken to address such complaints, as part of the GEMS Program’s quarterly reporting and Annual Plan submission process”.¹³

The GEMS Program submitted its consumer protection policies in a Program Notification to the Commission on July 1, 2015.¹⁴

There have been no Deployment Partner complaints for the GEMS Deployment Partners.

5.2 Utility-Scale Project Financing

The Program Order instructed the Authority to summarize and report information about utility-scale project financing during periods where utility-scale project financing is initiated and the project is operated.¹⁵ The Authority has not been focusing any efforts on initiating utility-scale projects in this quarter and there are no utility-scale projects that have been financed or are currently being discussed.

5.3 Utility System Cost Information Update

The Program Order directed the Authority to “work with the HECO companies and the Consumer Advocate to determine the appropriate GEMS Program-related utility system cost information for reporting purposes, and to provide an update on the finalization of these utility system costs and impacts reporting requirements as part of DBEDT’s first Quarterly Report filing.”¹⁶ Though “utility system cost” was not defined in the Program Order, the Consumer Advocate refers to these costs as costs “incurred as result of [distributed generation] PV or other clean energy projects financed by the GEMS [P]rogram.”¹⁷ Since the Program Order was issued, the Authority has been meeting with the HECO Companies to identify ways to integrate data that is currently available with data that will be obtained through monitoring and other means to quantify and analyze potential utility system costs due

¹² See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 66.

¹³ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 66.

¹⁴ See “Program Notification No. 4 for the Green Infrastructure Loan Program” filed in Docket No. 2014-0135 on July 1, 2015 at pp 4-5.

¹⁵ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 60.

¹⁶ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 95.

¹⁷ See “Division of Consumer Advocacy’s Statement of Position,” filed in Docket No. 2014-0135 on August 7, 2014, at p. 14.

to distributed generation. At the time of the first Quarterly Report, in January 2015, the Authority had not finalized any utility system costs and continues to discuss this issue with the utilities. The Authority will continue to update the Commission on utility system cost information as this discussion continues.

SERVICE LIST

Two copies of the foregoing letter Subject: Docket No. 2014-0135 GEMS Program Quarterly Report, together with this Certificate of Service have been served to the following and at the following addresses:

State of Hawaii
Public Utilities Commission
465 S. King Street, #103
Honolulu, Hawaii 96813

Jeffrey T. Ono
Executive Director
Department of Commerce and Consumer
Affairs
Division of Consumer Advocacy
PO Box 541
Honolulu, Hawaii 96809

Daniel G. Brown
Manager-Regulatory Non-Rate Proceedings
Hawaiian Electric Company, Inc.
Hawaii Electric Light Company, Inc.
Maui Electric Company, Ltd.
P.O. Box 2750
Honolulu, Hawaii 96840-0001

And by electronic transmission to

Warren S. Bollmeier II
President
Hawaii Renewable Energy Association
46-040 Konane Place, #3816
Kaneohe, HI 96744
wsb@lava.net

Rick Reed
Director
Hawaii Solar Energy Association
P.O. Box 37070
Honolulu, HI 96837
rreed@solarsupply.com

Henry Q. Curtis
Vice President for Consumer Issues
Life of the Land
P.O. Box 37158
Honolulu, HI 96837-0158
henry.lifeoftheland@gmail.com

Douglas A. Codiga, Esq.
Schlack Ito
Topa Financial Center
745 Fort Street, Suite 1500
Honolulu, Hawaii 96813
dcodiga@schlackito.com

Dated: Honolulu, Hawaii, April 29, 2016.