



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

July 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 April 1, 2016 – June 30, 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

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PUBLIC UTILITIES  
COMMISSION



**State of Hawaii**

**Department of Business, Economic Development, and Tourism**

**Hawaii Green Infrastructure Authority**

**GREEN ENERGY MARKET SECURITIZATION PROGRAM**

**QUARTERLY REPORT:**

**April 1, 2016 – June 30, 2016**

REPORT TO THE  
STATE OF HAWAII  
PUBLIC UTILITIES COMMISSION  
Pursuant to

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

**July 2016**

## Contents

<b>1</b>	<b>Introduction and Context</b> .....	<b>3</b>
1.1	Procedural History and Reporting Requirements .....	3
1.2	Overview of Program Status and Market Outlook.....	4
<b>2</b>	<b>Summary of Program Activities</b> .....	<b>5</b>
2.1	Administration .....	5
2.2	Status of Programs: Consumer PV .....	7
2.3	Status of Programs: Commercial Energy Efficiency.....	8
2.4	Status of Programs: Other Programs Under Development.....	8
2.5	Additional Activities .....	9
<b>3</b>	<b>Program Metrics</b> .....	<b>10</b>
3.1	Energy and Environment Impact.....	10
3.2	Economic Development Impact .....	11
3.3	Market Expansion Impact.....	12
3.4	Cost Savings .....	13
<b>4</b>	<b>Financial Summary of Hawaii Green Infrastructure Authority</b> .....	<b>14</b>
<b>5</b>	<b>Additional Reporting Requirements</b> .....	<b>15</b>
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. 32318<sup>1</sup> (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,”<sup>2</sup> (“Application”) by the Hawaii Green Infrastructure Authority (“Authority”, “HGIA”).<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup> 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 Advocate<sup>6</sup> that included requirements concerning the financing of utility-scale projects, when applicable.<sup>7</sup>

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:

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<sup>1</sup> Filed on September 30, 2014 in Docket No. 2014-0135

<sup>2</sup> Filed on June 6, 2014 in Docket No. 2014-0135

<sup>3</sup> 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.

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

<sup>5</sup> 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.

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

<sup>7</sup> 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.<sup>8</sup>

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.<sup>9</sup> 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.<sup>10</sup> 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

HGIA's focus in the past quarter has been on adapting our programs and capabilities to address the future needs of the Hawaii marketplace. Our work has focused on three primary areas:

- **Staffing:** After a period of transition in which the program was critically understaffed, we have added two full time staff and one summer associate (intern) to drive our programs forward. These new staff have valuable experience, including: 30 years of banking and credit union leadership; public policy work on environmental, energy and transportation; and renewable energy management. While we still have unmet needs in the complex undertaking of bringing new loan programs to market, these additions to the team have allowed us to develop momentum that had previously been lost.
- **Programs:** During this period, we made extensive progress in modifying our existing PV product to incorporate energy storage systems. We believe this is the most immediate opportunity for expanding access to consumers for new technologies. We also released an Open Solicitation for Financing Arrangements. This program will provide a fair and transparent vehicle to vet project finance proposals from the private, non-profit and public sectors. We expect to be able to deploy a significant amount of GEMS capital in service of these projects. We also continue to support the existing GEMS loan programs, which continue to suffer diminished demand in the current regulatory and macro environment.

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

<sup>9</sup> 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.

<sup>10</sup> 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.

- **Capabilities:** We are continuing to invest in making sure that the HGIA has the tools required to efficiently and successfully administer the GEMS funds. These include both the analytical models required to assess deals and the mechanisms to successfully administer ongoing programs. Efforts to develop on-bill repayment—a capability we believe substantially expands access to underserved consumers—came to a halt during this period. HGIA is actively investigating options to bring this capability to market, which we discuss further below.

As we look around the broader national energy market, we remain encouraged that the “Green Banks” operating under similar models to HGIA can play a vital role in expanding access to renewable energy. Given the current dynamics in the Hawaii energy marketplace, we believe this role remains critically important.

## 2 Summary of Program Activities

The following is a summary of the activities that have occurred between April 1, 2016 and June 30, 2016.

### 2.1 Administration

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

- Quarterly Report: January 1, 2016 – March 31, 2016 was filed on April 29, 2016 in Docket No. 2014-0135.
- 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 in Program Notification No. 7 for the proposed Consumer PV with Battery program.
- From January to April, the Authority was 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. 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 cannot deploy any funds to State agencies under Program Notification No. 6 in excess of borrowing amounts authorized by the Legislature. In Conference Committee, Legislators removed GEMS financing from the

proposed DOE program and H.B. 2569 was signed into law (Act 176) with a \$100 million general fund appropriation.

- During the Legislative session, the Authority sought 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 found that another appropriation is required for expenditures out of the GEMS special fund to purchase GEMS loans. The current FY 2017 appropriation ceiling of \$1M for the GEMS special fund did not account for this and the Legislature did not approve the increase in the expenditure ceiling.

In spite of this limitation, HGIA is still able to fund loans. In FY15, an appropriation of \$50M was appropriated by the Legislature for the Hawaii Green Infrastructure Special Fund. Over the last two years, DBEDT had assigned this \$50M ceiling to the Hawaii Green Infrastructure Bond Fund (S368). It should have been assigned to the Hawaii Green Infrastructure Special Fund (S367) to provide the ceiling to allow making green infrastructure loans and paying various administrative and other costs. It has been determined by the Department of Budget & Finance that the legislative intent of this \$50M ceiling was to cover expenditures of green infrastructure loans and paying various administrative and other costs. As such, DAGS and B&F will make the necessary journal entries to record the transactions.

- S.B. 2738, SD 2, HD2 proposed 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 did not make it out of Conference Committee.
- In April, an Executive Assistant was hired and the Administrative Services Coordinator position became vacant. In May, the Authority had three new hires – a Managing Director, a Program Officer and a Summer Senior Associate (intern). As of May, the Authority has 5.5 staff FTE's (Executive Director, Managing Director, Program Officer, Summer Senior Associate, Executive Assistant and Part-Time Accountant).
- In May, the Commission discontinued development of the on-bill repayment mechanism and directed HECO to work directly with the Authority on development. HGIA is actively pursuing avenues for investment of GEMS funds that do not depend on this mechanism for success. The Authority continues to believe that GEMS capital can be sustainably deployed, and advance the public interest without such a mechanism in place. However, the Authority's mission is to expand access to renewable energy technology and accelerate its adoption. To the extent On-Bill Repayment could be implemented responsibly and economically, HGIA would still consider doing so as it advances our mission. HGIA is in active discussion with HECO and a possible primary serving agent to scope and price the project. However, there is no reason to believe

that the same market factors that affected the PUC’s program would not similarly affect any other effort. Moreover, the benefits be applicable to a smaller scope than originally conceived in 2013. While the Authority will collaborate with HECO to carefully study the issue, the Authority would not invest in the development of On-Bill Repayment unless the Authority felt there was a compelling economic and public benefit to doing so.

**2.2 Status of Programs: Consumer PV**

At a glance (as of 6/30/16)

	<b>Applications</b>	<b>Credit approved</b>	<b>Loan docs out</b>	<b>Funded</b>
<b># of loans</b>	<b>190</b>	<b>30</b>	<b>23</b>	<b>12</b>
<b>\$ value of loans</b>	<b>n/a</b>	<b>n/a</b>	<b>\$698,134</b>	<b>\$385,453</b>

We currently have 15 Deployment Partners engaged in the program. Based on feedback from Deployment Partners, we have made some changes in the fourth quarter to broaden the applicability of the program:

- In June, the Authority’s underwriting partner, Energy Finance Solutions, added auto-decisioning to the online application process. Auto-decisioning is the automatic assessment of information provided by the customer at the time of application: qualifying program requirements, risk-rating parameters combined with credit bureau scores to automatically decision loans. Following completion and submission of the online application, a potential borrower is provided immediate notice of pre-approval, denial or pending status. This has simplified the sales process for the Deployment Partners.

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

- 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. Energy Finance Solutions has been engaged to define the trust borrower product terms, features and implementation requirements.
- 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 in some cases results in the underserved being charged rates that are not market-competitive. A market assessment of competitive offerings has been completed and a change in interest rate for existing and future borrowers is expected in August.

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: Commercial Energy Efficiency**

Metrus Energy, the Authority's approved capital partner for the Commercial Energy Efficiency Product, began marketing in July. 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.

### **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 is an increasingly compelling solutions for all consumers, not only the affluent or early adopters, in the evolving renewable energy market. The financial benefit of PV systems without battery storage will be limited once grid supply has been fully subscribed – MECO reached its grid supply cap in June and HECO and HELCO are expected to reach their caps by year end 2016. 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 was submitted in July 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 which might not otherwise be financed by traditional lending institutions, and compete with agility in a crowded marketplace for renewable energy lending. Program Notifications that expand the existing Commercial PV Program will be submitted in the near future.

#### *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*

On July 14, 2016, the Authority established an Open Solicitation for Financing Arrangements process for proposals related to deployment of GEMS funds. This is consistent with best practice by Green Banks and similar State entities and provides a consistent, transparent approach to sourcing opportunities for capital deployment.

## *Community Solar*

In 2015 the Legislature directed HECO to create a community-based renewable energy program designed to extend the benefits of solar PV and other clean energy technologies to underserved residents. The program would be particularly beneficial to apartment dwellers, renters and others who face impediments in installing PV systems. In June the Commission issued an Order and Staff Proposal on CBRE and solicited stakeholder comments. Once a community solar structure is developed and approved by the Commission, the Authority believes the community solar space holds great long-term promise for GEMS funding by opening access to renewables to a much wider range of utility ratepayers.

### **2.5 Additional Activities**

The following are some of the activities that have occurred since the end of the quarter (June 30, 2016) and will be reported as activities in the next Quarterly Report.

- The FY17 Annual Plan was filed with the Commission in March and went into effect, as submitted, on July 1, 2016.
- The Authority held a board meeting on July 6, 2016, at which the board approved the following items:
  - Use appropriation ceiling budgeted for GEMS in BED 120 for loan issuances in FY2016 and FY2017.
  - Elect Jeff Mikulina as Vice-Chairperson and Mark Glick as Secretary of the Authority.
  - Approve Loan Committee Members – Kalbert Young (Chair), Wesley Machida, Ryan Hamadon, Gabe Lee and Heather Piper.
- On July 22, 2016 the Authority filed Program Notification No. 7 to finance energy storage systems. The fifteen-day review period for the Program Notification will end on August 15, 2016.
- On July 25, 2016 the Authority filed Program Notification No. 8 to broaden the definition of participant under the commercial energy efficiency program approved in Program Notification No. 5. The definition would include all commercial entities. The fifteen-day review period for the Program Notification will end on August 16, 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
<b>Clean Energy Production of Projects Financed</b>			
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>
<b>Electricity Reductions from Energy Efficiency Projects Financed</b>			
Cumulative Annual Electric Energy Saved (kWh)			
Total Resource Benefit (kWh)			
<b>Petroleum Displaced by Clean Energy and Energy Efficiency Projects</b>			
Total Petroleum Displaced/Saved to Date (Estimated barrels)	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Petroleum Displaced to Date by Clean Energy Generation	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Petroleum Displaced Over Lifetime of Installed PV (Projected barrels)	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Cumulative Annual Petroleum Saved (from efficiency)			
Petroleum Saved from Total Resource Benefit of Efficiency Projects			
<b>Greenhouse Gas Avoided</b>			
Greenhouse Gas Avoided to Date (Estimated metric tons CO <sub>2</sub> )	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Greenhouse Gas Avoided from Clean Energy Production	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Greenhouse Gas Avoided Over Lifetime of Installed PV (Projected metric tons CO <sub>2</sub> )	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
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	\$110,289.90	\$1,059,849.20	\$1,710,088.49
GEMS Loans	\$251,363.79	\$388,800.68	\$388,800.68
Total GEMS Administrative Costs and Loans	\$361,653.69	\$1,448,649.88	\$2,098,889.17

	This Quarter	Program Year-To-Date	Since Program Launch
<b>Projects Financed According to Technology Type/Category</b>			
Solar Photovoltaic Systems	8	12	12
- 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	8	12	12
Indirect Economic Impact of Capital Deployed (\$)	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Indirect Economic Impact of Cost Savings To Date (Estimated \$)	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>
Indirect Economic Impact of Cost Savings over Project life (Projected \$)	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>

### 3.3 Market Expansion Impact

	This Quarter	Program Year-To-Date	Since Program Launch
Total Number of GEMS Loans	8	12	12
Total Number of Loans Serving Underserved Market			
Number of Loans on Oahu	5	8	8
Number of Loans on Maui	3	4	4
Number of Loans on Molokai			
Number of Loans on Lanai			
Number of Loans on Hawaii			
<b>Profile of Customers</b>			
<b>Number of Customers By Customer FICO Credit Score</b>			
700 and above	2	3	3
675-699	4	5	5
650-674		2	2
620-649	2	2	2
600-619			
<b>Number of Customers By Income Distribution (self-reported by customers)</b>			
Under \$15,000			
\$15,000-\$24,999			
\$25,000-\$34,999			
\$35,000-\$49,999	1	1	1
\$50,000-\$74,999		1	1
\$75,000-\$99,999	4	6	6
\$100,000 and Above	3	4	4
<b>Number of Nonprofits Participating in GEMS</b>			
<b>Number of Nonprofits by Total Assets or Gross Receipts</b>			
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			
<b>Number of Nonprofits by Average Number of Employees (past 12 months from Application)</b>			
≤10 Employees			
11-50 Employees			
51-100 Employees			
101-250 Employees			
251-500 Employees			
501-1,000 Employees			
>1,000 Employees			
<b>Number of Rental Units Supported by GEMS</b>			

<b>Profile of Nonprofits by Type (may also be provided)</b>			
	This Quarter	Program Year-To-Date	Since Program Launch
Total Number of Completed Applications Received	48	205	234
Number of Nonprofit PV Applications Received		14	43
Number of Nonprofit PV Applications Approved			
Number of Nonprofit PV Applications Declined		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	48	190	190
Number of Residential PV Applications Approved	14	23	23
Number of Residential PV Applications Declined	18	78	78
Number of Residential PV Applications Withdrawn	4	46	46
Number of Residential PV Applications Under Review	31	31	31
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 JUNE 30, 2016**

Current Assets	
Cash in Bank	\$ 142,828,433.43
Cash in Treasury	1,832,592.24
Non Current Assets	
Total Assets	<u>                    -</u>
	<u>\$ 144,661,025.67</u>
Liabilities	
Total Liabilities	<u>                    -</u>
	\$ -
Fund Balance	
Fund Balance - State Treasury	1,832,592.24
Fund Balance - GEMS Program	<u>142,828,433.43</u>
Total Fund Balance	<u>\$ 144,661,025.67</u>
Total Liabilities & Fund Balance	<u>\$ 144,661,025.67</u>

**STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES**

**PERIOD OF APRIL 1, 2016 TO JUNE 30, 2016**

Revenues	
Investment Interest	\$ 64,320.71
Other Income	-
Expenditures	
	<u>(361,653.69)</u>
Excess/(Deficiency) of Revenues Over(Under) Expenditures	\$ (297,332.98)
Other Financing Sources & Uses	
Total Other Sources	<u>                    -</u>
	\$ -
Net Change in Fund Balance	\$ (297,332.98)
Fund Balance, Beginning of Period	<u>144,958,358.65</u>
Fund Balance, Ending of Period	<u>\$ 144,661,025.67</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”<sup>11</sup> 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”.<sup>12</sup>

The GEMS Program submitted its consumer protection policies in a Program Notification to the Commission on July 1, 2015.<sup>13</sup>

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.<sup>14</sup> 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.”<sup>15</sup> 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.”<sup>16</sup> 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

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<sup>11</sup> See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 66.

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

<sup>13</sup> 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.

<sup>14</sup> See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 60.

<sup>15</sup> See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 95.

<sup>16</sup> 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](mailto:wsb@lava.net)

Rick Reed  
Director  
Hawaii Solar Energy Association  
P.O. Box 37070  
Honolulu, HI 96837  
[rreed@solarsupply.com](mailto: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](mailto:henry.lifeoftheland@gmail.com)

Douglas A. Codiga, Esq.  
Schlack Ito  
Topa Financial Center  
745 Fort Street, Suite 1500  
Honolulu, Hawaii 96813  
[dcodiga@schlackito.com](mailto:dcodiga@schlackito.com)

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