



DAVID Y. IGE
GOVERNOR

CYD M. MIYASHIRO
INTERIM 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 30, 2015

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, 2015 - June 30, 2015. 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,

Cyd M. Miyashiro
Interim Executive Director

Attachment

c: Service List

FILED
2015 JUL 30 P 3:03
PUBLIC UTILITIES
COMMISSION

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

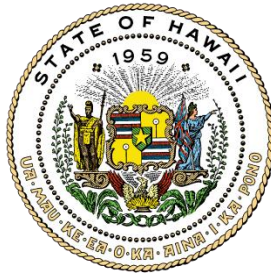
Warren S. Bollmeier II
President
Hawaii Renewable Energy Association
46-040 Konane Place, #3816
Kaneohe, HI 96744
wsb@lava.net

Leslie Cole-Brooks
Executive Director
Hawaii Solar Energy Association
P.O. Box 37070
Honolulu, HI 96837
Leslie.cole-brooks@hsea.org

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

Dated: Honolulu, Hawaii, July 30, 2015.



State of Hawaii

Department of Business, Economic Development & Tourism

Hawaii Green Infrastructure Authority

GREEN ENERGY MARKET SECURITIZATION PROGRAM

QUARTERLY REPORT:

April 1, 2015 – June 30, 2015

REPORT TO THE
STATE OF HAWAII
PUBLIC UTILITIES COMMISSION
Pursuant to
Decision and Order No. 32318 filed in Docket No. 2014-0135

July 2015

Contents

1	Introduction and Context	3
1.1	Procedural History and Reporting Requirements	3
2	Summary of Program Activities	5
2.1	Administration.....	5
2.2	Program Development and Implementation	6
2.3	Program Performance	7
2.4	Additional Activities	7
3	Program Metrics	8
3.1	Energy and Environment Impact	8
3.2	Economic Development Impact.....	8
3.3	Market Expansion Impact	9
3.4	Cost Savings.....	10
4	Financial Summary of Hawaii Green Infrastructure Authority	11
5	Additional Reporting Requirements	12
5.1	Consumer Protection Policies	12
5.2	Utility-Scale Project Financing	12
5.3	Utility System Cost Information Update	12

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 70% clean energy goals by 2030 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/>.

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.

2 Summary of Program Activities

The following is a summary of the activities that have occurred between April 1, 2015 and June 30, 2015.

2.1 Administration

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

- On April 22, 2015, Jeffrey Mikulina was confirmed¹¹ by the Hawaii State Senate to the Hawaii Green Infrastructure Authority for a term to end June 30, 2018. During the previous quarter, Luis Salaveria and Wesley Machida were confirmed¹² as the Director of DBEDT and the Director of Budget and Finance, respectively, and *ipso facto* are confirmed members of the Authority. The fourth member of the Authority is the Energy Program Administrator, Mark Glick. Currently, one Authority member position remains vacant.
- On April 30, 2015, Quarterly Report: January 1, 2015 – March 31, 2015 was filed in Docket No. 2014-0135.
- On May 15, 2015, the comment period for the GEMS Annual Plan Fiscal Year 2016: July 1, 2015 – June 30, 2016 (“Annual Plan”) ended. The Annual Plan was filed on March 31, 2015 in Docket No. 2014-0135. The Commission issued Order No. 32814 on April 28, 2015, which set a deadline of May 15, 2015 for comments on the Annual Plan. On May 15, 2015, the HECO Companies filed that they had no comments on the Annual Plan, and the Consumer Advocate filed comments that (1) suggested the HGIA develop a way to keep potential customers informed of potential policy changes affecting distributed generation as a result of ongoing Distributed Energy Resource proceedings, and (2) provided revisions to the GEMS Program metrics and reporting.¹³ The Consumer Advocate also clarified a point about interconnection approvals.¹⁴ The Annual Plan for Fiscal Year 2016 went into effect on July 1, 2015.
- On May 29, 2015, the Authority met to approve the agreement with originators of the GEMS Consumer Loan Product, review the Authority’s Draft Bylaws for later discussion, and approve the GEMS Program to offer commercial energy efficiency loans (allowing the Authority to move forward with designing financing options and engage in due diligence of potential partners).
- Throughout the first half of the quarter, the Authority, through DBEDT, continued to testify on matters at the 28th Legislative Session, 2015 at the Hawaii State Capitol. In addition to the Governor’s Messages mentioned herein, the Authority was actively monitoring eight bills that impacted its budget or program activities. Many of those were deferred, and no measures were passed with direct impact to the GEMS Program. Additionally, the Legislature approved the

¹¹ Nominated by Governor’s Message No. 620.

¹² Luis Salaveria was nominated by Governor’s Message No. 504. Wesley Machida was nominated by Governor’s Message No. 519.

¹³ On December 9, 2014, the Authority submitted its program metrics final draft with the Commission. The Authority amended these metrics to address (1) the comments of the Consumer Advocate and (2) energy efficiency. The Authority will submit revised GEMS Program Metrics to the Commission in the FY16 Quarter 1 (July 1 - September 30, 2015).

¹⁴ See Letter filed by the Consumer Advocate in Docket No. 2014-0135 on May 15, 2015.

Authority's \$1,000,000 appropriations request for FY 2016 from the Green Infrastructure Special Fund, which covers the Authority's administrative expenses.

- The Authority continues its search for a permanent Executive Director.

2.2 Program Development and Implementation

- On April 2, 2015, a Program Notification for PV-Related Technologies (technologies that are components of a PV system which may be more advanced than the standard PV system) was filed in Docket No. 2014-0135. The fifteen-day review period for the Program Notification ended on April 24, 2015. The Consumer Advocate filed comments on April 24, 2015.¹⁵
- On April 8, 2015, a Program Notification that provides additional information on the Small Business Loan Product and increased flexibility of the Nonprofit Loan Product and the Consumer Loan Product was filed in Docket No. 2014-0135. The fifteen-day review period for the Program Notification ended on April 29, 2015.¹⁶
- On April 15, 2015, the Commission filed Order No. 32778 "Granting the Department of Business, Economic Development, and Tourism's Motion to Waive and/or Amend Qualifications to Qualified Source of Capital Requirements as Specified in the Hawaii Energy Bill Saver Program: Program Manual" in Docket No. 2014-0129. Order No. 32778 granted the requests made by DBEDT in its "Motion to Waive and/or Amend Qualifications to Qualified Source of Capital Requirements as specified in the Hawaii Energy Bill Saver Program: Program Manual"¹⁷ ("Motion") at the request of the Commission's final Hawaii Energy Bill Saver Program: Program Manual filing and the Program Order. The order also encouraged the direct collaboration of the Hawaii Energy Bill Saver Program Entities and DBEDT,¹⁸ and confirmed that GEMS Program repayments that use the Commission's on-bill mechanism are Green Infrastructure Charges within the meaning of HRS §196-61.
- On June 30, 2015, the GEMS Consumer Loan Product for solar PV officially opened to accept applications. Project construction will not commence until utility interconnections are approved and project funding will not occur until solar PV projects are completed and NEM agreements are executed. The Authority secured partners for both the origination and servicing of the GEMS Consumer Loan Product. In addition to developing the necessary lending channels for the products and the servicing of payments, the Authority has begun accepting applications for

¹⁵ The Consumer Advocate's comments stated that it "does not object to the inclusion of PV-Related Technologies as part of PV systems financed through the GEMS Program" but does request that additional metrics pertaining to PV-Related Technologies are recorded and expressed concern about current and future GEMS customers' awareness of changes that affect distributed generation (see "Letter" filed by the State of Hawaii Division of Consumer Advocacy in Docket No. 2014-0135 on April 24, 2014 at page 2). The Authority will submit revised GEMS Program metrics to the Commission in FY 16 Quarter 1 (July 1 – September 30, 2015). The Authority met with the Consumer Advocate and discussed ways to communicate policy changes to potential consumers.

¹⁶ No objections or comments to this Program Notification were filed.

¹⁷ Filed in Docket No. 2014-0129 on January 26, 2015.

¹⁸ The Authority and Hawaii Energy Bill Saver Program's Finance Program Administrator have been engaged in QSC Agreement discussion and identification of additional steps to use the on-bill mechanism in the Commission's Hawaii Energy Bill Saver Program

installers for the consumer loan product from a small test group and plans on opening enrollment to all installers in mid-August.

- The Authority, in conjunction with the State Energy Office, has continued to seek out participants who are unable to gain access to the PV market and work with Deployment Partners to develop products to meet their needs. The Authority and State Energy Office are also actively exploring the development of products for approved eligible technologies other than PV systems, specifically focusing on interconnection-related technologies and energy efficiency.¹⁹
- Collaboration with the HECO Companies on utility system cost analysis strategies. See Section 5.3.

2.3 Program Performance

The following is a high-level summary of program performance information from April 1, 2015 to June 30, 2015, with more detailed quantitative information found in Section 3, Program Metrics. As part of the GEMS Program application process, the Authority:

- Issued a press release about the Nonprofit Loan Product and presented at conferences sponsored by Hawaii Alliance of Nonprofit Organizations and Hawaii Community Foundation.
- Approved six companies to be installers for the GEMS Small Business and Nonprofit Loan Products. These six companies have a combined salesforce of 27 representatives. Ten product introduction and training sessions were held with the six companies.
- Received 32 Applications, of which 27 have been pre-qualified and five are pending review, for the Nonprofit Loan Product.²⁰
- Is currently working on evaluating over 1MW of PV project leads for pre-qualified loans.

The GEMS Program has not released any capital to fund eligible technologies in the fourth quarter of Fiscal Year 2015.

2.4 Additional Activities

The following are some of the activities that have occurred since the end of the quarter (June 30, 2015) and will be reported as activities in the next Quarterly Report.

- A Program Notification that addresses additional Program Order requirements was filed on July 1, 2015 regarding consumer protection policies, fund deployment and billing.
- A Program Notification that allows the GEMS Program to finance commercial energy efficiency products was filed on July 15, 2015 in Docket No. 2014-0135.
- The Authority and the Hawaii State Energy Office are procuring the services of a Financial Auditor for the GEMS Program.

¹⁹ See Section 2.4 Additional Activities. Program Notification No. 5 filed July 15, 2015 in Docket No. 2014-0135.

²⁰ As of July 3, 2015.

3 Program Metrics

The Authority anticipates deploying funds in the first quarter of Fiscal Year 2016²¹ and therefore metrics will be reported in the applicable reporting period upon fund deployment.²²

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)			
Total Project Production to Date (Estimated kWh)			
Total Project Production Over Lifetime of Installed PV (Projected kWh)			
Petroleum Displaced by Clean Energy Projects			
Petroleum Displaced to Date (Estimated barrels)			
Petroleum Displaced Over Lifetime of Installed PV (Projected barrels)			
Greenhouse Gas Avoided			
Greenhouse Gas Avoided to Date (Estimated metric tons CO ₂)			
Greenhouse Gas Avoided Over Lifetime of Installed PV (Projected metric tons CO ₂)			

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,
- Allocation of GEMS Funds By Market Segment,
- Allocation of GEMS Funds by Technology Type,

²¹ See “Department of Business, Economic Development, and Tourism Hawaii Green Infrastructure Authority Annual Plan Fiscal Year 2016: July 1, 2015-June 30, 2016”; filed in Docket No. 2014-0135 on March 31, 2015, p. 11.

²² On December 9, 2014, the Authority submitted its program metrics final draft with the Commission. The Authority will submit revised GEMS Program Metrics to the Commission in FY16 Quarter 1 (July 1, 2015-September 30, 2015). The following metrics are in accordance with the December 9, 2014 metrics. Revisions to the format and content of metrics will be reflected in the next Quarterly Report.

	This Quarter	Program Year-To-Date	Since Program Launch
GEMS Administrative Costs	\$113,728.98	\$650,239.29*	\$650,239.29*

* The administrative costs recorded for the Program Year-To-Date reflect payment for administrative costs incurred during the establishment of the GEMS Program since the passing of Act 211.

	This Quarter	Program Year-To-Date	Since Program Launch
Projects Financed According to Technology Type/Category			
Solar Photovoltaic Systems			
Energy Storage			
LED Upgrades			
Commercial Efficiency			
Energy/Water Nexus			
Other Projects			
Total Number of Projects			

	This Quarter	Program Year-To-Date	Since Program Launch
Indirect Economic Impact of Capital Deployed (\$)			
Indirect Economic Impact of Cost Savings To Date (Estimated \$)			
Indirect Economic Impact of Cost Savings over Project life (Projected \$)			

3.3 Market Expansion Impact

	This Quarter	Program Year-To-Date	Since Program Launch
Total Number of GEMS Loans			
Total Number of Loans Serving Underserved Market			
Number of Loans on Oahu			
Number of Loans on Maui			
Number of Loans on Molokai			
Number of Loans on Lanai			
Number of Loans on Hawaii			

Profile of Customers	This Quarter	Program Year-To-Date	Since Program Launch
Number of Customers By Customer FICO Credit Score			
675-699			
650-674			
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			
\$75,000 and Above			
Number of Nonprofits Participating in GEMS			
Number of Rental Units Supported by GEMS			
Profile of Nonprofits by Type (may also be provided)			

3.4 Cost Savings

Charts, graphs or tables depicting:

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

4 Financial Summary of Hawaii Green Infrastructure Authority

State of Hawaii
Hawaii Green Infrastructure Authority
Financial Summary
FY 2015

STATEMENT OF NET POSITION
AS OF JUNE 30, 2015

Current Assets	
Cash in Bank	\$ 143,254,930.51
Cash in Treasury	2,741,814.84
Non Current Assets	-
Total Assets	<u>\$ 145,996,745.35</u>
Liabilities	
Total Liabilities	\$ -
Fund Balance	
Fund Balance - State Treasury	\$ 2,741,814.84
Fund Balance - GEMS Program	<u>143,254,930.51</u>
Total Liabilities & Fund Balance	<u>\$ 145,996,745.35</u>

STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
PERIOD OF APRIL 1, 2015 TO JUNE 30, 2015

Revenues	
Investment Interest	\$ 8,066.65
Other Income	-
Expenditures	(113,728.98)
Excess/(Deficiency) of Revenues Over(Under) Expenditures	<u>\$ (105,662.33)</u>
Other Financing Sources & Uses	
Bond Proceeds	\$ -
Net Change in Fund Balance	\$ (105,662.33)
Fund Balance, Beginning of Period	146,102,407.68
Fund Balance, Ending of Period	<u>\$ 145,996,745.35</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”²³ 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”.²⁴

The GEMS Program submitted its consumer protection policies in a Program Notification to the Commission on July 1, 2015, as mentioned in Section 2.4.²⁵

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.²⁶ 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.”²⁷ 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.”²⁸ 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 to distributed generation. At the time of the first Quarterly Report, in January 2015, the Authority had

²³ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 66.

²⁴ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 66.

²⁵ 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.

²⁶ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 60.

²⁷ See “Decision and Order No. 32318,” filed in Docket No. 2014-0135 on September 30, 2014, at p. 95.

²⁸ See “Division of Consumer Advocacy’s Statement of Position,” filed in Docket No. 2014-0135 on August 7, 2014, at p. 14.

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.