

**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

KA 'OIHANA HO'OMOHALA PĀ'OIHANA, 'IMI WAIWAI
A HO'OMĀKA'IKAI

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

JAMES KUNANE TOKIOKA
DIRECTOR

DANE K. WICKER
DEPUTY DIRECTOR

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

Telephone: (808) 586-2355
Fax: (808) 586-2377

DTS# 202312271101S

December 27, 2023

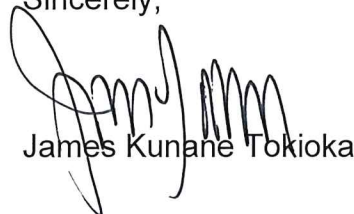
The Honorable Ronald D. Kouchi,
President and Members
of the Senate
Thirty-Second State Legislature
State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Scott K. Saiki,
Speaker and Members of the
House of Representatives
Thirty-Second State Legislature
State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Saiki, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Hawaii Green Infrastructure Authority's Annual Report for the year 2023, as required by Act 211, Session Laws of Hawaii 2013 and Act 107, Session Laws of Hawaii 2021. In accordance with Section 93-16, Hawaii Revised Statutes, I am also informing you that the report may be viewed electronically at: <http://dbedt.hawaii.gov/overview/annual-reports-reports-to-the-legislature/>.

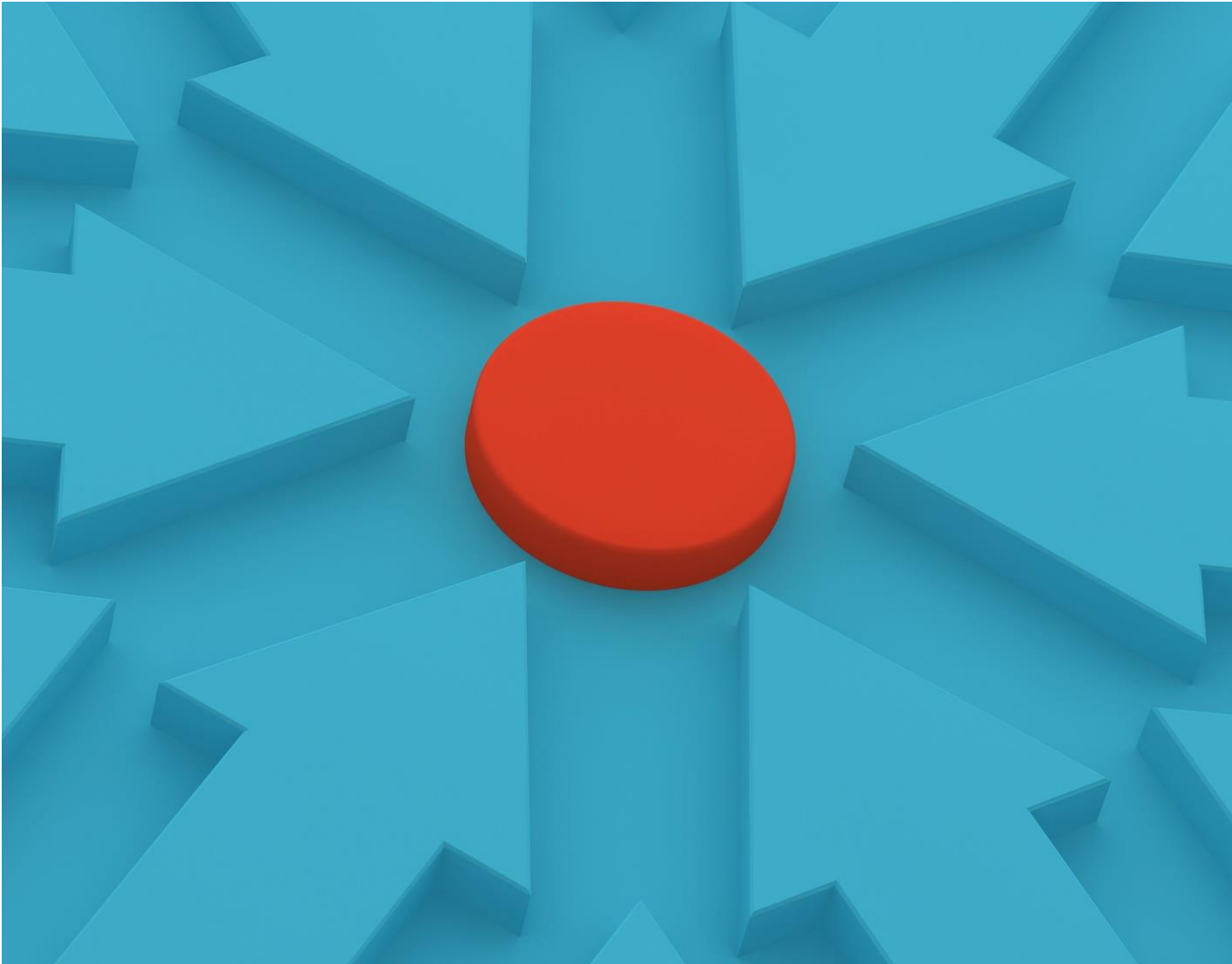
Sincerely,



James Kunane Tokioka

Enclosure

c: Legislative Reference Bureau



**2023 ANNUAL REPORT TO THE
GOVERNOR AND LEGISLATURE**
HAWAII GREEN INFRASTRUCTURE AUTHORITY

DEPARTMENT OF BUSINESS, ECONOMIC
DEVELOPMENT AND TOURISM

Pursuant to Act 211, SLH
2013 & Act 107, SLH 2021










TABLE OF CONTENTS

- Impacts..... 2**
- Reporting Requirements..... 3**
- Legislative Authorization 3**
- Hawaii Public Utilities Commission 4**
- Hawaii Green Infrastructure Authority 4**
- 2023 Activities 5**
 - Facilitating Inclusivity and Accessibility6
 - Enhancements to the GEM\$ On-Bill Financing Program6
 - Sourcing Additional Loan Capital7
 - \$50.0 Million Solar+Storage Program for ALICE Households.....7
 - \$100.0 Million Solar For All Grant Application.....8
 - Bridging Access to Capital Challenges for Businesses8
 - SSBCI HI-CAP Programs.....8
 - C-PACER Financing Program.....9
- Reporting Metrics..... 10**
 - Energy & Environmental Impacts10
 - Clean Energy Production of Projects Financed.....10
 - Electricity Reductions from Energy Efficiency Projects Financed10
 - Petroleum Displaced by Projects10
 - Greenhouse Gas Avoided.....10
 - Economic Development Impacts11
 - Market Expansion Impacts11
 - Projects Financed According to Technology Type/Category11
 - Residential Loan Program.....11
 - Profile of Customers Financed.....13
 - Commercial Loan Program13
 - Cost Savings Impacts.....15
 - Aggregate Estimated Gross Electricity Cost Savings.....15
 - Average Estimated Gross Electricity Cost Savings.....15
 - Aggregate Estimated Net Electricity Cost Savings.....15
 - Average Estimated Net Electricity Cost Savings.....15
- Future Outlook..... 16**
- Hawaii Green Infrastructure Board 17**

IMPACTS¹



Hawaii Green Infrastructure Authority As of September 30, 2023

 <p>\$10.9 Million</p> <p>Cumulative Excess Revenue over Expenses prior to \$15.9 million transferred to PUC</p>	<p>\$286.6 Million</p> <p>Economic Multiplier Impact</p> 	<p>963,677,440</p> <p>kWh</p>  <p>Estimated kWh Produced/Reduced over Lifetime</p>
<p>\$16.9 Million</p>  <p>Hawaii State Tax Revenue Generated</p>		
	<p>289,866</p> <p>Estimated Metric Tons of CO2</p> <p>Total Greenhouse Gas Avoided over Lifetime</p>	<p>591,713</p> <p>Barrels</p>  <p>Estimated Total Petroleum Displaced Over Lifetime</p>
 <p>1,394</p> <p>Jobs Created or Retained</p>	 <p>85%</p> <p>Underserved Residential Households Served</p>	
	<p>SSBCI HI-CAP Collateral Support & Loans Programs</p> <p>\$2.3 million in Federal SSBCI Funds have caused \$15.7 million in loans and credit facilities for eligible small businesses and nonprofits.</p>	

¹ Impacts reported are since inception. Cumulative excess revenues over expenses are before some \$15.9 million in “expenditures” for loan repayments transferred to the Public Utilities Commission’s Special Fund.

REPORTING REQUIREMENTS

This document fulfills the statutory requirement to report on the status of the Authority's activities, including approved loan program description and uses; information and data on the implementation of the loan program; and analytical data relating to the deployment of clean energy technology. The Authority respectfully submits this status report outlining the activities to further design, develop and deploy GEMS and other capital in 2023 as well as plans for 2024.

LEGISLATIVE AUTHORIZATION

On April 30, 2013, the Legislature enacted, and on June 27, 2013, the Governor signed into law, **Act 211 (SLH 2013)**, authorizing the establishment of a green infrastructure financing program, known as GEMS to deploy clean energy infrastructure to contribute towards Hawaii's aggressive pursuit of its statutory 100% clean energy goals by 2045 while helping ratepayers lower their energy costs.

Act 211 established a legal structure that enabled the Department of Business, Economic Development & Tourism ("DBEDT") to issue Green Energy Market Securitization bonds to capitalize the green infrastructure loan fund, leveraging public and private capital, to facilitate opportunities for underserved ratepayers to invest in and save money from green infrastructure investments. The GEMS bonds are not an obligation of the State of Hawaii. Its sole obligor are the ratepayers of the Hawaiian Electric Companies' through a non-by-passable Green Infrastructure Fee on ratepayers' utility bills.

Key objectives of the GEMS program are to:

1. Address financing market barriers to increase the installation of clean energy projects and infrastructure to meet the State's clean energy goals, including the RPS and EEPS;
2. Democratize clean energy by expanding access and affordability of renewable energy and energy efficiency projects for identified underserved markets, while expanding the market generally;
3. Enable more ratepayers to reduce their energy use and energy costs by helping them finance clean energy improvements;
4. Partner with and support existing market entities in the clean energy and financing sector to ensure GEMS can bridge market gaps and facilitate a sustainable and efficient private sector market; and
5. Balance the aforementioned goals and objectives with repayment risk to achieve an appropriate rate of return and build a sustainable financing program.

On April 27, 2021, the Legislature enacted, and on June 28, 2021, the Governor signed into law **Act 107 (SLH 2021)** authorizing the establishment of a Clean Energy and Energy Efficiency Revolving Loan Fund ("CEEERLF") under the administration of the Hawaii Green Infrastructure Authority. Two key components of this Act include but are not limited to providing HGIA, with the approval of the Governor, the authority to borrow funds from Federal, County, private or other

funding sources as well as implement and administer loan programs on behalf of other state departments or agencies.

On May 3, 2022, the Legislature enacted, and on June 27, 2022, the Governor signed into law **Act 183 (SLH 2022)** authorizing HGIA to design, implement and administer Hawaii’s commercial property assessed financing program for commercial property owners to finance the installation of clean energy, energy efficiency, cesspool remediation, water conservation and resiliency measures via an innovative and risk mitigating financing mechanism pari-passu to property taxes.

HAWAII PUBLIC UTILITIES COMMISSION

To effectuate Act 211, the GEMS financing program required Hawaii Public Utilities Commission (“Commission” or “PUC”) approval of its Financing Order and Program Order Applications. The PUC approved the GEMS [Bond] Financing Order on September 4, 2014 and the GEMS [Loan] Program Order on September 30, 2014.

The regulatory Orders approved by the Commission established the general parameters and program processes for GEMS. With feedback and support from several interveners - including but not limited to the Consumer Advocate and the Hawaii Solar Energy Association, the PUC granted GEMS the flexibility to work with the market to provide financing programs to enable more of Hawaii’s consumers to invest in and benefit from clean energy.

Pursuant to HRS 269-162, the Financing Order provided regulatory approval for the issuance of low-cost Green Infrastructure Bonds (GEMS Bonds) to capitalize the GEMS Loan Fund. Pursuant to HRS 269-170, the Program Order provided approval for the deployment of funds from the issuance of the GEMS Bonds. Included in the Program Order were general program parameters and specific deployment strategies, outlining a clean energy financing program that was best thought to serve Hawaii’s consumers at that time.

On October 26, 2017, the Hawaii Public Utilities Commission issued Order No. 34930 (“Order”) to change the priority of uses of GEMS Program Loan Repayments. This Order amended the order of loan repayments received to be applied first towards the replenishment of the Public Benefits Fee before the payment of program administrative costs. This Order resulted in the conversion of a sustainable financing program (Key Objective No. 5 above) to a non-sustainable financing program. As of this report date, the Authority had transferred over **\$15.9 million** to the PUC.

HAWAII GREEN INFRASTRUCTURE AUTHORITY

The Authority, Hawaii’s Green Bank, was constituted in November 2014 to democratize clean energy by making clean energy improvements affordable and accessible to a broader cross-section of Hawaii’s ratepayers to lower the energy burden of underserved ratepayers while

advancing the State’s goal of achieving 100 percent renewable portfolio standard in the electricity sector by 2045.

HGIA’s loan fund was capitalized with the \$146.0 million net proceeds of a Green Energy Market Securitization (“GEMS”) Bond issued in November 2014 and the Authority began accepting loan applications in July 2015.

HGIA is overseen by a five-person board of directors and is administratively attached to the Department of Business, Economic Development & Tourism. The Authority is tasked with administering and governing its financing Programs, while ensuring that capital is deployed effectively to achieve program objectives.

In April 2019, along with then Governor Ige, the Hawaii Public Utilities Commission, and the Hawaiian Electric Company, Inc., the Authority announced the official launch of its Green Energy Money Saver On-Bill Financing Program, with a risk mitigating loan repayment mechanism tied to the utility meter and paid through the Hawaiian Electric Companies’ electric utility bill. This game-changing repayment mechanism enabled the Authority to abandon traditional credit underwriting and instead offer a more inclusive, non-traditional financing program that better serve disadvantaged communities and other underserved ratepayers.

With the GEM\$ on-bill repayment mechanism, the Authority strengthened its commitment to underserved ratepayers during its August 15, 2019 meeting by limiting the use of all remaining GEMS loan capital to only LMI homeowners and renters, nonprofits, small businesses and multi-family rental projects.

The Authority offers a suite of financing products providing low-cost, long-term, flexible financing to Hawaii’s most vulnerable ratepayers, enabling said ratepayers to realize monthly energy cost savings while transitioning to clean energy.

The Authority also offers financing to state departments (“Departments”) to lower its energy costs by installing energy efficiency retrofits or by exercising its purchase options in existing solar PV Power Purchase Agreements. At the Department’s option, it may utilize this newfound cash flow to finance the installation of electric vehicle (“EV”) charging stations or EVs.

HGIA’s financing programs fill market gaps, stimulates private investments and leverages innovative tools to mitigate risks and reach new markets.

Lastly, working in concert with the Hawaii Public Utilities Commission (“PUC”) and the Hawaiian Electric Company, Inc., HGIA is responsible for the administration and oversight of the \$150.0 million Green Energy Market Securitization Bond.

2023 ACTIVITIES

While the 32nd Legislature opened on January 18, 2023 with optimism and a projected budget surplus in excess of \$3.9 billion for the fiscal year ending June 30, 2024, asset limited, income constrained, employed (ALICE) households were still struggling to catch up on past due utility and other bills. Further, continued inflation, rising interest rates, bank failures, wildfires and

supply-chain issues further exacerbating the budgets of underserved ratepayers as the year progressed.

In addition to administering its existing programs, the Authority’s focus during 2023 has been on further expanding access to capital, sourcing additional loan capital, and working with the Counties to make a new financing mechanism available to commercial property owners.

Facilitating Inclusivity and Accessibility

Enhancements to the Green Energy Money Saver (GEM\$) On-Bill Financing Program

In anticipation of the Solar for All grant opportunity and to provide long-term relief to lower the energy burden of Hawaii’s low and moderate-income households and other underserved ratepayers, in August 2022, the Authority submitted a request to the PUC for strategic enhancements to the GEM\$ On-Bill Financing Program.

On June 15, 2023, the PUC issued Order 39377 approving HGIA’s requested enhancements resulting in potentially the **most inclusive** rooftop solar financing program in the nation.

1. **Expanded Applicant Eligibility.** Effective July 1, 2023, HGIA **eliminated all** “credit” barriers to its GEM\$ Program. Disconnection notices, previously used as an eligibility screen (e.g., ratepayers with disconnection notices over the past 12-month period were not eligible for financing), are now used to determine the minimum estimated utility bill savings required, as follows:

# Disconnection Notices	Tiered Estimated Bill Savings Requirement
0	Minimum 5% Savings
1 – 4	Minimum 10% Savings
5+	Minimum 15% Savings

For investor-owned systems, the minimum estimated savings required remains unchanged at 20%.

2. **Sizing PV Systems to accommodate new Electric Vehicle Load.** In order to right-size solar systems for customers planning to purchase or lease an electric vehicle within an upcoming 12-month period, the PUC approved HGIA’s request to include the anticipated additional load expected from said electric vehicle. This change will enable underserved ratepayers to utilize the energy generated by the solar system to fuel their electric vehicles.
3. **Bundling Eligible Improvements.** In order to meet the minimum bill savings requirement of certain energy efficiency measures (e.g., solar hot water heaters, HVAC, etc.) the PUC approved the Authority’s request to bundle Eligible Improvements. As an example, heat pumps or solar hot water heaters can be bundled with solar PV + Storage to qualify for GEM\$ financing.

-
4. **Access to HGIA’s on-bill repayment mechanism.** The PUC approved the Authority’s request to allow outside capital sources access to HGIA’s GEM\$ on-bill repayment mechanism for CBRE and other projects that are not financed with GEMS funds. In these cases, HGIA’s role shall be that of a payment servicer and not of a lender. This pilot will run from July 1, 2023 to June 30, 2024. CBRE and other projects utilizing the on-bill repayment (OBR) mechanism, will still need to meet the minimum Tiered Estimated Bill Savings Requirements.

During the year, the Authority continued its residential and commercial clean energy financing for underserved ratepayers. Year to date², HGIA received 334 residential applications to install solar hot water or solar PV systems for low and moderate-income homeowners and renters, a 22% increase over the previous year.

Sourcing Additional Loan Capital

\$50,000,000 Solar + Storage Loan Program for ALICE Households

With 44% of Hawaii’s families classified as asset limited, income constrained, employed (“ALICE”), the Legislature recognized that our underserved ratepayers are facing disproportionate financial burdens with rising inflation and unprecedented spikes in electricity costs. Straining their already tight household budgets, with an estimated 15% of their income being used to pay for electricity (as compared to an average of 2.15% across the United States), ensuring a just and equitable transition to clean energy for almost half of our population is a priority. Additionally, based on the Federal Reserve Bank’s unbanked/underbanked metric, an estimated 75,000 rooftops may not qualify for traditional financing, representing a \$3.75 billion financing gap.

Thanks to the leadership of Speaker Saiki and forty-nine other Representatives, a bill to establish a loan fund for ALICE households garnered tremendous support during this past Legislative Session including the Hawaii State Energy Office, Consumer Advocate, Hawaii Executive Collaborative’s Climate Coalition, Ulupono Initiative, Hawaiian Electric, Elemental Excelsior, Blue Planet Foundation, Hawaii Solar Energy Association, and other Stakeholders.

This additional loan capital, which will allow HGIA to also finance energy storage systems, will be a game-changer helping underserved ratepayers reduce their energy burden while enhancing resiliency and grid stability.

While the Legislature approved \$100,000,000 to be appropriated out of the general fund to capitalize this solar and storage loan fund, due to an anticipated budget shortfall, Act 164, SLH 2023 signed into law by Governor Green on June 30, 2023, included a \$50,000,000³ appropriation for this purpose.

² 4th quarter 2022 to 3rd quarter 2023.

³ Due to anticipated budget shortfalls, Governor Green reduced the Legislature’s approved budget by approximately \$1.0 billion.

The Authority began accepting applications for energy storage systems paired with solar PV on July 1, 2023 and on December 1, 2023, Governor Green approved the release of these funds for deployment.

The Authority will be requesting an amendment to Act 164 (SLH 2023) to deposit the funds appropriated above into the clean energy and energy efficiency revolving loan fund pursuant to Section 196-65.5. This amendment is necessary to implement these funds as the legislature intended as a revolving loan fund where repaid principal can be re-deployed and re-invested into solar plus storage systems to assist more ALICE households over the next two decades, in alignment with the State's clean energy goals.

\$100,000,000 Solar For All Grant Application

On October 10, 2023, the Authority submitted an application requesting \$100,000,000 from the Environmental Protection Agency's (EPA) Greenhouse Gas Reduction Fund, Solar for All Funding Opportunity (NOFO).

On July 27, 2023, HGIA initially submitted a Notice of Intent (NOI) to apply for \$250,000,000 in funding under this competitive NOFO, which will fund, at maximum, seventy-one applications. However, after receiving NOIs from two-hundred sixty five interested applicants (51 States/Territories; 47 Tribal Nations; 57 Municipalities; and 110 nonprofits), on September 11, 2023, the EPA revised the NOFO limiting the maximum award size based on population⁴.

Solar For All is a comprehensive, sustainable financing program to facilitate rooftop solar and battery as well as community solar for low-income households. In addition to loan capital, a portion of the funding will also be available for technical assistance, capacity building, workforce development and community outreach.

The top three objectives of this fund are to (1) reduce greenhouse gas emissions; (2) deliver benefits to low-income households and disadvantaged communities; and (3) stimulate additional solar deployment through leverage. As such, in addition to an anticipated \$80.0 million in private capital leverage, HGIA's application also included \$38.0 million in state leverage from the funding approved by the Legislature earlier this year.

EPA expects to announce awards in March 2024 and make the funds available in July 2024.

Bridging Access to Capital Challenges for Businesses

State Small Business Credit Initiative (SSBCI) – HI-CAP Programs

The Authority launched the SSBCI HI-CAP Collateral Support, CDFI Loan Pool and Loans Programs in 2022 with \$9.0 million in Federal funds to expand access to capital for small businesses and nonprofits statewide. As of September 30, 2023, some \$2.3 million in SSBCI

⁴ The maximum award Hawaii is able to apply for is \$100.0 million.

funds have caused some \$15.7 million in loans and credit facilities for eligible small businesses and nonprofits.

Additionally, following the Maui Wildfires the Authority requested approval from the U.S. Treasury for exceptions to the Collateral Support Program to assist with the recovery efforts. In order to stimulate lending in Maui County's weakened economy during the rebuilding phase over the next five years, the Treasury approved an increase in the maximum cash collateral available for eligible loans from the lesser of 20% of the total loan amount or \$1.0 million to the lesser of 50% of the loan amount or \$5.0 million per loan. This exception will remain in place until September 30, 2028.

The Hawaii Technology Development Corporation (HTDC) and HGIA expects to apply for the second tranche of funds from the Treasury during the next quarter, of which HTDC will receive \$5.0 million and HGIA \$15.0 million to deploy.

C-PACER Financing Program

While Act 183 (SLH 2022) authorized Commercial Property Assessed Financing (C-PACER) in Hawaii, each County is required to pass an Ordinance to implement this innovative financing mechanism for their respective commercial property owners.

With the tightening of credit due to bank failures during the year, coupled with the rising interest rate environment, a number of commercial developments will need to rely on C-PACER financing for the projects to cash flow.

Bill 56 passed Honolulu City Council on December 6, 2023. The Authority and City Administration is working on a Memorandum of Agreement to govern Honolulu's C-PACER program. Upon approval through a Resolution, commercial properties in Honolulu will be able to access this financing option.

Over the last few months as Bill 56 was going through the City Council, it became apparent that its ability to stretch the term of the financing over the life of the equipment, may make C-PACER an affordable option for older condos built prior to 1975 that failed the fire safety test. In order to do so, Section 514-B, HRS will need to be revised. The Authority anticipates such a bill would be supported by condominium associations and the insurance industry.

REPORTING METRICS

The following are Fiscal 2024, year-to-date and “Since Program Inception” metrics.

Energy & Environmental Impacts

Clean Energy Production of Projects Financed	7/1/23 to 9/30/23	FY24 To Date	Since Program Inception
Installed Capacity (Actual kW)	209	209	14,492
Total Yr 1 Production (Estimated kWh)	301,569	301,569	21,987,204
Total Project Production over Lifetime of Installed PV (Projected kWh, including 0.05% degradation)	5,753,297	5,753,297	396,042,129

Electricity Reductions from Energy Efficiency Projects Financed

Total Yr 1 kWh Reduction (Energy Efficiency)	0	0	38,725,853
Total kWh Reduction Over Lifetime of Installed EE	0	0	567,635,311

Petroleum Displaced by Clean Energy and Energy Efficiency Projects (1)

Total Petroleum Displaced/Saved over Lifetime (Estimated barrels)	3,534	3,534	591,713
Petroleum Displaced based on Yr 1 Clean Energy Generation (Estimated barrels)	185	185	13,504
Petroleum Displaced Over Lifetime of Installed PV (Estimated barrels)	3,534	3,534	242,974
Cumulative Annual Petroleum Saved from Yr 1 Efficiency Projects	0	0	23,784
Petroleum Saved of Lifetime of Efficiency Projects	0	0	348,628

(1) Reference unitjuggler.com for conversion metric

Greenhouse Gas Avoided (2)

Total Greenhouse Gas Avoided (2) Over Lifetime (Clean Energy and Energy Efficiency Projects) (Est. metric tons CO ₂)	1,731	1,731	289,866
Greenhouse Gas Avoided from Clean Energy Yr 1 Production (Est. metric tons CO ₂)	91	91	6,619
Greenhouse Gas Avoided Over Lifetime of Installed PV (Projected metric tons CO ₂)	1,731	1,731	119,049
Greenhouse Gas Avoided from Yr 1 Energy Efficiency	0	0	11,654
Greenhouse Gas Avoided over lifetime of Energy Efficiency Project	0	0	170,817

(2) Reference eia.gov for conversion metrics

Economic Development Impacts

	7/1/23 to 9/30/23	FY24 To Date	Since Program Inception
GEMS Revenues (Cash Basis)	\$1,206,261	\$1,206,261	\$29,910,978
GEMS Administrative & Program Costs (Cash Basis) (3)	\$ 248,651	\$ 248,651	\$ 8,455,194
GEMS Loans Funded	\$1,558,948	\$1,558,948	\$90,423,409
Indirect Economic Impact - Jobs Created/Retained (4)	\$ 9	\$ 9	\$ 1,394
State of Hawaii Tax Revenues Generated (5)	\$ 109,148	\$ 109,148	\$16,869,842
Economic Multiplier Impact (6)	\$2,122,314	\$2,122,314	\$286,571,923

(3) Does not include principal and interest repaid to the PUC.

(4) Jobs created or retained is calculated using the State's metric of \$88,165.25/job for 2015; \$91,345.19/job for 2016; \$94,633.63/job for 2017; \$98,034.06/job for 2018; \$101,550.09/job for 2019; \$105,185.44/job in 2020; \$92,044/job in 2021; \$98,818/job in 2022; and \$98,895/job in 2023.

(5) State taxes generated is calculated as \$0.126 per dollar of investment.

(6) Multiplier Impact calculated as \$2.11 per dollar of investment.

Market Expansion Impacts

Projects Financed According to Technology Type/Category	7/1/23 to 9/30/23	FY24 To Date	Since Program Inception
Solar Photovoltaic (7)	23	23	940
Energy Storage	9	9	196
Lighting Upgrades (8)	0	0	965,037
HVAC Upgrades (8)	0	0	2,325
Mechanical Upgrades	0	0	1
Controls and Monitoring Devices	23	23	1,757
Energy/Water Nexus (9)	0	0	214
Total No. of Projects	55	55	970,470

(7) Including advanced inverters and smart modules

(8) State Energy Efficiency Projects

(9) Includes solar water heating

Residential Loan Program	7/1/23 to 9/30/23	FY24 To Date	Since Program Inception
Total Number of PV Loans, Direct	0	0	198
Total Number of PV Leases, Direct	0	0	64
Total Number of GEM\$ OBOs for PV (Loans)	18	18	287
Owner Occupied OBOs	18	18	286
Renter OBOs	0	0	1

Total Number of GEM\$ OBOs for PV (Leases)	5	5	62
Total Number of GEM\$ OBOs for EE (SWH)	0	0	18
Owner Occupied OBOs	0	0	18
Renter OBOs	0	0	0
Total Number of GEM\$ OBOs	23	23	367
Number PV Loans/Leases/OBOs Serving Underserved Market (10)	23	23	523
Number EE Loans/Leases/OBOs Serving Underserved Market (10)	0	0	16
% Loans/Leases Serving Underserved Market	100%	100%	86%

(10) See AMI Distribution

Status of Applications (WECC):

No. of Residential PV Applications Received	0	0	427
No. of Residential PV Applications in Process	0	N/A	N/A
No. of Residential PV Applications Declined	0	0	160
No. of Residential PV Applications Withdrawn/Expired	0	0	127
No. of Residential PV Loan Docs Accepted - NTP	0	N/A	N/A

Status of Applications (Direct):

No. of Residential PV Applications Received	0	0	155
No. of Residential PV Applications in Process	0	N/A	N/A
No. of Residential PV Applications Declined	0	0	58
No. of Residential PV Applications Withdrawn/Expired	0	0	37
No. of Residential PV Loan Docs Accepted - NTP	0	N/A	N/A

Status of Applications (Leases - all Leases):

No. of Residential PV Applications Received	34	34	363
No. of Residential PV Applications in Process	113	N/A	N/A
No. of Residential PV Applications Declined	0	0	9
No. of Residential PV Applications Withdrawn/Expired	4	4	108
No. of Residential PV - Notice to Proceed	21	N/A	N/A

Status of Applications (GEM\$ OBR-PV and EE):

No. of Residential GEM\$ Applications Received	76	76	1414
No. of Residential GEM\$ Applications in Process	233	N/A	N/A
No. of Residential GEM\$ Applications Declined	0	0	252
No. of Residential GEM\$ Applications Withdrawn/Expired	7	7	471
No. of Residential GEM\$ OBO Accepted - NTP	77	N/A	N/A

Geographic Location of Financing Products

Oahu	22	22	540
Maui	0	0	53
Molokai	0	0	2
Lanai	0	0	0
Hawaii	1	1	34

Profile of Customers Financed:

Number of Customers by Customer FICO Credit Score (11)

700 and above	0	0	149
675-699	0	0	50
650-674	0	0	32
620-649	0	0	18
600-619	0	0	9
Below 600	0	0	2

(11) Excludes on-bill applicants

Number of Customers by Income Distribution (self-reported by customers)

Under \$15,000	0	0	1
\$15,000-\$24,999	0	0	5
\$25,000-\$34,999	0	0	7
\$35,000-\$49,999	0	0	44
\$50,000-\$74,999	9	9	85
\$75,000-\$99,999	2	2	134
\$100,000 and above	12	12	353

Number of Customers by Area Median Income (12)

<30% AMI (Extremely Low Income)	0	0	17
30% to <50% AMI (Very Low Income)	0	0	62
50% to <80% AMI (Low Income)	13	13	171
80% to <140% AMI (Moderate Income)	10	10	288
>140% AMI	0	0	91

(12) Area Median Income as provided by the U.S. Department of Housing and Urban Development (HUD)

	7/1/23 to 9/30/23	FY24 To Date	Since Program Inception
Commercial Loan Program			
Total Number of GEMS Direct PV Loans	0	0	29
Total Number of GEMS Direct EE Loans	0	0	4
Total Number of GEM\$ OBOs, PV	0	0	18
Owner-User	0	0	18
Commercial Tenant	0	0	0
Total Number of GEM\$ OBOs, EE	0	0	1

Owner-User	0	0	1
Commercial Tenant	0	0	0
Number of Nonprofits Participating in GEMS	0	0	26
Number of Small Businesses Participating in GEMS	0	0	10
Number of Rental Units Supported by GEMS	0	0	1320

Geographic Location of Loans (13)

Oahu	0	0	34
Maui	0	0	9
Molokai	0	0	1
Lanai	0	0	0
Hawaii	0	0	8

(13) DOE loan benefits 241 public schools statewide (except Kauai)

Number of Small Businesses by Gross Receipts (14)

Up to \$9,999	0	0	0
\$10,000-\$24,999	0	0	0
\$25,000-\$99,999	0	0	0
\$100,000-\$499,999	0	0	1
\$500,000-\$999,999	0	0	2
\$1,000,000-\$4,999,999	0	0	2
Above \$5,000,000	0	0	1

Number of Small Businesses by Average Number of Employees (14)

10 Employees or less	0	0	1
11-50 Employees	0	0	0
51-100 Employees	0	0	0
101-250 Employees	0	0	0
251-500 Employees	0	0	0
501-1,000 Employees	0	0	2
>1,000 Employees	0	0	0

(14) Depending on the North American Industry Classification System (NAICS), the side determination is based on gross revenues or number of employees

Cost Savings Impacts

Aggregate , Estimated, Gross (15) Electricity Cost Savings (\$)	7/1/23 to 9/30/23	FY24 To Date	Since Program Inception
from Energy Production and Reduction	\$2,890,987	\$2,890,987	\$353,471,901
from Energy Production (Consumer)	\$2,890,987	\$2,890,987	\$ 76,626,879
from Energy Production (Commercial)	\$ -	\$ -	\$105,608,287
from Energy Efficiency (Consumer)	\$ -	\$ -	\$ 384,332
from Energy Efficiency (Commercial)	\$ -	\$ -	\$170,852,403

Average, Estimated, Gross (15) Electricity Cost Savings (\$)

from Energy Production (Consumer)	\$ 125,695	\$ 125,695	\$ 140,086
from Energy Production (Commercial)	#DIV/0!	#DIV/0!	\$ 2,246,985
from Energy Efficiency (Consumer)	#DIV/0!	#DIV/0!	\$ 21,352
from Energy Efficiency (Commercial)	#DIV/0!	#DIV/0!	\$ 34,170,481

(15) Gross savings calculation for the life of the system assumes a historical utility rate increase per island

Aggregate, Estimated, Net (16) Electricity Cost Savings (\$)

from Energy Production (Consumer)	\$1,111,849	\$ 1,111,849	\$46,006,490
from Energy Production (Commercial)	\$ -	\$ -	\$54,238,909
from Energy Efficiency (Consumer)	\$ -	\$ -	\$ 220,048
from Energy Efficiency (Commercial)*	\$ -	\$ -	\$115,633,685

Average, Estimated, Net (16) Electricity Cost Savings (\$)

from Energy Production (Consumer)	\$ 48,341	\$ 48,341	\$ 84,107
from Energy Production (Commercial)	#DIV/0!	#DIV/0!	\$ 1,154,019
from Energy Efficiency (Consumer)	#DIV/0!	#DIV/0!	\$ 12,225
from Energy Efficiency (Commercial)	#DIV/0!	#DIV/0!	\$23,126,737

(16) Net savings calculations include tax credits, assume historical utility rate increase per island and are net of loan payments required

Average System Cost per Watt for All Consumers (PV) (\$)	\$ 3.58	\$ 3.58	\$ 3.59
Average System Cost per Watt for Underserved Consumers (PV)	\$ 3.58	\$ 3.58	\$ 3.59
Average System Size for All Consumers (PV) (kW)	9.1	9.1	9.6
Average System Size for Underserved Consumers (PV) (kW)	9.1	9.1	9.6

FUTURE OUTLOOK

Over the past few years, the Authority has been setting the stage and laying the groundwork towards achieving the following strategic goals by November 2024 (FY2025), its 10-year milestone:

- Transition HGIA to a sustainable business model, with sufficient earned revenue to support its operations;
- Expand financing programs to meet market gaps;
- Increase source(s) of loan capital to continue lending, increase flexibility and retain repaid principal and earned revenue; and
- Collaborate with other agencies/departments to meet the state's goals and objectives.

As a public financing agency, HGIA has expanded its role from a singular focus on clean energy financing, to also meeting financing gaps in the market for small businesses, nonprofits and commercial property owners. Leveraging scarce public funds with private capital provides exponentially greater economic development and environmental impacts, and re-investing that same public dollar demonstrates sound fiscal stewardship.

HAWAII GREEN INFRASTRUCTURE AUTHORITY BOARD



James Kunane Tokioka
Chair



Dennis Wong
Vice Chair



Mark Glick
Secretary



Luis Salaveria
Member



Richard Wallsgrove
Member