CONNECTICUT GREEN BANK
(A COMPONENT UNIT OF THE STATE OF CONNECTICUT)

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FISCAL YEAR ENDED JUNE 30, 2018
(With Summarized Totals as of and for Fiscal Year Ended June 30, 2017)

Department of Finance and Administration
845 Brook Street
Rocky Hill, Connecticut

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INTRODUCTORY SECTION

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CONNECTICUT
GREEN BANK

October 29, 2018

We are pleased to present a Comprehensive Annual Financial Report (CAFR) of the Connecticut Green Bank (Green Bank) for the fiscal year ending June 30, 2018 accompanied by summarized totals as of and for the fiscal year ended June 30, 2017.

Management assumes full responsibility for the completeness and reliability of the information contained in this report based upon a comprehensive framework of internal controls that it has established for this purpose. To provide a reasonable basis for making these representations, the management of Green Bank has established a comprehensive internal control framework that is designed both to protect the entity's assets from loss, theft, or misuse, and to compile sufficient reliable information for the preparation of Green Bank's financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP). Because the cost of internal controls should not outweigh the benefits, Green Bank's comprehensive framework of internal controls has been designed to provide reasonable, rather than absolute assurance that the financial statements will be free from material misstatement. As such, management asserts that this financial report is complete and reliable in all material respects to the best of managements' knowledge and belief.

Blum, Shapiro & Company, P.C., has issued an unmodified opinion on the Green Bank's financial statements for the fiscal year ending June 30, 2018. The independent auditors' report is presented in the financial section of this report. This letter of transmittal is designed to complement the Management's Discussion and Analysis (MD&A) and should be read in conjunction with it. The Green Bank's MD&A can be found immediately following the report of the independent auditors. SustainAbility has issued an independent opinion that the metrics, data collection, calculation methodologies, and transparency for the social benefits supported by the Green Bank are sound and represent best practice relative to peer financial institutions benchmarked. The independent opinion is presented in the non-financial statistics section of this report.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Connecticut Green Bank for its comprehensive annual report for the fiscal years ending June 30, 2014 through June 30, 2017. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Profile of the Connecticut Green Bank

The Green Bank[1] was established in a bipartisan manner by the Governor and Connecticut's General Assembly on July 1, 2011 through Public Act 11-80 as a quasi-public agency that supersedes the former Connecticut Clean Energy Fund. As the nation's first state green bank, the Connecticut Green Bank makes green energy more accessible and affordable for all Connecticut citizens and businesses by creating a thriving marketplace to accelerate the growth of green energy. We facilitate green energy deployment by leveraging a public-private financing model that uses limited public dollars to attract private capital investments. By partnering with the private sector, we create solutions that result in long-term, affordable financing to increase the number of green energy projects statewide.

The Green Bank was awarded the prestigious Harvard Kennedy School's Ash Center's "Innovations in American Government Awards" in 2017 for its "Sparking the Green Bank Movement" nomination. The Ash Center for Democratic Governance and Innovation advances excellence in governance and strengthens democratic institutions worldwide. Through its research, education, international programs, and government innovations awards, the Center fosters creative and effective government problem solving and serves as a catalyst for addressing many of the most pressing needs of the world's citizens. The Innovations in American Government Award is the nation's preeminent recognition for excellence and creativity in the public sector. The award program receives thousands of applications which are evaluated on criteria to assess their novelty, effectiveness, significance, and transferability. The Ford Foundation created the Innovations in American Government Awards in 1985 in response to widespread pessimism and distrust in government's effectiveness.

The Green Bank's vision is to lead the green bank movement by accelerating private investment in clean energy deployment for Connecticut to achieve economic prosperity, create jobs, promote energy security and address climate change. By accelerating the growth of green energy we contribute to a better quality of life, a better environment and a better future for Connecticut. The Green Bank's mission is to support the Governor's and Legislature's energy strategy to achieve cleaner, cheaper and more reliable sources of energy while creating jobs and supporting local economic development.

To achieve its vision and mission, the Green Bank has established the following four goals:

1. To attract and deploy private capital investment to finance the clean energy[2] policy goals for Connecticut.
2. To leverage limited public funds to attract multiples of private capital investment while returning and reinvesting public funds in clean energy deployment over time.
3. To develop and implement strategies that bring down the cost of clean energy in order to make it more accessible and affordable to consumers.
4. To support affordable and healthy buildings in low-to-moderate income and distressed communities by reducing the energy burden and addressing health and safety issues in their homes, businesses, and institutions.

These goals support the implementation of Connecticut's clean energy policies be they statutory (i.e., Public Act 11-80, Public Act 13-298, Public Act 15-194), planning (i.e., Comprehensive Energy Strategy, Integrated Resources Plan), or regulatory in nature. The powers of the Green Bank are vested in and

[1] Public Act 11-80 repurposed the Connecticut Clean Energy Fund (CCEF) administered by Connecticut Innovations, into a separate quasi-public organization called the Clean Energy Finance and Investment Authority (CEFIA). Per Public Act 14-94, CEFIA was renamed to the Connecticut Green Bank.

[2] Public Act 11-80 defines "clean energy" broadly and includes familiar renewable energy sources such as solar photovoltaic, solar thermal, geothermal, wind and low-impact hydroelectric energy, but also includes fuel cells, energy derived from anaerobic digestion (AD), combined heat and power (CHP) systems, infrastructure for alternative fuels for transportation and financing energy efficiency projects.

exercised by a Board of Directors that is comprised of eleven voting and two non-voting members each with knowledge and expertise in matters related to the purpose of the organization. The Board of Directors and Staff are governed through the statute, as well as an Ethics Statement and Ethical Conduct Policy, Resolutions of Purposes, Bylaws, and Comprehensive Plan.

Initiatives and Results

Accelerate the Growth of Green Energy
The Green Bank makes green energy more accessible and affordable for all Connecticut citizens and businesses by creating a thriving marketplace to accelerate the growth of green energy. As a result of the efforts undertaken over the past seven years, we are deploying more green energy in our state than ever before (see Table 1).

Table 1. Project Investments between FY 2012 through FY 2018[3]

	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014	FY 2013	FY 2012	Total
Total Investment ($MM)	265.9	205.7	307.5	324.7	107.8	111.3	14.8	1,337.8
Green Bank Investment $(MM)	33.6	33.5	39.4	57.1	32.5	18.7	4.8	219.6
Leverage Ratio	7.9	6.1	7.8	5.7	3.3	6	3.1	6.1
% of Funding as Grants	42%	39%	48%	58%	65%	67%	100%	54%
Installed Capacity (MW)	57.8	49.8	66.5	62.5	23.4	23.4	2.8	286.3

By using $219.6 million of ratepayer funds, we have helped attract $1,118.2 million of private investment in clean energy for a total investment of $1.3 billion in Connecticut's economy. In addition, $66.4 million in estimated tax revenues have been generated from this investment. This is supporting the deployment of 286.3 MW of renewable energy, producing and saving an estimated 40.5 million MMBtu and 10.0 million MWh of clean energy and reducing an estimated 4.6 million tons of CO_2 emissions over the life of the projects, while creating nearly 16,000 job-years, and improving public health benefits by $122.0 to $275.7 million as a result of cleaner air.

We Grow Businesses and We Help People Thrive
As leaders in the green bank movement – through innovation, education, and activation – we accelerate the growth of green energy. By generating a robust, flourishing green energy marketplace, we grow businesses and help people thrive. Within this marketplace the Green Bank partners with contractors and capital providers to offer a diverse portfolio of programs that benefit homeowners, businesses, and institutions. The Green Bank is demonstrating how public resources can be better invested in ways that attract more private investment in our communities, lead to the deployment of more green energy by local contractors, and most importantly reducing the budget of energy costs on our families and businesses.

The Green Bank helps make homes more energy efficient and sustainable by promoting awareness and offering flexible financing solutions to homeowners and multifamily building owners who seek assistance to make green energy upgrades. We make green energy more attractive to everyone so that residents can integrate it into their lives. The benefits are many – from reducing the burden of energy costs, to improving comfort and health in the home, to a cleaner environment. More green homes mean greener, healthier communities.

[3] Includes closed transactions approved by the Board of Directors consistent with its Comprehensive Plan and Budget.

The Green Bank makes green energy investments smarter and safer for businesses, including commercial and industrial customers, and institutions, including multifamily and not-for-profit organizations, with affordable, long-term financing for energy upgrades. We demonstrate how green energy improvements are smart investments that lower operating costs. We inspire them to embrace cleaner and more reliable sources of energy to power their buildings which stimulates a healthier local economy. Healthy buildings mean healthy businesses and institutions.

The Green Bank makes green energy more accessible and affordable to grow businesses and help people thrive.

We Believe in Inclusive Prosperity

The green economy is for everyone. Washington, DC Mayor Bowser says it best "As the nation's capital, we need to lead the way when it comes to protecting and preserving the environment. By creating a Green Bank, we will create more jobs for DC residents, which will allow us to continue our push for inclusive prosperity."

The Green Bank's simple promise of increasing affordability and accessibility to green energy has evolved into a greater commitment to our stakeholders. We believe that everything we do, we do to help families thrive and businesses grow. We do it in the interest of achieving inclusive prosperity not only within Connecticut and across the country, but around the world.

Leading the Green Bank Movement

The Connecticut Green Bank is a leader in the green bank movement. The Connecticut Green Bank and its programs serve as models for other states across the country.

The Connecticut Green Bank is leading a movement to use public funds more responsibly by attracting and deploying more private investment in green energy for the state's economy and environment.

Responsible Public Investment in Green Energy

The Green Bank receives funding through a number of sources, including a Systems Benefit Charge, the Regional Greenhouse Gas Initiative (RGGI), renewable energy certificate (REC) sales, interest income, and the federal government. The Green Bank's predecessor organization's programs were all structured as grants, which meant the funds were spent with no expectation of return. This model put the organization at the mercy of these funding streams which, while reliable, are largely determined by activities outside of our control such as levels of state electricity use and RGGI allowance prices. With the transition to a new financing model, the Green Bank is able to invest its funds in activities that earn a return and begin to build revenue streams that can be reinvested in green energy in Connecticut.

Acknowledgements

First and foremost, we would like to thank the Staff of the Connecticut Green Bank. Through their hard work, commitment and innovation, we are making progress towards $2 billion of investment into Connecticut's economy and have built a model that is delivering results for our state and serving as a model across the country and around the world.

We are grateful to our independent auditors, Blum Shapiro & Company and SustainAbility, for their assistance and advice during the course of this audit and review, and for supporting our interests in continuing to disclose not only our financial position, but also the public benefits to society resulting from our public-private investments.

Finally, we thank the Board of Directors for their continued leadership and guidance as we continue to prove that there is a new model for how government is able to play a part in deploying more green energy at a faster pace while using public resources responsibly.

Respectfully submitted,

Bryan T. Garcia
President and CEO

George Bellas
Vice President - Finance

Board of Directors

Connecticut Green Bank

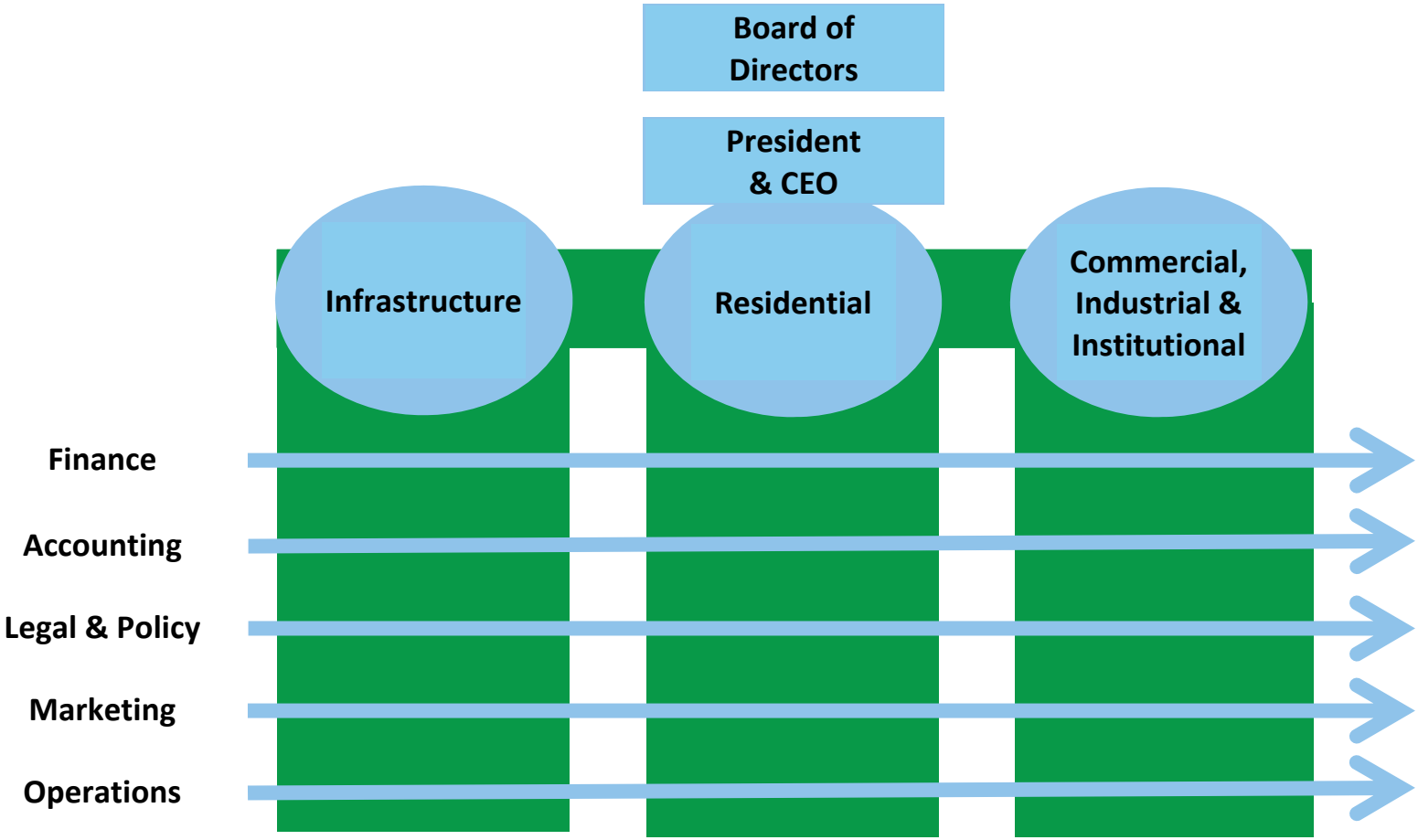
Position	Status	Voting	Name	Organization
State Treasurer (or designee)	Ex Officio	Yes	Bettina Bronisz	Treasurer's Office
Commissioner of DEEP[4] (or designee)	Ex Officio	Yes	Robert Klee[5]	DEEP
Commissioner of DECD[6] (or designee)	Ex Officio	Yes	Catherine Smith[7]	DECD
Residential or Low Income Group	Appointed	Yes	Betsy Crum	Women's Institute for Housing and Economic Development
Investment Fund Management	Appointed	Yes	(unfilled)	(unfilled)
Environmental Organization	Appointed	Yes	Matthew Ranelli[8]	Shipman & Goodwin
Finance or Deployment	Appointed	Yes	Thomas Flynn	Environmental Data Resources
Finance of Renewable Energy	Appointed	Yes	Eric Brown[9]	Connecticut Business and Industry Association
Finance of Renewable Energy	Appointed	Yes	Kevin Walsh	GE Energy Financial Services
Labor Organization	Appointed	Yes	John Harrity[10]	IAM Connecticut
R&D or Manufacturing	Appointed	Yes	Gina McCarthy	Harvard T.H. Chan School of Public Health
President of the Green Bank	Ex Officio	No	Bryan Garcia	Connecticut Green Bank

Discretely Presented Component Units

Position	Name
President	Bryan Garcia
Treasurer	George Bellas
Secretary	Brian Farnen
Chief Investment Officer	Roberto Hunter

[4] Department of Energy and Environmental Protection
[5] Vice Chairperson of the Board of Directors and Chairperson of the Deployment Committee
[6] Department of Economic and Community Development
[7] Chairperson of the Board of Directors
[8] Secretary of the Board of Directors and Chairperson of the Audit, Compliance and Governance Committee
[9] Chairperson of the joint committee of the EEO and CGB
[10] Chairperson of the Budget and Operations Committee

Organizational Chart



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Connecticut Green Bank

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2017

Christopher P. Morrill

Executive Director/CEO

FINANCIAL SECTION

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Independent Auditors' Report

To the Board of Directors
Connecticut Green Bank
Rocky Hill, Connecticut

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities and discretely presented component units of the Connecticut Green Bank (a component unit of the State of Connecticut) as of and for the fiscal year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the Green Bank's basic financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the discretely presented component units of the Connecticut Green Bank as of June 30, 2018, and the respective changes in financial position and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 15 to the financial statements, during the fiscal year ended June 30, 2018, the Connecticut Green Bank adopted new accounting guidance, GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.* The net position of the Connecticut Green Bank has been restated to recognize the net other postemployment benefit liability in accordance with GASB No. 75. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 4 through 14 and the pension and OPEB schedules on pages 67 through 70 be presented to supplement the basic financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, which considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise Connecticut Green Bank's basic financial statements. The introductory section, financial statistical section and other statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The introductory section, financial statistical section and other statistical section have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

We also previously audited, in accordance with auditing standards generally accepted in the United States of America, the basic financial statements of the Connecticut Green Bank as of and for the year ended June 30, 2017 (not presented herein), and have issued our report thereon dated October 26, 2017, which contained unmodified opinions on the respective financial statements of the business-type activities and the discretely presented component units. The accompanying summarized comparative information as of and for the year ended June 30, 2017 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and related directly to the underlying accounting and other records used to prepare the 2017 financial statements. The accompanying summarized comparative information has been subjected to the auditing procedures applied in the audit of the 2017 basic

financial statements and certain additional procedures including comparing and reconciling such information directly to the underlying accounting and other records used to prepare those financial statements or to those financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the summarized comparative information is fairly stated in all material respects in relation to the basic financial statements as a whole for the year ended June 30, 2017.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 29, 2018 on our consideration of the Connecticut Green Bank's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Connecticut Green Bank's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Connecticut Green Bank's internal control over financial reporting and compliance.

Blum, Shapiro & Company, P.C.

West Hartford, Connecticut
October 29, 2018

The following Management's Discussion and Analysis (MD&A) provides an overview of the financial performance of the Connecticut Green Bank (the Green Bank), formerly known as the Clean Energy Finance and Investment Authority, (a component unit of the State of Connecticut) for the fiscal year ended June 30, 2018. The information contained in this MD&A should be considered in conjunction with the information contained in the financial statements and notes to the financial statements included in the "Basic Financial Statements" section of this report.

The Green Bank as a reporting entity is comprised of the primary government and three discretely presented component units as defined under Government Auditing Standards Board Statement No. 61: *The Financial Reporting Entity: Omnibus and Amendment of GASB Statements No. 14 and No. 34*.

This MD&A discusses financial performance of both the primary government, the Green Bank, and its discretely presented component units, CT Solar Lease 2 LLC, CT Solar Lease 3 LLC and CEFIA Solar Services Inc. We are including the performance of these component units in the consolidated data tables included in this analysis because they play an integral part in assisting the Green Bank in achieving its goal to deploy renewable energy in the State of Connecticut and to omit them from the analysis would not provide a complete picture of the Green Bank's activities. Where possible we have distinguished activity pertaining solely to a component unit or the primary government in the discussion that follows.

FINANCIAL STATEMENTS PRESENTED IN THIS REPORT

On June 6, 2014, Public Act 14-94 of the State of Connecticut changed the name of the Clean Energy Finance and Investment Authority to the Connecticut Green Bank.

The Green Bank is a quasi-public agency of the State of Connecticut established on July 1, 2011 by Section 16-245n of the Connecticut General Statutes, created for the purposes of, but not limited to: (1) implementing the Comprehensive Plan developed by the Green Bank pursuant to Section 16-245n(c) of the Connecticut General Statutes, as amended; (2) developing programs to finance and otherwise support clean energy investment in residential, municipal, small business and larger commercial projects, and such others as the Green Bank may determine; (3) supporting financing or other expenditures that promote investment in clean energy sources to foster the growth, development and commercialization of clean energy resources and related enterprises; and (4) stimulating demand for clean energy and the deployment of clean energy sources within the state that serve end-use customers in the State. The Green Bank constitutes the successor agency to Connecticut Innovations for the purposes of administering the Connecticut Clean Energy Fund in accordance with section 4-38d of the Connecticut General Statutes and therefore the net position of such fund was transferred to the newly created the Green Bank as of July 1, 2011.

The basic financial statements include: Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position, and the Statement of Cash Flows. The Statement of Net Position provides a measure of the Green Bank's economic resources. The Statement of Revenues, Expenses and Changes in Net Position measures the transactions for the periods presented and the impact of those transactions on the resources of the Green Bank. The Statement of Cash Flows reconciles the changes in cash and cash equivalents with the activities of the Green Bank for the period presented. The activities are classified as to operating, noncapital financing, capital and related financing, and investing activities.

Notes to the basic financial statements provide additional detailed information to supplement the basis for reporting and nature of key assets and liabilities.

FINANCIAL HIGHLIGHTS OF FISCAL 2018

NET POSITION

The Green Bank's net position, which is reflective of the reporting entity's overall financial position, decreased year over year. Net position as of June 30, 2018 and 2017 was $89.4 million and $106.0 million, respectively, a decrease of $16.6 million. The Green Bank's net position as of June 30, 2017 was restated from $128.7 million to $106.0 million, a decrease of $22.7 million, to adjust net position for the implementation of Government Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Post Employment Benefits other than Pensions*. Note 15 provides further analysis on the effect of this implementation on the Green Bank's net position. The components of net position show that unrestricted net position decreased to $1.4 million as of June 30, 2018 as compared to $31.8 million as of June 30, 2017, restated for GASB 75, a decrease of $30.4 million. Contributing to this decrease in unrestricted net position was a transfer of a portion of the primary government's available unrestricted cash balances into restricted cash balances to support the maintenance of loan loss reserves, interest rate buydowns, contractual obligations under the Clean Renewable Energy Bond and contractual obligations to maintain collateral accounts to support loan guarantees. This transfer is reflected in the component of net position designated as net position restricted for energy programs, which increased $2.5 million from $16.8 million as of June 30, 2017 to $19.3 million as of June 30, 2018. Restricted net position energy programs as of June 30, 2017 included approximately $2.9 in proceeds received upon the issuance of Clean Renewable Energy Bonds (CREBs) by the Green Bank which the Green Bank, through its component unit, CGB Meriden Hydro LLC, used to purchase a hydro-electric facility in fiscal year 2018 from the facility's developer in a sale-lease back transaction. Restricted net position energy programs as of June 30, 2018 included $9.1 million in proceeds received from the issuance of CREBs which will be used in fiscal 2019 to construct solar PV facilities on campuses in the State of Connecticut's system of universities and colleges. Note 16 Restricted Net Position provides a breakout by dollar amount of cash balances restricted for these programs. Also contributing to the decrease in unrestricted net position was payment of $14 million to the State of Connecticut in fiscal 2018 and the increase in pension and OPEB liabilities of $0.4 million.

Green Bank assets decreased $6.9 million in fiscal year 2018 to $184.4 million. As of June 30, 2017, assets totaled $191.3 million. This was primarily the result of a decrease in cash balances of $15 million and the completion and sale of Solar PV projects by CEFIA Holdings LLC of $ 6.4 million. These decreases were offset by an increase of $3.5 million in program loans made by the primary government to support renewable energy installations and energy efficiency upgrades for both residential and commercial property owners in Connecticut and a net increase in investments in capital assets of $11.9 million pertaining to the purchase of the hydroelectric facility in Meriden Connecticut by the primary government and the purchase of commercial solar PV facilities by CT Solar Lease 3 LLC.

Investments in capital assets net of depreciation increased from $61.5 million as of June 30, 2017 to $73.4 million as of June 30, 2018, an increase of $11.9 million. This increase was primarily the result of the purchase and construction of commercial solar PV systems by CT Solar Lease 3 LLC. The electricity generated by these facilities will be sold through power purchase agreements to third party commercial, not for profit and municipal customers. During fiscal year 2018 the primary government also placed in service the Hydroelectric facility. During fiscal 2017, CT Solar lease 2 completed its acquisition of both residential and commercial solar PV systems which comprise the remaining balance in capital assets.

Unrestricted cash and cash equivalents decreased $17.3 million to $19.8 million as of June 30, 2018 compared to $37.1 million as of June 30, 2017 and restricted cash and cash equivalents increased $2.3 million to $24.4 million as of June 30, 2018 from $22.1 million as of June 30, 2017. The net decrease in unrestricted cash was primarily the result of the transfer of $14 million to the State of Connecticut during the last month of fiscal year 2018. The net increase in restricted cash was primarily the result of the receipt of a $1.5 grant to establish a health and safety revolving loan fund in fiscal 2019.

Green Bank liabilities increased by $22.7 million in fiscal year 2018 to $119.1 million as of June 30, 2018 from $96.4 million as of June 30, 2017. Current liabilities, comprised of current maturities of long term debt, accounts payable and accrued expenses decreased $0.6 million to $13.4 million as of June 30, 2018 compared to $14.0 million as of June 30, 2017. Accounts payable and accrued expenses decreased $2.2 million from $8.7 million in 2017 to $6.5 million in 2018 primarily as a result a decrease in accrued performance-based incentives payable by the primary government to third party owners of PV systems at each respective year-end. Contributing to this decrease was a liability of $1.7 million representing the buyout of future PBI obligations to third party owners of solar PV systems which was paid out in fiscal year 2018. The remaining decrease of $800,000 resulted from a decrease in the amount recorded for the current portion of long term debt maturing within a year in 2018 compared to 2017 primarily pertaining to CT Solar Lease 2 LLC's debt facility used to finance its acquisition of Solar PV projects.

The Green Bank's allocation of the State of Connecticut State Employee Retirement System unfunded pension liability, as calculated under Government Accounting Standard Board (GASB) statement 68 decreased $0.6 million in fiscal year 2018 to $24.6 million as of June 30, 2018 compared to $25.2 million as of June 30, 2017. The related Deferred Outflows of Resources, which represents timing differences in plan earnings, assumptions and Green Bank pension contributions decreased $1.2 million to $8.8 million as of June 30, 2018 compared to $10 million as of June 30, 2017. Note 14 provides further detail regarding the pension plan. The primary government is responsible for this pension obligation

The Green Bank's allocation of the State of Connecticut State Employee Retirement System unfunded retiree healthcare (OPEB) liability, as calculated under Government Accounting Standard Board (GASB) statement 75 increased $1.1 million in fiscal year 2018 to $24.9 million as of June 30, 2018 compared to $23.8 million as of June 30, 2017. The related Deferred Outflows of Resources, which represents timing differences in plan earnings, assumptions and Green Bank OPEB contributions increased $0.1 million to $2.0 million as of June 30, 2018 compared to $1.9 million as of June 30, 2017. Note 15 provides further detail regarding the OPEB plan. The primary government is responsible for this OPEB obligation

Long term debt increased $8.8 million in fiscal year 2018 to $38.5 million as of June 30, 2018 when compared to $29.7 million as of June 30, 2017. During fiscal year 2018, the Green Bank issued $9.1 million of Clean Renewable Energy Bonds. The proceeds from these bonds will be used by the Green Bank to construct solar PV facilities on various campuses of colleges and universities owned by the State of Connecticut. During fiscal year 2018 the Green Bank borrowed $1 million under a short term working capital loan facility secured by the proceeds from the sale of renewable energy credits to public utilities located within the State of Connecticut. These increases in long term debt are offset by repayments of principal by CT Solar Lease 2 LLC of funds borrowed under its credit facility with KeyBank and Webster Bank.

As of June 30, 2018, the Green Bank's unfunded contingent grant and loan commitments, which are obligations of the primary government, the majority of which represent PBI payments to third party owners of solar facilities as described in Note 13, totaled $62.5 million. These grant and loan commitments are expected to be funded over the next one to six years from current and future unrestricted cash balances.

The following table summarizes the net position of the reporting entity at June 30, 2018 and 2017:

	2018	2017	Increase (Decrease)
Cash and cash equivalents-unrestricted	$ 19,830	$ 37,148	$ (17,318)
Cash and cash equivalents-restricted	24,368	22,063	2,305
Bonds receivable	3,329	3,329	--
Fair value of interest rate swaps	171		171
Solar lease notes	7,267	8,113	(846)
Program loans	45,664	42,206	3,458
Capital assets, net	73,417	61,510	11,907
Other assets	10,360	16,884	(6,524)
Total Assets	184,406	191,253	(6,847)
Deferred Outflows of Resources			
Deferred amount for pensions	8,779	9,978	(1,199)
Deferred amount for OPEB	1,999	1,856	143
Deferred payments to State of Connecticut	14,000	--	14,000
Total deferred outflows of resources	24,778	11,834	12,944
Current liabilities	10,285	13,153	(2,868)
Unearned revenue	3,144	872	2,272
Pension liabilities	24,636	25,245	(609)
OPEB liabilities	24,876	23,804	1,072
Payment to State of Connecticut	14,000	--	14,000
Other long term liabilities	3,659	3,020	639
Fair value of interest rate swap	--	541	(541)
Long term debt, less current maturities	38,532	29,737	8,795
Total liabilities	119,132	96,372	22,760
Deferred Inflows of Resources			
Deferred amount for pensions	48	--	48
Deferred amount for OPEB	625	--	625
Total deferred outflows of resources	673	--	673
Invested in capital assets	2,251	1,388	863
Restricted Net Position:			
Non-expendable	66,496	55,975	10,521
Restricted - energy programs	19,250	16,844	2,406
Unrestricted	1,382	32,509	(31,127)
Total Net Position	$ 89,379	$ 106,716	$ (17,337)

CHANGES IN NET POSITION

Operating revenues increased by $2.9 million to $36.9 million as of June 30, 2018 as compared to $34.0 million as of June 30, 2017. Continuing a trend in recent years, remittances to the primary government from utility companies representing the one mil per kilowatt hour charge to each end use customer of electric services in the State of Connecticut decreased $461,000 to $25.9 million for the fiscal year ended June 30, 2018 as compared to $26.4 million for the fiscal year ending June 30, 2017. Sales of Renewable Energy Credits (RECs) increased $1.1 million to $3.7 million in 2018 compared to $2.6 million in 2017 primarily as a result of the commencement of sales of RECs to the two public utility companies in Connecticut. Proceeds received by the primary government from quarterly Regional Greenhouse Gas Initiative (RGGI) auctions declined $1.1 million year over year with proceeds of $1.3 million in fiscal year 2018 compared to proceeds of $2.4 million in fiscal year 2017. The decrease in proceeds can primarily be attributed to the continued diversion of proceeds earmarked for the Green Bank into the State of Connecticut's general fund to meet projected budget shortfalls. During fiscal 2018 CEFIA Holdings LLC, a developer of solar PV facilities sold $2.8 million of partially constructed projects to a third party.

Total payments of grants and incentives to commercial, not for profit, municipal and residential owners by the primary government to install either solar PV systems or energy efficiency measures increased $846,000 to $17.9 million in fiscal year 2018 compared to $17.1 million for the fiscal year 2017. PBI payments comprised the largest component of incentives paid out in both these years.

Program administration expenses decreased $556,000 to $17.4 million in fiscal 2018 from $16.8 million in fiscal 2017, a 3% decrease. Included in program administration expenses is the non-cash depreciation expense for Solar PV capital assets acquired by CT Solar Lease 2 LLC and CT Solar Lease 3 LLC of $2.8 million in fiscal 2018 and $2.3 million in fiscal 2017. General and administrative costs decreased by $95,000 to $5.63 million in fiscal year 2018 from $5.73 million in fiscal year 2017, a 1.7% decrease. Included in general and administrative costs for 2018 and 2017 is $2.2 million and $1.7 million respectively for the non-cash GASB 68 pension expense and GASB 75 OPEB expense allocated to the Green Bank by the State of Connecticut which is not an expense that is controllable by Green Bank management. General and Administrative expense excluding these non-cash charges for 2018 and 2017 were $3.1 million and $4 million, respectively, representing a decrease of $867,000 or 21.7%.

Interest earned on program investments and bank deposits increased $488,000 in fiscal 2018 to $3.6 million compared to $3.1 million in fiscal 2017 as a result of increased loans made in the Green Bank's investment portfolio. Interest as a revenue source is expected to continue to increase in future years as the Green Bank expands its investment portfolio. Interest expense increased $167,000 to $1.39 million from $1.22 million as borrowings have increased to finance its leasing programs. Capital contributions to CT SL2 LLC and CT SL3 LLC by their investor member decreased $4.2 million to $2.2 million in fiscal 2018 from $6.4 million in fiscal year 2017. Capital contributions from the investor member are received as projects are completed. As of June 30, 2017, all capital contributions to CT SL2 LC due from the investor member have been received.

The following table summarizes the changes in net position between June 30, 2018 and 2017:

	2018	2017	Increase (Decrease)
Revenues			
Utility remittances	$ 25,943	$ 26,404	$ (461)
Energy system sales	2,782	--	2,782
REC sales	3,660	2,571	1,089
Other revenues	4,497	4,992	(495)
Total revenues	36,882	33,967	2,915
Operating Expenses			
Cost of goods sold - energy systems	2,998	--	2,998
Grants and incentive programs	17,930	17,084	846
Program administration expenses	17,380	16,824	556
General and administrative expenses	5,630	5,726	(96)
Total operating expenses	43,938	39,634	4,304
Operating Income	(7,056)	(5,667)	(1,389)
Non-Operating Revenues (Expenses)			
Interest earned	3,632	3,144	488
Interest expense	(1,389)	(1,222)	(167)
Investment loss	(510)	(1,094)	584
Unrealized loss on investment	--	--	--
Unrealized gain (loss) on interest rate swap	712	1,087	(375)
Provision for loan losses	(362)	(956)	594
Capital contribution	2,176	6,446	(4,270)
Distribution to member	(540)	(437)	(103)
Payments to State of Connecticut	(14,000)	--	(14,000)
Net Change	(17,337)	1,301	(18,638)
Net Position Beginning of Year	106,716	105,415	1,301
Net Position at End of Year	$ 89,379	$ 106,716	$ (17,337)

FINANCIAL HIGHLIGHTS OF FISCAL 2017

NET POSITION

The Green Bank's net position, which is reflective of the reporting entity's overall financial position, decreased $18.3 million year over year primarily as a result of the aforementioned implementation of GASB 75 in fiscal year 2018 which resulted in a decrease to unrestricted net position of $22.7 million. Net position as of June 30, 2017, as restated, and 2016 was $106.0 million and $104.7 million, respectively. Prior to the restatement net position as of June 30, 2017 was $128.7 million, an increase of $1.3 million when compared to net position as of June 30, 2017. The components of net position show that unrestricted net position decreased to $34.9 million as of June 30, 2017 as compared to $62.7 million as of June 30, 2016, a decrease of $27.8 million. Contributing to this decrease in unrestricted net position was a transfer of a portion of the primary government's available unrestricted cash balances into restricted cash balances to support the maintenance of loan loss reserves, interest rate buydowns, contractual obligations under the Clean Renewable Energy Bond and contractual obligations to maintain collateral accounts to support loan guarantees. This transfer is reflected in the component of net position designated as net position restricted for energy programs, which increased $11.5 million from $5.3 million as of June 30, 2016 to $16.8 million as of June 30, 2017. Restricted net position energy programs include approximately $2.9 in proceeds received upon the issuance of Clean Renewable Energy Bonds by the Green Bank in fiscal year 2017 which the Green Bank, through its component unit, CGB Meriden Hydro LLC, will use to purchase a hydro-electric facility in fiscal year 2018 from the facility's developer in a sale-lease back transaction. Note 17 Restricted Net Position provides a breakout by dollar amount of cash balances restricted for these programs.

Green Bank assets increased $14.4 million in fiscal year 2017 to $191.3 million as of June 30, 2017 from $176.8 million as of June 30, 2016 primarily resulting from an increase of $8.9 million in program loans made by the primary government to support renewable energy installations and energy efficiency upgrades for both residential and commercial property owners in Connecticut and an increase in investments in capital assets by the component unit, CT LS2 LLC of $3.4 million.

Investments in capital assets net of depreciation increased from $58.1 million as of June 30, 2016 to $61.5 million as of June 30, 2017, an increase of $3.4 million. This increase was the result of the purchase and construction of commercial solar PV systems by CT Solar Lease 2 LLC. These systems will either be leased or the electricity generated by them sold, to third party commercial, not for profit and municipal customers. During fiscal 2017, CT Solar lease 2 completed its acquisition of both residential and commercial solar PV systems which comprise the balance in capital assets. During fiscal year 2017, the Green Bank established a new component unit, CT Solar Lease 3 LLC, whose purpose will be to continue the acquisition of commercial solar PV systems begun by CT Solar Lease 2 LLC and to sell the electricity generated by these facilities to non-residential customers.

Unrestricted cash and cash equivalents decreased $10.9 million to $37.1 million as of June 30, 2017 from $48.1 million as of June 30, 2016 and restricted cash and cash equivalents increased $12.3 million to $22.1 million as of June 30, 2017 from $9.8 million as of June 30, 2016 primarily for the reasons also discussed in the preceding paragraph. As of June 30, 2016, Green Bank assets included $1.0 million representing an equity investment in a company that developed uninterruptable power supply products. During fiscal 2017 the Green Bank fully reserved this investment which it made when it was managed as the Connecticut Clean Energy Fund by Connecticut Innovations, Inc. Connecticut Innovations investment staff continue to monitor and manage this investment and recommended a full reserve as of June 30, 2017. Investment staff will continue to monitor this investment and recommend changes to the reserve if warranted.

Green Bank liabilities increased by $44.3 million in fiscal year 2017 to $96.4 million as of June 30, 2017 from $52.0 million as of June 30, 2016. Current liabilities, comprised of current maturities of long term debt, accounts payable and accrued expenses increased $6.2 million to $13.2 million as of June 30, 2017 compared to $ 7.0 million as of June 30, 2016. This increase was primarily the result of an increase in performance-based incentives (PBI) payable to third party owners of solar facilities as of June 30, 2017 when compared to June 30, 2016 of $5.8 million. A portion of the $5.8 million, $1.7 million, represents the buyout of future PBI obligations to third party owners, which was approved by the Green Bank Board of Directors in fiscal year 2017. The significant increase in PBI liabilities resulted from the increase in residential solar PV systems coming on line and generating electricity in fiscal year 2017. The primary government is responsible for these obligations. Unearned revenues resulting from the development and acquisition of commercial solar PV systems by CEFIA Holdings LLC and CT Solar Lease 2 LLC and the leasing of residential solar PV systems by CT Solar Lease 2 LLC decreased $5.4 million to $872,000 as of June 30, 2017 from $6.3 million as of June 30, 2016 as the remaining commercial solar PV systems were completed in fiscal year 2017.

The Green Bank's allocation of the State of Connecticut State Employee Retirement System unfunded pension liability, as calculated under Government Accounting Standard Board (GASB) statement 68 increased $9.1 million in fiscal year 2017 to $25.2 million as of June 30, 2017 compared to $16.1 million as of June 30, 2016. The related Deferred Outflows of Resources, which represents timing differences in plan earnings, assumptions and Green Bank pension contributions increased $7.4 million to $10.0 million as of June 30, 2017 compared to $2.6 million as of June 30, 2016. Note 15 provides further details regarding this obligation. The primary government is responsible for this pension obligation.

As discussed in the fiscal year 2018 analysis, the Green Bank's allocation of the State of Connecticut State Employee Retirement System unfunded retiree healthcare (OPEB) liability, as calculated under Government Accounting Standard Board (GASB) statement 75 implemented in fiscal year 2018 resulted in the recording of an OPEB liability of $23.8 million as of June 30, 2017. The related Deferred Outflows of Resources, which represents timing differences in plan earnings, assumptions and Green Bank pension contributions was $1.9 million as of June 30, 2017. Note 15 provides further detail regarding this obligation. The primary government is responsible for the OPEB obligation

Long term debt increased $11.1 million in fiscal year 2017 to $29.7 million as of June 30, 2017 when compared to $18.6 million as of June 30, 2016. During fiscal year 2017, the Green Bank issued $2.9 million of Clean Renewable Energy Bonds. The proceeds from these bonds will be used by CGB Meriden Hydro LLC, a component of the primary government, to purchase a hydro-electric facility from the developer in fiscal year 2018 in a sale-leaseback transaction. During fiscal year 2017, CEFIA Solar Services, Inc. borrowed $1.8 million from the Connecticut Housing Finance Authority which it lent to CT Solar Lease 2 LLC to finance the installation of renewable energy and energy efficiency projects in municipal housing developments throughout Connecticut. The remainder of the increase in long term debt represents advances of $9.5 million made to CT Solar Lease 2 LLC under its credit facility with KeyBank for total of $14.2 million in new borrowings during fiscal year 2017.

As of June 30, 2017, the Green Bank's unfunded contingent grant and loan commitments, which are obligations of the primary government, the majority of which represent PBI payments to third party owners of solar facilities as described in Note 13, totaled $76 million. These grant and loan commitments are expected to be funded over the next one to six years from current and future unrestricted cash balances.

The following table summarizes the net position of the reporting entity at June 30, 2017 and 2016:

Net Position
(in thousands)

	2017	2016	Increase (Decrease)
Cash and cash equivalents-unrestricted	$ 37,148	$ 48,072	$ (10,924)
Cash and cash equivalents-restricted	22,063	9,750	12,313
Bonds receivable	3,329	3,492	(163)
Portfolio investments	--	1,000	(1,000)
Solar lease notes	8,113	9,008	(895)
Program loans	42,206	33,268	8,938
Capital assets, net	61,510	58,115	3,395
Other assets	16,884	14,124	2,760
Total Assets	191,253	176,829	14,424
Deferred Outflows of Resources			
Deferred amount for pensions	9,978	2,575	7,403
Deferred amounts for OPEB	1,856		1,856
Total deferred outflows of resources	11,834	2,575	9,259
Current liabilities	13,153	6,964	6,189
Unearned revenue	872	6,259	(5,387)
Pension liabilities	25,245	16,096	9,149
OPEB liabilities	23,804	--	23,804
Other long term liabilities	3,020	2,528	492
Fair value of interest rate swap	541	1,628	(1,087)
Long term debt, less current maturities	29,737	18,567	11,170
Total liabilities	96,372	52,042	44,330
Deferred Inflows of Resources			
Deferred amount for pensions	--	--	--
Total deferred outflows of resources	--	--	--
Invested in capital assets	1,388	656	732
Restricted Net Position:			
Non-expendable	55,975	58,709	(2,734)
Restricted - energy programs	16,844	5,295	11,549
Unrestricted	32,509	62,702	(30,193)
Total Net Position	$ 106,716	$ 127,362	$ (20,646)

CHANGES IN NET POSITION

Operating revenues decreased by $3.8 million to $34.0 million as of June 30, 2017 as compared to $37.8 million as of June 30, 2016. Continuing a trend in recent years, remittances to the Green Bank from utility companies representing the one mil per kilowatt hour charge to each end use customer of electric services in the State of Connecticut decreased $200,000 to $26.4 million for the fiscal year ended June 30, 2017 as compared to $26.6 million for the fiscal year ending June 30, 2016. Sales of Renewable Energy Credits (RECs) remained level year over year at $2.6 million for the fiscal year 2017 compared to $2.7 million for the fiscal year 2016. Proceeds received by the Green Bank from quarterly Regional Greenhouse Gas Initiative (RGGI) auctions declined $4.1 million year over year with proceeds of $2.4 million in fiscal year 2017 compared to proceeds of $6.5 million in fiscal year 2016. The decrease in proceeds received by the Green Bank can primarily be attributed to a decrease in the auction clearing price for CO2 allowances. For the four auctions in fiscal year 2016, the clearing price average was $6.18 per allowance while the clearing price average for the four auctions held in fiscal year 2017 was $3.40 per allowance. Contributing to the decline in auction proceed revenue was the diversion of approximately $800,000 in proceeds earmarked for the Green Bank to the State of Connecticut general fund under Public Act 16-3.

Total payments of grants and incentives to commercial, not for profit, municipal and residential owners to install either solar PV systems or energy efficiency measures increased $6.4 million to $17.1 million in fiscal year 2017 compared to $10.6 million for the fiscal year 2016. PBI payments comprised the largest share of this increase as PV systems came on line in fiscal 2017 and began to generate electricity which provides the basis for the PBI payment.

As a result of continuing efforts by Green Bank management to control costs, program administration expenses increased $327,000 to $16.8 million in fiscal 2017 from $16.5 million in fiscal 2016, a 2% increase. Included in program administration expenses is the non-cash depreciation expense for Solar PV capital assets acquired by CT Solar Lease 2 LLC of $2.3 million in fiscal 2017 and $1.5 million in fiscal 2016. General and administrative costs increased by $1 million to $5.7 million in fiscal year 2017 from $4.7 million in fiscal year 2016, a 2.2% increase. Included in general and administrative costs is an increase of $2.0 million year over year for the non-cash GASB 68 pension expense allocated to the Green Bank by the State of Connecticut which is not an expense that is controllable by Green Bank management.

Interest earned on program investments and bank deposits increased $128,000 in fiscal 2017 to $3.1 million compared to $3 million. Interest as a revenue source is expected to continue to increase in future years as the Green Bank expands its investment portfolio. Interest expense increased $491,000 to $1.2 million from $731,000 as borrowings have increased to finance its leasing programs. The unrealized loss on investment of $1.0 million results from fully reserving the carrying cost of the Green Bank's previously discussed equity investment. Capital contributions to CT SL2 LLC by its investor member decreased $5.9 million to $6.4 million in fiscal 2017 from $12.3 million in fiscal year. Capital contributions from the investor member are received as projects are completed. As of June 30, 2017, all capital contributions to CT SL2 LC due from the investor member have been received.

The following table summarizes the changes in net position between June 30, 2017 and 2016:

	2017	2016	Increase (Decrease)
Revenues			
Utility remittances	$ 26,404	$ 26,605	$ (201)
REC sales	2,571	2,654	(83)
Other revenues	4,992	8,529	(3,537)
Total revenues	33,967	37,788	(3,821)
Operating Expenses			
Grant and incentive payments	17,085	10,645	6,440
Program administration expenses	16,824	16,497	327
General and administrative expenses	5,725	4,706	1,019
Total operating expenses	39,634	31,848	7,786
Operating Income	(5,667)	5,940	(11,607)
Non-Operating Revenues (Expenses)			
Interest earned	3,144	3,016	128
Interest expense	(1,222)	(731)	(491)
Investment loss	(94)	(33)	(61)
Unrealized loss on investment	(1,000)	-	(1,000)
Unrealized gain (loss) on interest rate swap	1,087	(968)	2,055
Provision for loan losses	(956)	(1,022)	66
Capital contribution by member	6,446	12,294	(5,848)
Distribution to member	(437)	(301)	(136)
Net Change	1,301	18,195	(15,894)
Net Position at Beginning of Year	105,415 *	109,167	(3,752)
Net Position at End of Year	$ 106,716	$ 127,362	$ (20,646)

* Restated for GASB 75 - OPEB Liability

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the Green Bank's finances. Questions concerning any of the information provided in this report or request for additional financial information should be addressed to the Office of Finance and Administration, 845 Brook Street, Rocky Hill, Connecticut 06067.

BASIC FINANCIAL STATEMENTS

CONNECTICUT GREEN BANK
CONSOLIDATING STATEMENT OF NET POSITION
JUNE 30, 2018
(with summarized totals for the year ended June 30, 2017)

		Discretely Presented Component Units					
	Total Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	CT Solar Lease 3 LLC	Eliminating Entries	2018 Total Reporting Entity	2017 Total Reporting Entity
Assets							
Current Assets							
Cash and cash equivalents	$ 17,125,737	$ 1,856,368	$ 611,674	$ 236,323	$	$ 19,830,102	$ 37,148,283
Accounts receivable	996,349	373		42,772	(21,075)	1,018,419	404,807
Utility remittance receivable	2,377,065					2,377,065	2,507,659
Other receivables	1,026,878	450,178		164,298		1,641,354	770,003
Due from component units	40,901,665	499,817	7,875,147		(49,276,629)	-	-
Prepaid expenses and other assets	1,423,742	418,309		5,797		1,847,848	10,012,025
Current portion of solar lease notes	908,541					908,541	869,831
Current portion of program loans	2,138,512					2,138,512	1,910,048
Total current assets	66,898,489	3,225,045	8,486,821	449,190	(49,297,704)	29,761,841	53,622,656
Noncurrent Assets							
Portfolio investments	1					1	1
Fair value of interest rate swap		171,478				171,478	
Bonds receivable	3,328,530					3,328,530	3,328,530
Solar lease notes, less current portion	6,358,184					6,358,184	7,242,822
Program loans, less current portion	43,525,021					43,525,021	40,296,113
Renewable energy credits	547,556					547,556	654,767
Investment in component units	100		30,104,842		(30,104,942)	-	-
Capital assets, net of depreciation and amortization	3,868,024	67,713,698		11,185,186	(9,349,687)	73,417,221	61,510,207
Asset retirement obligation, net		2,389,006		538,681		2,927,687	2,535,104
Restricted assets:							
Cash and cash equivalents	19,856,884	4,511,301				24,368,185	22,063,406
Total noncurrent assets	77,484,300	74,785,483	30,104,842	11,723,867	(39,454,629)	154,643,863	137,630,950
Total Assets	144,382,789	78,010,528	38,591,663	12,173,057	(88,752,333)	184,405,704	191,253,606
Deferred Outflows of Resources							
Deferred amount for pensions	8,778,670					8,778,670	9,978,107
Deferred amount for OPEB	1,999,011					1,999,011	1,856,261
Deferred payments to State of Connecticut	14,000,000					14,000,000	
Total Deferred Outflows of Resources	24,777,681	-	-	-	-	24,777,681	11,834,368

The accompanying notes are an integral part of the financial statements

CONNECTICUT GREEN BANK
CONSOLIDATING STATEMENT OF NET POSITION (CONTINUED)
JUNE 30, 2018
(with summarized totals for the year ended June 30, 2017)

		Discretely Presented Component Units					
	Total Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	CT Solar Lease 3 LLC	Eliminating Entries	2018 Total Reporting Entity	2017 Total Reporting Entity
Liabilities and Net Position							
Liabilities							
Current maturities of long-term debt	$ 317,879	$ 434,824	$ 94,788	$	$	$ 847,491	$ 2,647,159
Accounts payable and accrued expenses	5,953,047	550,620	25,532	35,954	(21,075)	6,544,078	8,660,946
Due to component units	499,817	10,486,561	36,260,451	2,029,800	(49,276,629)	-	-
Line of credit	1,000,000					1,000,000	-
Custodial liability	1,893,526					1,893,526	1,844,791
Unearned revenue	2,190,310	822,622		131,286		3,144,218	871,714
Total current liabilities	11,854,579	12,294,627	36,380,771	2,197,040	(49,297,704)	13,429,313	14,024,610
Asset retirement obligation		3,087,868		571,125		3,658,993	3,020,405
Long-term debt, less current maturities	13,650,816	23,230,643	1,650,934			38,532,393	29,736,999
Fair value of interest rate swap						-	540,877
Pension liability	24,636,114					24,636,114	25,245,439
OPEB liability	24,875,889					24,875,889	23,803,688
Payable to State of Connecticut	14,000,000					14,000,000	-
Total liabilities	89,017,398	38,613,138	38,031,705	2,768,165	(49,297,704)	119,132,702	96,372,018
Deferred Inflows of Resources							
Deferred amount for pensions	47,042					47,042	
Deferred amount for OPEB	624,950					624,950	-
Total deferred inflows of resources	671,992	-	-	-	-	671,992	-
Net Position							
Invested in capital assets	963,469	1,347,368		111,852	(171,983)	2,250,706	1,387,893
Restricted Net Position:							
Nonexpendable	95,745	62,208,324		13,369,938	(9,177,703)	66,496,304	55,975,002
Restricted for energy programs	19,205,056	45,113				19,250,169	16,843,634
Unrestricted (deficit)	59,206,810	(24,203,415)	559,958	(4,076,898)	(30,104,943)	1,381,512	32,509,427
Total Net Position	$ 79,471,080	$ 39,397,390	$ 559,958	$ 9,404,892	$ (39,454,629)	$ 89,378,691	$ 106,715,956

The accompanying notes are an integral part of the financial statements

CONNECTICUT GREEN BANK
CONSOLIDATING STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN NET POSITION
FOR THE YEAR ENDED JUNE 30, 2018
(with summarized totals for the year ended June 30, 2017)

		Discretely Presented Component Units					
	Total Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	CT Solar Lease 3 LLC	Eliminations	2018 Total Reporting Entity	2017 Total Reporting Entity
Operating Revenues							
Utility remittances	$ 25,943,182	$	$	$	$	$ 25,943,182	$ 26,404,349
Grant revenue	81,952					81,952	98,486
RGGI auction proceeds	1,250,260					1,250,260	2,392,647
Energy system sales	13,559,517				(10,777,111)	2,782,406	-
REC sales	2,827,682	700,015		131,823		3,659,520	2,570,647
Other income	818,614	3,136,213	132,458	211,991	(1,134,940)	3,164,336	2,500,419
Total operating revenues	44,481,207	3,836,228	132,458	343,814	(11,912,051)	36,881,656	33,966,548
Operating Expenses							
Cost of goods sold - energy systems	12,979,629				(9,981,831)	2,997,798	-
Grants and incentive programs	18,932,920				(1,002,483)	17,930,437	17,084,211
Program administration expenses	13,206,508	4,083,177	61,520	354,566	(325,934)	17,379,837	16,824,382
General and administrative expenses	5,431,801	288,724	4,601	37,332	(132,457)	5,630,001	5,725,394
Total operating expenses	50,550,858	4,371,901	66,121	391,898	(11,442,705)	43,938,073	39,633,987
Operating Income (Loss)	(6,069,651)	(535,673)	66,337	(48,084)	(469,346)	(7,056,417)	(5,667,439)
Nonoperating Revenue (Expenses)							
Interest income - promissory notes	3,291,701	1,637				3,293,338	2,921,710
Interest income - short-term cash deposits	311,730	21,904	4,827	15		338,476	223,298
Interest expense long-term debt	(172,817)	(1,171,323)	(44,729)			(1,388,869)	(1,222,384)
Interest income - component units	62,981		46,958		(109,939)	-	-
Interest expense - component units		(109,939)			109,939	-	-
Payments to State of Connecticut	(14,000,000)					(14,000,000)	-
Distributions to member		(509,564)		(30,607)		(540,171)	(436,452)
Realized and unrealized gain (loss) on investments	(510,207)					(510,207)	(1,093,972)
Unrealized gain (loss) on interest rate swap		712,355				712,355	1,086,987
Provision for loan losses	(361,711)					(361,711)	(956,489)
Total nonoperating revenue (expenses)	(11,378,323)	(1,054,930)	7,056	(30,592)	-	(12,456,789)	522,698
Change in Net Position before Capital Contributions	(17,447,974)	(1,590,603)	73,393	(78,676)	(469,346)	(19,513,206)	(5,144,741)
Capital contributions		114,755		9,483,568	(7,422,382)	2,175,941	6,445,790
Change in Net Position	(17,447,974)	(1,475,848)	73,393	9,404,892	(7,891,728)	(17,337,265)	1,301,049
Net Position - Beginning of Year, as Restated	96,919,054	40,873,238	486,565	-	(31,562,901)	106,715,956	105,414,907
Net Position - End of Year	$ 79,471,080	$ 39,397,390	$ 559,958	$ 9,404,892	$ (39,454,629)	$ 89,378,691	$ 106,715,956

The accompanying notes are an integral part of the financial statements

CONNECTICUT GREEN BANK
CONSOLIDATING STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED JUNE 30, 2018
(with summarized totals for the year ended June 30, 2017)

		Discretely Presented Component Units					
	Total Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	CT Solar Lease 3 LLC	Eliminating Entries	2018 Total Reporting Entity	2017 Total Reporting Entity
Cash Flows from Operating Activities							
Sales of energy systems	$ 12,221,027	$	$	$	$ (10,856,621)	$ 1,364,406	$ 522,362
Sales of Renewable Energy Credits	2,811,399	722,728				3,534,127	2,515,088
Utility company remittances	26,073,775					26,073,775	26,567,324
Grants	1,587,595					1,587,595	99,949
RGGI auction proceeds	965,534					965,534	3,560,543
Other income	831,973	1,795,223	33,114	268,029	(1,641,290)	1,287,049	2,029,596
Lease payments received		1,397,663				1,397,663	1,295,956
Program administrative expenses	(10,778,794)	(970,697)	(61,520)	(120,242)		(11,931,253)	(15,336,729)
Grants, incentives and credit enhancements	(20,920,492)				1,010,530	(19,909,962)	(10,842,910)
Purchases of energy equipment	(5,074,498)				1,418,000	(3,656,498)	(16,907,742)
General and administrative expenditures	(5,257,756)	(222,248)	(4,750)	(258,463)	630,760	(5,112,457)	(3,134,036)
Net cash provided by (used in) operating activities	2,459,763	2,722,669	(33,156)	(110,676)	(9,438,621)	(4,400,021)	(9,630,599)
Cash Flows from Noncapital Financing Activities							
Payments to State of Connecticut	(14,000,000)					(14,000,000)	-
Funds received (disbursed) from escrow and custodial accounts	(120,228)	(67,312)		6,189		(181,351)	(564,964)
Advances to CGB component units	(3,110,933)				3,110,933	-	-
Advances repaid (disbursed) to third party capital providers	(126,729)					(126,729)	90,908
Advances from CGB and component units		10,933	3,100,000		(3,110,933)	-	-
Repayments of advances (to) from component units	235,065	(3,332,710)	3,097,645			-	-
Net cash provided by (used in) noncapital financing activities	(17,122,825)	(3,389,089)	6,197,645	6,189	-	(14,308,080)	(474,056)
Cash Flows from Capital and Related Financing Activities							
Purchase of capital assets	(3,932,367)			(9,438,621)	9,438,621	(3,932,367)	(105,149)
Proceeds from long-term debt	10,101,729					10,101,729	14,354,411
Repayment of long-term debt	(568,973)	(1,442,241)	(86,891)			(2,098,105)	(2,331,844)
Interest expense	(170,873)	(1,125,075)	(23,947)			(1,319,895)	(1,110,543)
Capital contributions from (to) component entities			(7,422,382)	7,422,382		-	-
Capital contributions from Firstar Development, LLC		114,755		2,374,799		2,489,554	6,445,790
Return of capital to Firstar Development, LLC		(506,250)		(18,765)		(525,015)	(412,606)
Net cash provided by (used in) capital and related financing activities	5,429,516	(2,958,811)	(7,533,220)	339,795	9,438,621	4,715,901	16,840,059
Cash Flows from Investing Activities							
Gains and losses on investments	(8,787)					(8,787)	-
Loan losses	31,238					31,238	(20,277)
Return of principal on WC & program loans	6,664,612					6,664,612	9,531,886
Interest on short-term investments, cash, solar lease notes and loans	2,397,101	23,511	4,827	15		2,425,454	2,745,337
CPACE program loan disbursements	(5,932,692)					(5,932,692)	(5,602,984)
Grid Tied program loan disbursements	(829,349)					(829,349)	(319,471)
AD/CHP program loan disbursements						-	(1,997,403)
Alpha/Operational Demo program loan disbursements						-	(15,000)
Energy Efficiency program loan disbursements						-	(130,000)
Residential Solar Loan program disbursements	(3,371,678)					(3,371,678)	(9,537,847)
Net cash provided by (used in) investing activities	(1,049,555)	23,511	4,827	15	-	(1,021,202)	(5,345,759)
Net Increase (Decrease) in Cash and Cash Equivalents	(10,283,101)	(3,601,720)	(1,363,904)	235,323	-	(15,013,402)	1,389,645
Cash and Cash Equivalents - Beginning of Year	47,265,722	9,969,389	1,975,578	1,000	-	59,211,689	57,822,044
Cash and Cash Equivalents - End of Year	$ 36,982,621	$ 6,367,669	$ 611,674	$ 236,323	$ -	$ 44,198,287	$ 59,211,689
Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used in) Operating Activities:							
Operating income (loss)	$ (6,069,651)	$ (535,673)	$ 66,337	$ (48,084)	$ (469,346)	$ (7,056,417)	$ (5,667,439)
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:							
Depreciation	216,609	2,478,364		282,235		2,977,208	2,424,130
Accretion		146,098		32,444		178,542	(273,633)
Deferred lease revenue		(49,092)		131,286		82,194	-
Pension expense adjustment	637,154					637,154	1,746,587
OPEB expense adjustment	1,554,401					1,554,401	-
Changes in operating assets and liabilities:							
(Increase) decrease in operating assets	5,686,275	611,537	(99,343)	(208,812)	1,991,796	7,981,453	(8,817,536)
(Decrease) increase in operating liabilities	434,975	71,435	(150)	(299,745)	(10,961,071)	(10,754,556)	957,292
Net Cash Provided by (Used in) Operating Activities	$ 2,459,763	$ 2,722,669	$ (33,156)	$ (110,676)	$ (9,438,621)	$ (4,400,021)	$ (9,630,599)

The accompanying notes are an integral part of the financial statements

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

The Connecticut Green Bank (the Green Bank) was established in July 2011 under Title 16, Sec. 16-245n of the General Statutes of the State of Connecticut as the successor entity of the Connecticut Clean Energy Fund. The Green Bank, a component unit of the State of Connecticut, was created to promote energy efficiency and investment in renewable energy sources in accordance with a comprehensive plan developed by it to foster the growth, development and commercialization of renewable energy sources and related enterprises and stimulate demand for renewable energy and deployment of renewable energy sources which serve end-use customers in the State. The Green Bank constitutes the successor agency to Connecticut Innovations Incorporated (CI), a quasi-public agency of the State of Connecticut, for the purposes of administering the Clean Energy Fund in accordance with section 4-38d of the Connecticut General Statutes and therefore the net position of such fund was transferred to the newly created Green Bank as of July 1, 2011.

On June 6, 2014, Public Act 14-94 of the State of Connecticut changed the name of the Clean Energy Finance and Investment Authority to the Connecticut Green Bank.

Prior Period Summarized Financial Information

The basic financial statements include certain prior year summarized comparative information in total but not at the level of detail required for a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the Green Bank's financial statements for the year ended June 30, 2017, from which the summarized information was derived.

Principal Revenue Sources

The Public Utility Regulatory Authority (PURA) assesses a charge per kilowatt-hour to each end-use customer of electric services provided by utility companies (excluding municipally owned entities) in the state, which is paid to the Green Bank and is the principal source of the Green Bank's revenue. The Green Bank may deploy the funds for loans, direct or equity investments, contracts, grants or other actions that support energy efficiency projects and research, development, manufacture, commercialization, deployment and installation of renewable energy technologies.

The Green Bank also receives a portion, currently 23%, of proceeds the State of Connecticut receives from quarterly Regional Greenhouse Gas Initiative (RGGI) auctions. These proceeds finance energy efficiency and renewable energy projects through the Green Bank's CPACE program. The Green Bank also earns both interest income and revenue from the sale of Solar Renewable Energy Credits (SREC's) generated by facilities it has financed.

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Reporting Entity

The Green Bank, as the primary government, follows the reporting requirements of Governmental Accounting Standards Board (GASB) Statement No. 61 (*The Financial Reporting Entity Omnibus - an Amendment of GASB Statements No. 14 and No. 34*) (the Statement) regarding presentation of component units. The Statement modifies certain requirements for including component units in the reporting entity, either by blending (recording their amounts as part of the primary government), or discretely presenting them (showing their amounts separately in the reporting entity's financial statements). To qualify as a blended component unit, the unit must meet one of the following criteria: 1) have substantively the same governing body as that of the primary government, and either (A) a financial benefit or burden relationship exists between the unit and the primary government, or (B) management of the primary government (below the level of the governing body) has operational responsibility of the unit; 2) the unit provides services or benefits exclusively or almost exclusively to the primary government; or 3) the unit's total debt outstanding, including leases, is expected to be repaid by resources of the primary government. A unit which fails to meet the substantively the same governing requirement may still be included as a discretely presented component unit, if the primary government has appointed the voting majority of the component unit's governance or met other criteria specified in the Statement such as whether or not it would be misleading were the entity to be excluded.

The Green Bank, as of June 30, 2018, has established six legally separate for-profit entities whose collective purpose is to administer the Green Bank's solar energy programs. The Green Bank believes to exclude any of the entities from these financial statements would be misleading. Each entity is listed below, along with whether it is included as a blended component unit (blended) or qualifies as a discretely presented component unit (discrete) within these financial statements based on the criteria previously described.

CEFIA Holdings LLC (blended)

A Connecticut limited liability company (LLC), 99% owned by the Green Bank (1% owned by CI), established to acquire and develop a portfolio of commercial and residential solar facilities and, through its CT Solar Lease 2 program, to enable investment in solar photovoltaic equipment for the benefit of Connecticut homeowners, businesses, not-for-profits and municipalities (the End Users). CEFIA Holdings LLC acquires the initial title to the solar assets and contracts with independent solar installers to complete the installation of the solar assets and arrange for the leasing of the solar assets (or sale of energy under power purchase agreements) to the End Users. CEFIA Holdings LLC is also responsible for procuring insurance for the solar assets, operation and maintenance services as well as warranty management services for the ultimate owner of the solar assets, CT Solar Lease 2 LLC or CT Solar Lease 3 LLC, to which CEFIA Holdings LLC sells the residential and commercial projects before the projects are placed in service. After acquiring the residential and commercial projects, CT Solar Lease 2 LLC or CT Solar Lease 3 LLC administers the portfolio of projects with the assistance of Renew Financial Corporation. The Green Bank's Board of Directors acts as the governing authority of CEFIA Holdings LLC. The Green Bank appoints its employees to manage the operations of CEFIA Holdings LLC. The Green Bank is also financially responsible (benefit/burden) for CEFIA Holdings LLC's activities.

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CT Solar Loan I LLC (blended)

A limited liability company, wholly owned by CEFIA Holdings LLC, CT Solar Loan I LLC was established to make loans to residential property owners for the purpose of purchasing and installing solar photovoltaic equipment. The Green Bank's Board of Directors acts as the governing authority of CT Solar Loan I LLC. The Green Bank appoints its employees to manage the operations of CT Solar Loan I LLC. The Green Bank is also financially responsible (benefit/burden) for CT Solar Loan I LLC's activities.

CEFIA Solar Services, Inc. (discrete)

A Connecticut corporation, 100% owned by CEFIA Holdings LLC, established to share in the ownership risks and benefits derived from the leasing of solar photovoltaic and the sale of energy under power purchase agreements as managing member of CT Solar Lease 2 LLC and CT Solar Lease 3 LLC. CEFIA Solar Services, Inc. (Solar Services) has a one percent ownership interest in CT Solar Lease 2 LLC and CT Solar Lease 3 and is its managing member. Solar Services is responsible for performing all management and operational functions pursuant to the Operating Agreement of CT Solar Lease 2 LLC and of CT Solar Lease 3 LLC. The Green Bank through CEFIA Holdings LLC directly appoints the Board of Directors of Solar Services. The Board of Directors is comprised exclusively of Green Bank employees. The primary government's intent for owning a controlling interest in Solar Services is to enhance its ability to offer financing options to commercial entities and residents of Connecticut wishing to install renewable energy equipment. The Green Bank believes that to exclude Solar Services from these financial statements would be misleading.

CT Solar Lease 2 LLC (discrete)

A Connecticut limited liability company, CT Solar Lease 2 LLC acquires title to the residential and commercial solar projects from the developer, CEFIA Holdings LLC, using capital from its members along with non-recourse funding from participating banks. Repayment to participating banks is predicated upon the property owners' payment to CT Solar Lease 2 LLC of their obligations under leases and power purchase agreements, as well as revenue earned from production-based incentives. CT Solar Lease 2 LLC is owned ninety-nine percent (99%) by Firstar Development, LLC, a Delaware limited liability company, as the Investor Member and one percent (1%) by CEFIA Solar Services, Inc., as the Managing Member. The primary government's intent to provide management services through Solar Services is to directly enhance its ability to provide financing options to commercial entities and residents of Connecticut wishing to install renewable energy equipment. Although the Green Bank has a minority membership interest in CT Solar Lease 2 LLC, the Green Bank believes that to exclude it from these financial statements would be misleading.

As of June 30, 2017, CT Solar Lease 2 LLC has completed its acquisition of residential and commercial solar projects from the developer. All projects have been placed in service and are generating revenue. CT Solar Lease 2 LLC has also received all capital contributions required under its Operating Agreement from its members.

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CT Solar Lease 3 LLC (discrete)

A Connecticut limited liability company, CT Solar Lease 3 LLC acquires title to commercial solar projects from the developer, CEFIA Holdings LLC, using capital from its members. CT Solar Lease 3 LLC's primary sources of revenue will be from the sale of electricity generated by its solar PV facilities to property owners through power purchase agreements and the sale of RECs generated from facility electrical production to third parties. CT Solar Lease 3 LLC is owned ninety-nine percent (99%) by Firstar Development, LLC, a Delaware limited liability company, as the Investor Member and one percent (1%) by CEFIA Solar Services Inc., as the Managing Member. The primary government's intent to provide management services through Solar Services is to directly enhance its ability to provide financing options to commercial entities and residents of Connecticut wishing to install renewable energy equipment. Although the Green Bank has a minority membership interest in CT Solar Lease 3 LLC, the Green Bank believes that to exclude it from these financial statements would be misleading.

CGB Meriden Hydro LLC (blended)

On August 31, 2017, the Green Bank, through its wholly owned component unit, CGB Meriden Hydro LLC (CGB Meriden), purchased a 195 kW hydroelectric facility located in Meriden, Connecticut, from the facility's developer, Hanover Pond Hydro LLC (Hanover Pond), pursuant to a sale and leaseback agreement dated January 1, 2017 for $3,911,706. The Green Bank utilized the proceeds of the Clean Energy Renewable Bond (CREB), $2,957,971 issued in fiscal year 2017, to finance a portion of the total purchase price.

Hanover Pond remits to CGB Meriden a monthly lease payment equal to the monthly payment made by the City of Meriden to Hanover Pond for the purchase of electricity generated by the hydroelectric facility under a power purchase agreement dated August 14, 2014, as amended. This lease commenced on the date commercial operations began and terminates on the 30th anniversary of said date. Commercial operations began on March 7, 2017. In addition to revenues earned through its lease with Hanover Pond, CGB Meriden also receives revenues from the sale of renewable energy credits generated by the facility and sold to the local utility company under a sale and purchase contract dated July 31, 2014 which was assigned to CGB Meriden on September 18, 2017.

Advances between the primary government (the Green Bank) and its component units, or between the component units themselves, involved establishment of funds to provide for loan loss reserves as well as pay certain organizational costs. Advances were eliminated in preparing the combining and reporting entity financial statements.

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Condensed combining information for the primary government (The Green Bank) and its three blended component units (CGB Meriden Hydro LLC, CT Solar Loan I LLC and CEFIA Holdings LLC) is presented as of June 30, 2018 as follows:

Condensed, Combining Information - Statement of Net Position

	CGB	CGB Meriden Hydro LLC	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Assets						
Current Assets						
Cash and cash equivalents	$ 11,029,137	$ 5,204	$ 339,337	$ 5,752,059	$	$ 17,125,737
Accounts receivable	948,766		1,062	46,521		996,349
Utility remittance receivable	2,377,065					2,377,065
Other receivables	966,491			60,387		1,026,878
Due from component units	41,113,226			7,322,926	(7,534,487)	40,901,665
Prepaid expenses and other assets	710,739	63,518	14,791	634,694		1,423,742
Current portion of solar lease notes	908,541					908,541
Current portion of program loans	1,978,189		160,323			2,138,512
Total current assets	60,032,154	68,722	515,513	13,816,587	(7,534,487)	66,898,489
Noncurrent Assets						
Portfolio investments	1					1
Fair value of interest rate swap						
Bonds receivable	3,328,530					3,328,530
Solar lease notes, less current portion	6,358,184					6,358,184
Program loans, less current portion	40,953,025		2,571,996			43,525,021
Renewable energy credits	547,556					547,556
Investment in component units	99,100			100	(99,100)	100
Capital assets, net of depreciation and amortization	75,842	3,792,182				3,868,024
Asset retirement obligation, net						
Restricted assets:						
Cash and cash equivalents	19,555,821		301,063			19,856,884
Total noncurrent assets	70,918,059	3,792,182	2,873,059	100	(99,100)	77,484,300
Total Assets	130,950,213	3,860,904	3,388,572	13,816,687	(7,633,587)	144,382,789
Deferred Outflows of Resources						
Deferred amount for pensions	8,778,670					8,778,670
Deferred amount for OPEB	1,999,011					1,999,011
Deferred payments to State of Connecticut	14,000,000					14,000,000
Total Deferred Outflows of Resources	24,777,681	-	-	-	-	24,777,681

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Condensed, Combining Information - Statement of Net Position (Continued)

	CGB	CGB Meriden Hydro LLC	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Liabilities and Net Position						
Liabilities						
Current maturities of long-term debt	$ 106,223	$	$ 211,656	$	$	$ 317,879
Accounts payable and accrued expenses	5,940,221	158	2,483	10,185		5,953,047
Due to component units	499,817	4,016,987	1,217,500	2,300,000	(7,534,487)	499,817
Line of credit	1,000,000					1,000,000
Custodial liability	651,826			1,241,700		1,893,526
Unearned revenue	1,500,000			690,310		2,190,310
Total current liabilities	9,698,087	4,017,145	1,431,639	4,242,195	(7,534,487)	11,854,579
Asset retirement obligation						
Long-term debt, less current maturities	11,900,060		1,750,756			13,650,816
Fair value of interest rate swap						
Pension liability	24,636,114					24,636,114
OPEB liability	24,875,889					24,875,889
Payable to State of Connecticut	14,000,000					14,000,000
Total liabilities	85,110,150	4,017,145	3,182,395	4,242,195	(7,534,487)	89,017,398
Deferred Inflows of Resources						
Deferred amount for pensions	47,042					47,042
Deferred amount for OPEB	624,950					624,950
Total deferred inflows of resources	671,992	-	-	-	-	671,992
Net Position						
Invested in capital assets	75,842	887,627				963,469
Restricted Net Position:						
Nonexpendable				95,745		95,745
Restricted for energy programs	18,903,993		301,063			19,205,056
Unrestricted (deficit)	50,965,917	(1,043,868)	(94,886)	9,478,747	(99,100)	59,206,810
Total Net Position	$ 69,945,752	$ (156,241)	$ 206,177	$ 9,574,492	$ (99,100)	$ 79,471,080

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Condensed, Combining Information - Statement of Revenues, Expenses and Changes in Net Position

	CGB	CGB Meriden Hydro LLC	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Operating Revenues						
Utility remittances	$ 25,943,182	$	$	$	$	$ 25,943,182
Grant revenue	81,952					81,952
RGGI auction proceeds	1,250,260					1,250,260
Energy system sales				13,559,517		13,559,517
REC sales	2,827,682					2,827,682
Other income	583,282	235,000	332			818,614
Total operating revenues	30,686,358	235,000	332	13,559,517	-	44,481,207
Operating Expenses						
Cost of goods sold - energy systems				12,979,629		12,979,629
Grants and incentive programs	18,932,920					18,932,920
Program administration expenses	12,672,232	385,804	21,910	126,562		13,206,508
General and administrative expenses	5,412,094	5,437	6,071	8,199		5,431,801
Total operating expenses	37,017,246	391,241	27,981	13,114,390	-	50,550,858
Operating Income (Loss)	(6,330,888)	(156,241)	(27,649)	445,127		(6,069,651)
Nonoperating Revenue (Expenses)						
Interest income - promissory notes	3,090,670		201,031			3,291,701
Interest income - short-term cash deposits	294,337		131	17,262		311,730
Interest expense long-term debt	(37,936)		(134,881)			(172,817)
Interest income - component units	62,981					62,981
Interest expense - component units						
Payments to State of Connecticut	(14,000,000)					(14,000,000)
Distributions to member						
Realized and unrealized gain (loss) on investments	(510,207)					(510,207)
Unrealized gain (loss) on interest rate swap						
Provision for loan losses	(361,711)					(361,711)
Total nonoperating revenue (expenses)	(11,461,866)	-	66,281	17,262	-	(11,378,323)
Change in Net Position before Capital Contributions	(17,792,754)	(156,241)	38,632	462,389		(17,447,974)
Capital contributions						
Change in Net Position	(17,792,754)	(156,241)	38,632	462,389	-	(17,447,974)
Net Position - Beginning of Year, as Restated	87,738,506		167,545	9,112,103	(99,100)	96,919,054
Net Position - End of Year	$ 69,945,752	$ (156,241)	$ 206,177	$ 9,574,492	$ (99,100)	$ 79,471,080

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Condensed, Combining Information - Statement of Cash Flows

	CGB	CGB Meriden Hydro LLC	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Cash Flows from Operating Activities						
Sales of energy systems	$	$	$	$ 12,221,027	$	$ 12,221,027
Sales of Renewable Energy Credits	2,811,399					2,811,399
Utility company remittances	26,073,775					26,073,775
Grants	1,587,595					1,587,595
RGGI auction proceeds	965,534					965,534
Other income	596,641	235,000	332			831,973
Lease payments received						
Program administrative expenses	(10,292,862)	(329,798)	(24,072)	(132,062)		(10,778,794)
Grants, incentives and credit enhancements	(20,920,492)					(20,920,492)
Purchases of energy equipment				(5,074,498)		(5,074,498)
General and administrative expenditures	(5,238,256)	(5,190)	(6,092)	(8,218)		(5,257,756)
Net cash provided by (used in) operating activities	(4,416,666)	(99,988)	(29,832)	7,006,249	-	2,459,763
Cash Flows from Noncapital Financing Activities						
Payments to State of Connecticut	(14,000,000)					(14,000,000)
Funds received (disbursed) from escrow and custodial accounts	(117,655)			(2,573)		(120,228)
Advances to CGB component units	(7,127,020)				4,016,087	(3,110,933)
Advances repaid (disbursed) to third party capital providers	(66,342)			(60,387)		(126,729)
Advances from CGB and component units		4,016,087			(4,016,087)	
Repayments of advances (to) from component units	11,155,409		(2,855,000)	(8,065,344)		235,065
Net cash provided by (used in) noncapital financing activities	(10,155,608)	4,016,087	(2,855,000)	(8,128,304)	-	(17,122,825)
Cash Flows from Capital and Related Financing Activities						
Purchase of capital assets	(20,661)	(3,911,706)				(3,932,367)
Proceeds from long-term debt	10,101,729					10,101,729
Repayment of long-term debt	(53,418)		(515,555)			(568,973)
Interest expense	(35,992)		(134,881)			(170,873)
Capital contributions from (to) component entities						
Capital contributions from Firstar Development, LLC						
Return of capital to Firstar Development, LLC						
Net cash provided by (used in) capital and related financing activities	9,991,658	(3,911,706)	(650,436)	-	-	5,429,516
Cash Flows from Investing Activities						
Gains and losses on investments	(8,787)					(8,787)
Loan losses	31,238					31,238
Return of principal on WC & program loans	5,874,539		790,073			6,664,612
Interest on short-term investments, cash, solar lease notes and loans	2,376,872		2,967	17,262		2,397,101
CPACE program loan disbursements	(5,932,692)					(5,932,692)
Grid Tied program loan disbursements	(829,349)					(829,349)
AD/CHP program loan disbursements						
Alpha/Operational Demo program loan disbursements						
Energy Efficiency program loan disbursements						
Residential Solar Loan program disbursements	(3,371,678)					(3,371,678)
Net cash provided by (used in) investing activities	(1,859,857)	-	793,040	17,262	-	(1,049,555)
Net Increase (Decrease) in Cash and Cash Equivalents	(6,440,473)	4,393	(2,742,228)	(1,104,793)	-	(10,283,101)
Cash and Cash Equivalents - Beginning of Year	37,025,431	811	3,382,628	6,856,852	-	47,265,722
Cash and Cash Equivalents - End of Year	$ 30,584,958	$ 5,204	$ 640,400	$ 5,752,059	$ -	$ 36,982,621
Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used in) Operating Activities:						
Operating income (loss)	$ (6,330,888)	$ (156,241)	$ (27,649)	$ 445,127	$	$ (6,069,651)
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:						
Depreciation	97,085	119,524				216,609
Accretion						
Deferred lease revenue						
Pension expense adjustment	637,154					637,154
OPEB expense adjustment	1,554,401					1,554,401
Changes in operating assets and liabilities:						
(Increase) decrease in operating assets	(29,670)	(63,429)		5,779,374		5,686,275
(Decrease) increase in operating liabilities	(344,748)	158	(2,183)	781,748		434,975
Net Cash Provided by (Used in) Operating Activities	$ (4,416,666)	$ (99,988)	$ (29,832)	$ 7,006,249	$ -	$ 2,459,763

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Measurement Focus, Basis of Accounting and Financial Statement Presentation

All entities are enterprise funds. Enterprise funds are used to account for governmental activities that are similar to those found in the private sector in which the determination of net income is necessary or useful to sound financial administration.

Basis of Presentation

These financial statements are reported using the economic resources measurement focus and accrual basis of accounting. Revenues are recognized when earned, and expenses are recognized when the liability is incurred, regardless of the timing of the related cash flows.

Revenue Recognition

The Green Bank, in addition to utility assessments and RGGI auction income, recognizes revenue from grants as expenses are incurred.

CT Solar Loan I LLC derives revenue from interest earned on residential solar loan products.

CEFIA Holdings LLC derives revenue from the sales of photovoltaic energy systems to CT Solar Lease 2, LLC. This amount was eliminated to arrive at the total reporting entity revenue.

CEFIA Solar Services, Inc. revenue consists of an administrative fee from CT Solar Lease 2 LLC. This amount was eliminated to arrive at the total reporting entity revenue.

CT Solar Lease 2 LLC derives revenue from the following sources: operating leases, energy generation, performance based incentives (PBIs) and the sale of Solar Renewable Energy Certificates (SRECs) to third parties.

CT Solar Lease 3 LLC derives revenue from the following sources: energy generation and the sale of Solar Renewable Energy Certificates (SRECs) to third parties.

CGB Meriden Hydro derives revenue from the following sources: energy generation and the sale of Solar Renewable Energy Certificates (SRECs) to third parties.

Rental income from operating leases for residential and certain commercial scale solar facilities is recognized on a straight-line basis over the term of each underlying lease.

Energy generation revenue will be recognized as electricity is generated, based on actual output and contractual prices set forth in long term PPAs associated with certain commercial scale facilities.

Revenue from the sale of SRECs and SHRECs to third parties is recognized upon the transfer of title and delivery of the SRECs to third parties and is derived from contractual prices set forth in SREC sale agreements associated with commercial scale facilities.

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Operating vs. Nonoperating Revenue (Expense)

All entities distinguish operating revenues and expenses from nonoperating items. Operating revenues consist of utility customer assessments, grants for operating activities, and other revenue generated in connection with investments in clean energy programs. Operating expenses consist of operating costs, including depreciation on capital assets and grants and programs. Nonoperating revenue (expense) consists of investment earnings, and other items not considered operational by management.

Use of Estimates

Management uses estimates and assumptions in preparing these financial statements in accordance with accounting principles generally accepted in the United States of America. Those estimates and assumptions affect certain reported amounts and disclosures in the financial statements. Actual results could vary from the estimates that were used.

Use of Restricted vs. Nonrestricted Resources

When both restricted and unrestricted amounts are available for use, the policy is to use restricted resources for their intended purposes first and then unrestricted resources.

Cash and Cash Equivalents

Cash equivalents consist of cash and highly liquid short-term investments with an original term of 90 days when purchased and are recorded at cost, which approximates fair value.

Capital Assets

Capital asset acquisitions exceeding $1,000 are capitalized at cost. Maintenance and repair expenses are charged to operations when incurred. Depreciation is computed using straight-line methods over the estimated useful lives of the assets, which range from two to thirty years. Leasehold improvements are amortized over the shorter of their useful life or the lease term.

The estimated useful lives of capital assets are as follows:

Asset	Years
Solar lease equipment	30 years
Furniture and equipment	5 years
Leasehold improvements	5 years
Computer hardware and software	2-3 years

For capital assets sold or otherwise disposed of, the cost and related accumulated depreciation and amortization are removed from the accounts, and any related gain or loss is reflected in income for the period.

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

All solar facilities are owned by CT Solar Lease 2 LLC and CT Solar Lease 3 LLC and are stated at cost and include all amounts necessary to construct them. Systems are placed in service when they are ready for use and all necessary approvals have been received from local utility companies. Additions, renewals, and betterments that significantly extend the life of an asset are capitalized. Expenditures for warranty maintenance and repairs to solar facilities are charged to expense as incurred. Solar facilities in process represent facilities which are in various stages of construction or have not yet received the necessary utility company approvals.

Deferred Outflows/Inflows of Resources

In addition to assets, the consolidating statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period or periods and so will not be recognized as an outflow of resources (expense) until then. The Green Bank reports deferred outflows related to pension and OPEB in the statement of net position which result from differences between expected and actual experience, changes in assumptions or other inputs, and contributions after the measurement date. These amounts are deferred and included in pension expense and OPEB expense in a systematic and rational manner over a period equal to the average of the expected remaining service lives of all employees that are provided with benefits.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position or fund balance that applies to a future period or periods and so will not be recognized as an inflow of resources (revenue) until that time. The Green Bank reports deferred inflows of resources related to pensions and OPEB in the consolidated statement of net position which result from differences between expected and actual experience, changes in assumptions or other inputs. These amounts are deferred and included in pension and OPEB expense in a systematic and rational manner over a period equal to the average of the expected remaining service lives of all employees that are provided with benefits.

Impairment of Long-Lived Assets

CT Solar Lease 2 LLC (CT SL2) and CT Solar Lease 3 LLC (CT SL3) review their solar facilities for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. When recovery is reviewed, if the undiscounted cash flows estimated to be generated by an asset is less than its carrying amount, management compares the carrying amount of the asset to its fair value in order to determine whether an impairment loss has occurred. The amount of the impairment loss is equal to the excess of the asset's carrying value over its estimated fair value. No impairment loss was recognized by CT SL2 or CT SL3 during the fiscal year ending June 30, 2018.

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Asset Retirement Obligations

CT SL2 and CT SL3 are required to recognize their liability related to asset retirement obligations when they have the legal obligation to retire long-lived assets. Upon the expiration of operating leases or a Power Purchase Agreement's (PPA's) initial or extended terms, customers generally have the option to purchase the solar facilities at fair market value or require CT SL2 or CT SL3 to remove the solar facilities at their expense.

Asset retirement obligations are recorded in the period in which they are incurred and reasonably estimable, including those obligations for which the timing method of settlement are conditional on a future event that may or may not be in the control of CT SL2 or CT SL3. Retirement of assets may involve efforts to remove the solar facilities depending on the nature and location of the assets. In identifying asset retirement obligations, CT SL2 and CT SL3 consider identification of legally enforceable obligations, changes in existing law, estimates of potential settlement dates, and the calculation of an appropriate discount rate to be used in calculating the fair value of the obligations. For those assets where a range of potential settlement dates may be reasonably estimated, obligations are recorded. CT SL2 and CT SL3 routinely review and reassess their estimates to determine if an adjustment to the value of asset retirement obligations is required.

The aggregate carrying amount of asset retirement obligations recognized by CT SL2 and CT SL3 was $3,658,993 and $3,020,405 at June 30, 2018 and June 30, 2017 respectively. The following table shows changes in the aggregate carrying amount of CT SL2 and CT SL3's asset retirement obligation for the year ended June 30, 2018:

Balance - June 30, 2017	$	3,020,405
Additional accruals		558,480
Accretion expense		80,108
Balance - June 30, 2018	$	3,658,993

Pension Accounting

The Green Bank's proportionate share of the net pension liability and expense associated with the Green Bank's requirement to contribute to the Connecticut State Employees Retirement System (SERS) have been determined on the same basis as they are reported by SERS. Contributions made to SERS after the measurement date and prior to the Green Bank's fiscal year are reported as deferred outflows of resources.

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

OPEB Accounting

The Green Bank's proportionate share of the net OPEB liability and expense associated with the Green Bank's requirement to contribute to the State of Connecticut Other Post-Employment Benefits Program have been determined on the same basis as they are reported by State of Connecticut Other Post-Employment Benefits Program. Contributions made to the State of Connecticut Other Post-Employment Benefits Program after the measurement date and prior to the Green Bank's fiscal year are reported as deferred outflows of resources.

Portfolio Investments

The Green Bank carries all investments at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer liability by in an orderly transaction between market participants at the measurement date. As discussed in Note 4, the Green Bank's portfolio investments are managed by CI. Fair value is determined by CI's independent valuation committee (Committee) using United States Private Equity Valuation Guidelines promulgated by the Private Equity Investment Guidelines Group. In the absence of readily determinable market values, the Committee gives consideration to pertinent information about the companies comprising these investments, including, but not limited to, recent sales prices of the issuer's securities, sales growth, progress toward business goals and other operating data. CI has applied procedures in arriving at the estimate of the value of such securities that it believes are reasonable and appropriate. Green Bank management reserves the right to establish a reserve in addition to the reserve recommended by the Committee to further account for current market conditions and volatility. Due to the inherent uncertainty of valuation, those estimated values may differ significantly from the amounts ultimately realized from the investments, and the differences could be material. The Green Bank reports gains as realized and unrealized consistent with the practice of venture capital firms. The calculation of realized gains and losses is independent of the calculation of the net change in investment value.

All of the Green Bank's portfolio investments are uninsured against loss and unregistered, and are held in CI's name since the investments were made when the Green Bank's predecessor, the Connecticut Clean Energy Fund, was administered by CI.

Net Position

Net position is presented in the following three categories:

- *Investment in Capital Assets* represent capital assets, net of accumulated depreciation and amortization that are attributable to those particular assets.

- *Restricted Net Position* represent assets whose use is restricted through external restrictions imposed by creditors, grantors, contributors and the like, or through restrictions imposed by laws or through constitutional provisions or enabling legislature, and includes equity interest within the Green Bank's component units by outside entities.

- *Unrestricted Net Position* represents assets which do not meet the definition of the two preceding categories.

1. NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Grants and Programs

Expenditures for grants and programs are recorded upon the submission of invoices and other supporting documentation and approval by management. Salaries, benefits and overhead expenses are allocated to program expenses based on job functions.

Reclassifications

Certain amounts in the 2017 summarized information have been reclassified to conform to the 2018 presentation.

Subsequent Events

The Green Bank has performed a review of events subsequent to the statement of net position date through October 29, 2018, the date of the financial statements where available to be issued. No additional events requiring recording or disclosure in the financial statements were identified.

2. FAIR VALUE MEASUREMENTS

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements); followed by quoted prices in inactive markets or for similar assets or with observable inputs (Level 2 measurements); and the lowest priority to unobservable inputs (Level 3 measurements). In determining fair value, The Green Bank utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The Green Bank also considers nonperformance risk in the overall assessment of fair value.

Investments are measured at fair value utilizing valuation techniques based on observable and/or unobservable inputs. Observable inputs reflect readily obtainable data from independent sources, while unobservable inputs reflect market assumptions. These inputs are classified into the following hierarchy:

Level 1
Unadjusted quoted prices in active markets that are accessible at the measurement date for identical assets or liabilities.

Level 2
Inputs other than quoted prices in active markets for identical assets and liabilities that are observable either directly or indirectly for substantially the full term of the asset or liability. Level 2 inputs include the following:

- Quoted prices for similar assets or liabilities in active markets
- Quoted prices for identical or similar assets or liabilities in markets that are not active
- Observable inputs other than quoted prices that are used in the valuation of the asset or liability (e.g., interest rate and yield curve quotes at commonly quoted intervals)
- Inputs that are derived principally from or corroborated by observed market data by correlation or other means

2. FAIR VALUE MEASUREMENTS (CONTINUED)

Level 3
Unobservable inputs for the asset or liability (supported by little or no market activity). Level 3 inputs include management's own assumptions about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk).

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following table sets forth by level, within the fair value hierarchy, the Green Bank's fair value measurements at June 30, 2018:

	Investment Assets at Fair Value as of June 30, 2018			
	Level 1	Level 2	Level 3	Total
Portfolio investments	$	$	$ 1	$ 1

The following table sets forth by level, within the fair value hierarchy, the Green Bank's fair value measurements at June 30, 2017:

	Investment Assets at Fair Value as of June 30, 2017			
	Level 1	Level 2	Level 3	Total
Portfolio investments	$	$	$ 1	$ 1

There were no transfers between levels during the years ended June 30, 2018 and 2017.

3. CASH AND CASH EQUIVALENTS

The following is a summary of cash and cash equivalents for the reporting entity at June 30:

	2018	2017
Checking	$ 6,028,624	$ 8,382,573
Money market	7,304,157	13,114,107
State Treasurer's Short-Term Investment Fund	6,497,321	15,651,603
Unrestricted cash and cash equivalents	19,830,102	37,148,283
Checking - restricted	11,471,402	1,132,633
Money market - restricted	5,278,656	8,986,340
State Treasurer's Short-Term Investment Fund - restricted	7,618,127	11,944,433
Total Cash and Cash Equivalents	$ 44,198,287	$ 59,211,689

3. CASH AND CASH EQUIVALENTS (CONTINUED)

	Cash and Cash Equivalents as of June 30, 2018				
	Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	CT Solar Lease 3 LLC	Total
Checking	$ 5,096,905	$ 553,541	$ 142,236	$ 235,942	$ 6,028,624
Money market	5,531,511	1,302,827	469,438	381	7,304,157
State Treasurer's Short-Term Investment Fund	6,497,321				6,497,321
Unrestricted cash and cash equivalents	17,125,737	1,856,368	611,674	236,323	19,830,102
Restricted cash:					
Checking	10,471,402	1,000,000			11,471,402
Money market	1,767,355	3,511,301			5,278,656
State Treasurer's Short-Term Investment Fund	7,618,127				7,618,127
	$ 36,982,621	$ 6,367,669	$ 611,674	$ 236,323	$ 44,198,287

	Cash and Cash Equivalents as of June 30, 2017				
	Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	CT Solar Lease 3 LLC	Total
Checking	$ 7,722,434	$ 523,672	$ 135,967	$ 500	$ 8,382,573
Money market	6,331,063	4,942,933	1,839,611	500	13,114,107
State Treasurer's Short-Term Investment Fund	15,651,603				15,651,603
Unrestricted cash and cash equivalents	29,705,100	5,466,605	1,975,578	1,000	37,148,283
Restricted cash:					
Checking	132,633	1,000,000			1,132,633
Money market	5,483,556	3,502,784			8,986,340
State Treasurer's Short-Term Investment Fund	11,944,433				11,944,433
	$ 47,265,722	$ 9,969,389	$ 1,975,578	$ 1,000	$ 59,211,689

State Treasurer's Short-Term Investment Fund

The State Treasurer's Short-Term Investment Fund is a Standard & Poor's AAAm investment pool of high-quality, short-term money market instruments managed by the Cash Management Division of the State Treasurer's Office and operates in a manner similar to money market mutual funds. It is the investment vehicle for the operating cash of the State of Connecticut Treasury, state agencies and authorities, municipalities, and other political subdivisions of the State. The value of the Green Bank's position in the pool is the same as the value of pool shares. Regulatory oversight is provided by an investment advisory council and the State Treasurer's Cash Management Board.

3. CASH AND CASH EQUIVALENTS (CONTINUED)

Investment Maturities

The State Treasurer's Short-Term Investment Fund itself has no maturity date and is available for withdrawal on demand.

Interest Rate Risk

The Green Bank manages its exposure to declines in fair value by limiting the average maturity of its cash and cash equivalents to no more than one year. The Green Bank does not have a formal policy relating to a specific investment related risk.

Credit Risk

Connecticut General Statutes authorize the Green Bank to invest in obligations of the U.S. Treasury including its agencies and instrumentalities, commercial paper, banker's acceptance, repurchase agreements and the State Treasurer's Short-Term Investment Fund.

Investment ratings for the Fund's investment are as follows:

	Standard & Poor's
State Treasurer's Short-Term Investment Fund	AAAm

Concentration of Credit Risk

The Green Bank's investment policy does not limit the investment in any one investment vehicle. The State Treasurer's Short-term Investment Fund is not subject to this disclosure.

Custodial Credit Risk - Deposits

In the case of deposits, this represents the risk that, in the event of a bank failure, the Green Bank's deposits may not be returned to it. The Green Bank does not have a deposit policy for custodial credit risk. As of June 30, 2018 and 2017, $27,892,085 and $29,254,187, respectively, of the Green Bank's bank balances were exposed to custodial credit risk. Primary government consisted of $21,641,517 and $17,966,373 as of June 30, 2018 and 2017, respectively. CT Solar Lease 2, LLC consisted of $5,888,894 and $9,562,237 as of June 30, 2018 and 2017, respectively. CEFIA Solar Services, Inc. consisted of $ 361,674 and $1,725,577 as of June 30, 2018 and 2017, respectively. Funds held by banks on behalf of the Green Bank, CT Solar Lease 2 LLC and CEFIA Solar Services included contractual requirements to maintain $17,057,975 in deposits with financial institutions participating in various lease and loan programs, representing loan loss and lease maintenance reserves and guaranty pledge accounts.

Custodial Credit Risk - Investments

For an investment, this represents the risk that, in the event of the failure of the counterparty, the Green Bank will not be able to recover the value of the investment. The Green Bank does not have a policy relating to the credit risk of investments. As of June 30, 2018 and 2017, the Green Bank had no reportable credit risk.

4. PORTFOLIO INVESTMENTS

The former Connecticut Clean Energy Fund (CCEF) invested in emerging technology companies as equity and debt investments in Operational Demonstration projects. Based on a memorandum of understanding between the Green Bank and CI, CI manages these investments on behalf of the Green Bank.

5. BONDS RECEIVABLE

Subordinate Series 2014B-1 and 2014C-1
This Series represents two $800,000 bonds received in connection with the Green Bank's May 2014 sale of C-PACE loans to Clean Fund Holdings, LLC (CFH). CFH paid the Green Bank approximately $6.4 million in cash along with two bonds issued to the Green Bank through Public Finance Authority. The 2014 Series bonds carry interest of 5.30% per annum with a maturity date of September 10, 2034. The bonds are secured by the C-PACE loans sold to CFH. The Green Bank received a principal repayment of $ 8,858 as a result of a C-PACE loan payoff in 2016. As of June 30, 2018, management believes no valuation allowance is necessary on these bonds.

Each bond required semi-annual interest-only payments to the Green Bank starting September 10, 2014 and continuing to September 10, 2034. Starting March 10, 2030 and every six months thereafter, principal payments, along with the required interest is to be paid to the Green Bank.

Subordinate Series 2015B-1 and 2015C-1
This Series represents two $955,000 bonds received in connection with the Green Bank's August 2015 sale of C-PACE Loans to Clean Fund Holdings, LLC (CFH). CFH paid the Green Bank approximately $7.7 million in cash along with two bonds issued to the Green Bank through Public Finance Authority. The 2015 Series bonds carry interest of 5.52% per annum with a maturity date of August 13, 2035. The bonds are secured by the C-PACE loans sold to CFH. The Green Bank received a principal repayment of $81,877 for each bond as a result of a C-PACE loan payoff in 2017. As of June 30, 2018, management believes no valuation allowance is necessary on these bonds.

Each bond required semi-annual interest-only payments to the Green Bank starting September 10, 2015 and continuing to August 13, 2035. Starting September 10, 2032 and every six months thereafter, principal payments, along with the required interest is to be paid to the Green Bank.

Principal maturities of these bonds are as follows:

Year Ending June 30,	2014B-1	2014C-1	2015B-1	2015B-1	Total
2019	$	$	$	$	$ -
2020					-
2021					-
2022					-
2023					-
2024 - 2028					-
2029 - 2033	617,500	617,500	192,500	192,500	1,620,000
2034 - 2038	173,642	173,642	680,623	680,623	2,413,530
	$ 791,142	$ 791,142	$ 873,123	$ 873,123	$ 3,328,530

6. SOLAR LEASE NOTES RECEIVABLE

In June of 2008 the predecessor of the Green Bank, the Connecticut Clean Energy Fund (CCEF) entered into a Master Lease Program Agreement with CT Solar Leasing LLC, a third party leasing company, AFC First Financial Corporation, a third party servicer, and Firstar Development LLC, the tax equity investor, to develop a residential solar PV leasing program in Connecticut. CCEF purchased a total of $13,248,685 of promissory notes issued by CT Solar Leasing LLC during the period commencing in April of 2009 and ending in February of 2012 to fund the program. Each nonrecourse promissory note is secured by the payments under a specific PV equipment lease, with a rate of interest of 5% and a term of 15 years. Future principal repayments under the program and the current loss reserve are as follows:

Future Principal Repayments		
2019	$	908,541
2020		955,024
2021		998,900
2022		1,014,040
2023		1,054,648
2024-2026		2,408,973
		7,340,126
Less reserve for losses		(73,401)
	$	7,266,725
Current portion	$	908,541
Noncurrent portion		6,358,184
	$	7,266,725

7. PROGRAM LOANS RECEIVABLE

Outstanding principal balances by program for the years ending June 30, 2018 and 2017, are as follows:

	2018	2017
Loans in repayment for completed projects:		
Connecticut Green Bank		
CPACE Program benefit assessments - in repayment	$ 16,425,897	$ 12,157,762
CPACE Promissory notes	1,732,290	1,791,578
Grid-Tied Program term loans	10,663,213	10,568,847
Multifamily/Affordable housing program loans	10,088,597	10,967,995
Alpha/Operational Demonstration program loans	650,000	1,151,421
Other program loans	550,495	684,580
CT Solar Loan I LLC		
Residential Solar PV Program loans-in repayment	2,732,318	3,321,253
	42,842,810	40,643,436
Reserve for loan losses	(5,978,840)	(5,611,942)
Total loans in repayment for completed projects, net	36,863,970	35,031,494
Loan advances for projects under construction:		
Connecticut Green Bank		
CPACE Program benefit assessments - under construction	8,799,563	7,174,667
Total loans advances for projects under construction	8,799,563	7,174,667
Total	$ 45,663,533	$ 42,206,161
Current Portion	$ 2,138,512	$ 1,910,048
Noncurrent Portion	43,525,021	40,296,113
	$ 45,663,533	$ 42,206,161

7. PROGRAM LOANS RECEIVABLE (CONTINUED)

Scheduled repayments of principal under these loans in repayment as of June 30, 2018 is as follows:

	2019	2020	2021	2022	2023	Thereafter	Total
Connecticut Green Bank							
CPACE Program benefit assessments-in repayment	$ 742,416	$ 844,139	$ 888,595	$ 940,197	$ 992,336	$ 12,018,214	$ 16,425,897
CPACE promissory notes	45,922	49,482	53,584	58,217	63,459	1,461,626	1,732,290
Grid-Tied Program term loans	331,419	339,498	349,424	1,238,658	1,877,861	6,526,353	10,663,213
Multifamily/Affordable housing term loans	779,199	797,937	836,951	1,370,754	2,146,214	4,157,542	10,088,597
Alpha/Operational Demonstration program loans					650,000		650,000
Other program loans	96,535	79,755	9,321	37,801	66,452	260,631	550,495
CT Solar Loan I LLC							
Residential Solar PV Program loans - in repayment	160,323	183,470	192,996	206,139	219,277	1,770,113	2,732,318
	2,155,814	2,294,281	2,330,871	3,851,766	6,015,599	26,194,479	42,842,810
Reserve for loan losses	(17,302)	(16,976)			(649,051)	(5,295,511)	(5,978,840)
	$ 2,138,512	$ 2,277,305	$ 2,330,871	$ 3,851,766	$ 5,366,548	$ 20,898,968	$ 36,863,970

Benefits assessments under the C-PACE program finance energy efficiency upgrades and the installation of renewable energy equipment on non-residential property. These assessments carry interest rates ranging from 5.0% to 9.0% with terms ranging from 10 to 26 years. CPACE promissory notes represent a component of proceeds received from the sale of 37 benefit assessments from the Green Bank's portfolio to a third-party capital provider. These promissory notes carry interest rates ranging from 7.1% to 14.4% and mature at various intervals commencing on September 10, 2036 and ending on March 10, 2037.

Grid-tied term loans represent the financing of three projects. The first project is the 15-megawatt Bridgeport Fuel Cell Park from Project 150. Interest is paid monthly on the outstanding principal balance at a rate of 5.0% until 2022 when principal repayments commence over a 48-month period. The second project is a 5 mega-watt wind turbine facility in Colebrook, CT. Interest on a revolving term loan is paid quarterly at prime plus 3%. Interest on a nonrevolving term loan is paid quarterly based on the project's cash flows. The minimum rate of interest on the nonrevolving term loan is 10%. Principal under both loans is repaid at maturity which is 15 years from the date the project was placed in service. The project was placed in service in November 2015. The third project is an anaerobic digestion facility located in Southington, CT. The term loan carries an interest rate of 2% and interest and principal are repaid on a quarterly basis. Commencing on May 1, 2018 the borrower is required to make annual payments against principal equal to 50% of excess project cash flow as defined in the loan agreement.

Affordable Housing initiatives include providing term loans to two third-party capital providers to finance solar PV installations and energy efficiency measures for low to moderate income households. Under the first initiative through June 30, 2017, the Green Bank has advanced $7,691,173 of a $10,000,000 term financing facility comprising two promissory notes with interest rates of 5% and 7.7% payable monthly. Each advance under the notes matures six years from the date of the advance. The final maturity date of all advances made under these notes as of June 30, 2017 is September 26, 2023. Under a second initiative as of June 30, 2017, the Green Bank has advanced $3,500,000 of a $3,500,000 term financing facility comprising 4 promissory notes. All notes carry an interest rate of 3% payable along with principal on a monthly basis. The notes have terms of 7 and 20 years with maturities ranging from December 1, 2025 to October 1, 2037.

7. PROGRAM LOANS RECEIVABLE (CONTINUED)

Multifamily pre-development loans are advances to developers and owners of multifamily residences to provide funding for project feasibility and site development work. Loans mature in two years and carry no interest. As of June 30, 2018, $90,927 had been advanced under this program.

Operational demonstration program loans are residual transactions of the programs of the Connecticut Clean Energy Fund. The loans finance the development of emerging clean energy technologies. Repayment of each loan is based upon the commercial success of the technology and carries an interest rate of 6%. If commercial success is not achieved after ten years from the date of the loan agreement, the loan converts to a grant. Connecticut Innovations assists in overseeing these loans.

Other program loans represent the financing of feasibility studies for various renewable energy projects or energy efficiency upgrades.

The residential solar PV loan program administered by CT Solar Loan I LLC, makes loans to residential property owners for solar PV installations. Loans carry an interest rate ranging from 6.49% to 6.75% with a term of 15 years.

8. FINANCING ACTIVITIES

Short-Term Debt - Primary Government

Connecticut Green Bank Line of Credit

On June 29, 2018 the Green Bank executed a $16,000,000 line of credit (LOC) with Webster Bank N.A. and Liberty Bank, with Webster Bank as the administrative agent. The LOC is broken down by lender as follows:

Liberty Bank	$ 8,000,000
Webster Bank, National Association	8,000,000
	$ 16,000,000

Funds must be advanced during an availability period which ends on December 29, 2018. All advances must be made in a principal amount of $250,000 or in additional whole multiples of $50,000. Each loan advance will be shared by the participating lenders in accordance with their pro-rata share of the of the total facility commitment. All principal on advances made under the LOC are due at maturity which is June 29, 2019. Advances can be prepaid without penalty. Through the availability period the amount by which the aggregate commitment exceeds aggregate advances is subject to a .5% unused commitment fee. At the time of closing, the Green Bank paid the lenders a commitment fee of $120,000. As of June 30, 2018, $1,000,000 has been advanced under the LOC.

8. FINANCING ACTIVITIES (CONTINUED)

The LOC is collateralized with revenues from the Master Purchase Agreement (MPA) the Green Bank entered into with Connecticut's two investor owned public utilities. Under the MPA each utility must purchase Solar Home Energy Credits (SCHRECs) generated by solar PV facilities located in its service area from the Green Bank. See Note 19 for further detail on the SHREC program. In connection with the LOC, the Green Bank is required to establish and maintain a collections account with Webster Bank into which all proceeds from the sale of SHRECs are to be deposited and an interest reserve account with each lender. As of June 30, 2018 the collections account balance was $388 and the cumulative balance in the interest reserve accounts was $178,031.

Interest to be paid on each advance commences on the date the advance is disbursed and ends one month thereafter. Interest is calculated based on the one-month LIBOR rate plus the applicable margin of 240 basis points. As of June 30, 2018 no interest has been paid to the lenders.

Long-Term Debt - Primary Government

CT Solar Loan I LLC Line of Credit

On February 3, 2014, CT Solar Loan I LLC (SLI) executed a $4,000,000 line of credit with Solar Mosaic, Inc. (LOC). The LOC was amended in June 2015 to $1,100,000. Borrowings on the LOC immediately turn into a term note with predefined repayment terms at the time of borrowing. No further borrowings were available after June 30, 2015. Borrowings on the Mosaic LOC bear interest at 6.4586% (Base Rate) and SLI exercised its option to buy-down the interest rate to 6.00% (Reduced Rate) by making a payment on the borrowing date of 2.875% of the principal amount of the loan (Rate Buy-down Amount). As of June 30, 2018 and 2017 there was $373,478 and $508,793, respectively, outstanding. All borrowings will have matured by September 20, 2027.

In connection with the LOC, SLI is required to establish and maintain a collections account, debt service reserve account and a loan loss reserve account. Deposits shall be made into the collections account for all payments received from residential borrowers against loans securing the LOC. The debt service reserve account is required to have no less than six months forward-looking principal and interest payments for the loans outstanding. The loan loss reserve account required a one-time deposit of $300,000 as of June 30, 2014 which was reduced to $82,500 as of June 30, 2015.

Future maturities on borrowings on the LOC are as follows:

Years Ending June 30,	Principal	Interest	Total
2019	$ 47,170	$ 21,157	$ 68,327
2020	49,878	17,910	67,788
2021	52,748	15,182	67,930
2022	55,788	11,934	67,722
2023	48,778	8,706	57,484
2024 - 2028	119,116	10,850	129,966
	$ 373,478	$ 85,739	$ 459,217

8. FINANCING ACTIVITIES (CONTINUED)

CT Solar Loan I LLC Term Note

On April 25, 2016, CT Solar Loan I LLC (SLI) executed a $2,510,837 Loan Agreement and Promissory Note (Note) with the Reinvestment Fund, Inc. The Note carries a fixed interest rate of 6.02%. Interest and principal repayments are amortized over a hypothetical 15-year period. The Note has a maturity date of April 1, 2023 with all unpaid principal and accrued interest due at that time. Principal repayments and interest payments are made in monthly installments beginning June 1, 2016.

In connection with the Note, SLI is required to establish and maintain a collections account, and maintain $217,500 in a loan loss reserve account. Deposits shall be made into the collections account for all payments received from residential borrowers against loans securing the Note.

Future maturities on borrowings under the Reinvestment Fund LOC is as follows:

Years Ending June 30,	Principal	Interest	Total
2019	$ 164,486	$ 88,792	$ 253,278
2020	84,330	83,450	167,780
2021	89,549	78,231	167,780
2022	95,091	72,689	167,780
2023	1,155,478	56,094	1,211,572
	$ 1,588,934	$ 379,256	$ 1,968,190

Connecticut Green Bank New Clean Renewable Energy Bond

On February 26, 2016 the Board of Directors of the Green Bank authorized the issuance of a New Clean Energy Renewable Energy Bond (CREB) in an amount not to exceed $3,000,000 to finance a portion of the acquisition cost of a 193kW Hydroelectric Facility located in Meriden, Connecticut, by CGB Meriden Hydro LLC, a subsidiary of the Green Bank. On February 2, 2017 the Green Bank issued a CREB in the amount of $2,957,971 with an annual interest rate of 4.19%, maturing on November 15, 2036. Interest and principal payments are to be paid annually on November 15th. Proceeds from the sale of the CREB have been deposited with the bond trustee and will be disbursed upon acquisition of the hydroelectric facility from its developer which is expected to occur during the first quarter of fiscal year 2018. Proceeds from the sale of electricity generated by the facility to the City of Meriden along with revenue from the associated renewable energy credits will fund the payment of principal and interest on the CREB. The CREB qualified for a tax credit from the US Treasury under Section 54C of the Internal Revenue Code. The tax credit will be paid in the form of a subsidy to the Green Bank. The project also qualified to receive an interest rate subsidy from the local electricity utility through a program approved by the Connecticut Public Utility Regulatory Authority (PURA). This subsidy will be paid directly to the purchaser of the CREB. Both these subsidies will reduce the borrowing costs of the Green Bank.

8. FINANCING ACTIVITIES (CONTINUED)

Future maturities on borrowings under the CREB is as follows:

Years Ending June 30,	Principal	Interest	US Treasury Tax Subsidy	CT PURA Interest Subsidy	Total
2019	$ 106,223	$ 121,701	$ (85,840)	$ (18,013)	$ 124,071
2020	109,041	117,250	(82,701)	(18,013)	125,577
2021	123,718	112,681	(79,479)	(18,013)	138,907
2022	134,348	107,497	(75,822)	(18,013)	148,010
2023	158,669	101,868	(71,852)	(18,013)	170,672
2024 - 2028	848,350	405,376	(285,928)	(72,054)	895,744
2029 - 2033	817,977	226,955	(160,080)		884,852
2034 - 2037	606,228	64,415	(45,435)		625,208
	$ 2,904,554	$ 1,257,743	$ (887,137)	$ (162,119)	$ 3,113,041

On September 28, 2017, the Board of Directors of the Green Bank authorized the issuance of a New Clean Energy Renewable Energy Bond (CREB) in an amount not to exceed $9,350,000 to finance the installation of various solar projects for the benefit of the Connecticut State College and University System (CSCUS). To that end on December 29, 2017 the Green Bank entered into an equipment lease/purchase agreement financed by the issuance of a $9,101,729 CREB with an annual interest rate of 4.90%, maturing on November 15, 2037 to construct and lease these solar facilities to CSCUS. Interest and principal payments are to be paid annually on November 15th. Proceeds from the sale of the CREB have been deposited with an escrow agent and will be disbursed to construct the solar facilities. Proceeds from the sale of electricity generated by the facilities to CSCUS along with revenue from the associated renewable energy credits will fund the payment of principal and interest on the CREB. The CREB qualified for a tax credit from the US Treasury under Section 54C of the Internal Revenue Code. The tax credit will be paid in the form of a subsidy to the Green Bank. The project also qualified to receive an interest rate subsidy from the local electricity utility through a program approved by the Connecticut Public Utility Regulatory Authority (PURA). This subsidy will be paid directly to the purchaser of the CREB. Both these subsidies will reduce the borrowing costs of the Green Bank.

8. FINANCING ACTIVITIES (CONTINUED)

Future maturities on borrowings under the CREB is as follows:

Years Ending June 30,	Principal	Interest	US Treasury Tax Subsidy	CT PURA Interest Subsidy	Total
2019	$	$ 391,475	$ (208,041)	$ (56,417)	$ 127,017
2020	515,976	445,985	(237,009)	(56,417)	668,535
2021	522,198	420,702	(223,573)	(56,417)	662,910
2022	528,550	395,114	(209,975)	(56,417)	657,272
2023	535,036	369,215	(196,212)	(56,417)	651,622
2024 - 2028	2,777,293	1,446,234	(768,570)	(282,084)	3,172,873
2029 - 2033	2,960,797	748,179	(397,604)		3,311,372
2034 - 2038	1,261,879	186,327	(99,020)		1,349,186
	$ 9,101,729	$ 4,403,231	$ (2,340,004)	$ (564,169)	$ 10,600,787

Long-Term Debt - Primary Government - Discretely Presented Component Units

CEFIA Solar Services Inc. Term Note

On October 18, 2016 CEFIA Solar Services Inc. executed a term note with the Connecticut Housing Finance Authority (CHFA) in the amount of $1,895,807 with an interest rate of 2.5% with a 20-year term maturing on November 1, 2036. Principal and interest are payable monthly. CEFIA Solar Services, in its role as managing member of CT Solar Lease 2 LLC (CT SL2) lent these funds to CT SL2 through the execution of a subordinated promissory note of same date. CT SL2 used these funds to finance the acquisition of renewable energy equipment and installation of energy efficiency measures by eleven housing developments owned by municipalities throughout Connecticut.

Future maturities on borrowings under CHFA is as follows:

Years Ending June 30,	Principal	Interest	Total
2019	$ 94,788	$ 42,557	$ 137,345
2020	94,788	40,187	134,975
2021	94,788	37,817	132,605
2022	94,788	35,448	130,236
2023	94,788	33,078	127,866
2024 - 2028	473,953	108,614	582,567
2029 - 2033	473,953	61,219	535,172
2034 - 2037	323,876	14,569	338,445
	$ 1,745,722	$ 373,489	$ 2,119,211

8. FINANCING ACTIVITIES (CONTINUED)

Line of Credit - Discretely Presented Component Unit - CT Solar Lease 2, LLC

CT Solar Lease 2, LLC has a $27,600,000 line of credit agreement (Additional LOC) with Key Bank as the Administrative Agent and Lender along with an additional participating lender. The additional LOC is broken down by lender as follows:

Key Bank	$ 17,250,000
Webster Bank, National Association	10,350,000
	$ 27,600,000

Funds may be drawn down in no more than ten total advances by March 31, 2017. With the exception of the final advance, each advance must be in the principal amount of $2,760,000 or a whole multiple of $100,000 in excess of $2,760,000. Each loan funding will be shared by all participating lenders in accordance with their pro-rata share of the total facility commitment. As of June 30, 2017, $27,500,633 had been advanced under the additional LOC through March 31, 2017 the advance termination date. Principal repayments as of June 30, 2018 and 2017, were $1,442,241 and $1,560,600, respectively.

Each advance will be amortized separately. CT Solar Lease 2 LLC has the option with each advance of selecting between the LIBOR rate or the base rate which is defined as the highest of (a) the Federal Funds Effective Rate plus one-half of 1 percent, (b) Key Bank's prime rate, and (c) the LIBOR rate plus 1%. CT Solar Lease 2 LLC may also elect to convert an advance from one rate to the other by following the process outlined in the credit agreement.

Payments of interest with respect to any LIBOR rate advances are due on the 15th day of the month following each calendar quarter end. Payments of interest with respect to any base rate advances are due monthly. Payments of principal with respect to all advances are due on the 15th day of the month following each calendar quarter end. Principal payments on each advance will be based on a modified 15-year amortization schedule and are calculated as the lessor of 2.1675% of the initial principal amount of each advance or the net operating income with respect to the projects purchased with each advance as defined in the credit agreement.

Within one month of each advance, CT Solar Lease 2 LLC is required to enter into an interest rate swap contract with respect to a minimum amount of 75% of such advance. If one of the participating lenders is the counterparty to the swap contract, such contract will be secured by the collateral of the credit agreement; otherwise, the swap contract will be unsecured. See Note 9.

Certain obligations of CT Solar Lease 2 LLC under the credit agreement are guaranteed by the Green Bank. This credit agreement is secured by all assets of CT Solar Lease 2 LLC as well as CEFIA Solar Services (the Managing Member) interest in CT Solar Lease 2 LLC. There are no prepayment penalties. There are certain debt service coverage ratios CT Solar Lease 2 LLC must maintain related to each separate advance and which require the separate measurement of the net operating income with respect to the projects purchased with each advance. As of June 30, 2018, the outstanding balance on the line of credit was $23,665,467.

9. INTEREST RATE SWAP AGREEMENT

CT Solar Lease 2 LLC entered into a multi-year interest rate swap agreement with Key Bank (the KeyBank Agreement) in September 2014 in anticipation of making its first draw down on the credit agreement with KeyBank. Payments made and received were based on a notional amount of $15,732,975 and $17,553,675 as of June 30, 2018 and 2017, respectively. The KeyBank Agreement provides for CT Solar Lease 2 LLC to receive payments based on the 1-month USD-LIBOR-BBA (2.07325% and 1.15889% at June 15, 2018 and 2017, respectively, the dates of the last reset) and to make payments based on fixed interest rates ranging from 1.96% to 2.78%. The KeyBank Agreement matures on December 15, 2025. The fair value of the KeyBank Agreement as of June 30, 2018 and 2017 was reported as an asset of $130,401 and a liability of $520,880, respectively, which is represented as the fair value of the interest rate swap on the accompanying 2018 and 2017 statement of net position.

CT Solar Lease 2 LLC entered into an interest rate swap agreement with Webster Bank (the Webster Agreement) in June of 2017 to meet certain requirements under its credit agreement with KeyBank in which Webster Bank also participates. Payments made and received were based on a notional amount of $1,826,600 and $2,000,000 as of June 30, 2018 and 2017, respectively. The Webster Agreement provides for CT Solar Lease 2 LLC to receive payments based on the 1-month USD-LIBOR-BBA (2.07325% at June 30, 2018 and 1.21556% at June 22, 2017, the date the Webster Agreement became effective) and to make payments based on a fixed rate of 2.10%. The Webster Agreement matures on June 15, 2027. The fair value of the Webster Agreement as of June 30, 2018 and 2017 was reported as an asset of $41,077 and a liability of $19,997, respectively, which is a component of the fair value of interest rate swap on the accompanying 2018 and 2017 statement of net position.

CT Solar Lease 2 LLC uses the dollar-offset method for evaluating effectiveness of the interest rate swap agreements.

10. RELATED PARTY TRANSACTIONS AND OPERATING LEASES

Due to Outside Agency

The Green Bank utilizes the services of CI when needed for certain operating expenses. CI provides these services at cost. Such services include, but are not limited to, staff for human resources, office space, equipment leases and office expenses. Expenses billed to the Green Bank by CI totaled $71,824 and $77,807 for the years ended June 30, 2018 and 2017, respectively. As of June 30, 2018 and 2017, no amounts were due to CI.

Unused Commitment Fee

The Investor Member of CT Solar Lease 2 LLC is entitled to an annual fee due within 30 days of the end of each calendar quarter, calculated on a monthly basis, based on the amount of the Investor Member's unfunded capital contributions. The fee for each month is equal to 1.25% times the amount by which the Investor Member's contribution cap exceeds the total capital contributions funded as of the last day of the month in question divided by twelve. Amounts not paid timely accrue interest at the US Bank Prime Rate in effect on the due date plus 2%. The unused commitment fee totaled $33,896 for the year ended June 30, 2017, the year in which the commitment ended.

10. RELATED PARTY TRANSACTIONS AND OPERATING LEASES (CONTINUED)

The Investor Member of CT Solar Lease 3 LLC is entitled to an annual fee due within 30 days of the end of each calendar quarter, calculated on a monthly basis, based on the amount of the Investor Member's unfunded capital contributions. The fee for each month is equal to 1.25% times the amount by which the Investor Member's contribution cap exceeds the total capital contributions funded as of the last day of the month in question divided by twelve. Amounts not paid timely accrue interest at the US Bank Prime Rate in effect on the due date plus 2%. The unused commitment fee totaled $61,520 for the year ended June 30, 2018. The was no unused commitment fee liability for the year ended June 30, 2017.

Priority Return

The Investor Member is the Tax-Equity Investor and is entitled to substantially all of the tax benefits of both CT Solar Lease 2 LLC and CT Solar Lease 3, LLC until January 1 of the year which is five years after the date the last project is installed, which is anticipated to be January 1, 2023 for CT Solar Lease 2 LLC and January 1, 2024 for CT Solar Lease 3, LLC, the Flip Date.

The Investor Member of CT Solar Lease 2 LLC shall be due a cumulative, quarterly distribution, payable by CT Solar Lease 2 LLC, equal to 0.5% of its paid-in capital contributions in respect of projects beginning at the end of the first quarter after the first project acquisition capital contribution is made and continuing until the Flip Date. To the extent the priority return is not paid in a quarter until the Flip Date, unpaid amounts will accrue interest at the lower of 24% per annum or the highest rate permitted by law.

In accordance with the Operating Agreement, all amounts and accrued interest due on the priority return are to be paid from net cash flow prior to certain required payments due under the Credit Agreement. The Investor Member was paid priority returns of $504,046 and $412,606 for the years ended June 30, 2018 and 2017, respectively.

The Investor Member of CT Solar Lease 3 LLC shall be due a cumulative, quarterly distribution, payable by CEFIA Solar Services, Inc, its managing member, equal to 0.5% of its paid-in capital contributions in respect of projects beginning at the end of the first quarter after the first project acquisition capital contribution is made and continuing until the Flip Date. To the extent the priority return is not paid in a quarter until the Flip Date, unpaid amounts will accrue interest at the lower of 24% per annum or the highest rate permitted by law.

In accordance with the Operating Agreement, all amounts and accrued interest due on the priority return are to be paid from net cash flow prior to certain required payments due under the Credit Agreement. The Investor Member was paid priority returns of $30,607 for the year ended June 30, 2018. The Investor Member was not paid a priority return for the year ended June 30, 2017.

Administrative Services Fee

The Managing Member of CT Solar Lease 2 LLC, CEFIA Solar Services, Inc., provides administrative and management services and earns a quarterly fee initially equal to $30,000 per quarter beginning July 1, 2013. The amount of the fee increased 2.5% each July 1st beginning July 1, 2014. The administrative services fee totaled $132,458 and $129,227 for the years ended June 30, 2018 and 2017, respectively, and is included in accounts payable and accrued expenses on the accompanying statement of net position.

10. RELATED PARTY TRANSACTIONS AND OPERATING LEASES (CONTINUED)

Payroll Taxes and Fringe Benefit Charges

Pursuant to state statute, the Green Bank is subject to fringe benefit charges for pension plan and medical plan contributions which are paid at the state level. The Green Bank's employer payroll taxes are also paid at the state level. The Green Bank reimburses the state for these payments. The reimbursement for 2018 and 2017 was $ 4,101,094 and $3,725,755, respectively, comprising 79.85% and 73.71%, respectively, of gross salaries.

Operating Leases

During 2014, the Green Bank entered into a noncancelable operating lease with an unrelated entity for its main office space. The lease calls for monthly escalating payments beginning at $12,567 through December 31, 2020. Rent expense related to this lease for the years ended June 30, 2018 and 2017 was $167,913 and $164,614, respectively.

In addition, the Green Bank has a noncancelable operating lease for an additional office space from an unaffiliated entity which calls for initial monthly payments of $7,333, with escalating payments through December 2020. Rent expense related to this lease for the years ended June 30, 2018 and 2017, amounted to $97,722 and $95,000, respectively. The Green Bank also began subleasing additional office space from CI in March 2016. Initial monthly payments are $5,666 with escalating payments through December 2020. Rent expense related to this sublease was $70,707 and $68,894 for the years ended June 30, 2018 and 2017, respectively. This sublease with CI was terminated without penalty on June 30, 2018.

In addition, the Green Bank leases office equipment on a month-to-month basis. Rent expense related to the office equipment for the years ended June 30, 2018 and 2017, was $9,973 and $11,005, respectively.

Future minimum lease payments for office rentals are as follows:

Years Ending June 30,		
2019	$	268,920
2020		275,168
2021		139,146
	$	683,234

11. CAPITAL ASSETS

Capital asset activity for reporting entity for the years ended June 30, 2018 and 2017, are as follows:

Primary Government:

2018	Balance, July 1, 2017	Additions	Deletions	Adjustments	Balance, June 30, 2018
Capital assets being depreciated:					
Furniture and equipment	$ 169,955	$ 3,914,206	$	$	$ 4,084,161
Computer hardware and software	234,137	7,976	(26,655)		215,458
Leasehold improvements	250,981		(58,954)		192,027
Capital assets not being depreciated:					
WIP solar lease equipment					-
Construction in progress					-
	655,073	3,922,182	(85,609)	-	4,491,646
Less accumulated depreciation and amortization:					
Furniture and equipment	136,379	145,899			282,278
Computer hardware and software	164,972	36,302	(26,653)		174,621
Leasehold improvements	155,236	34,406	(22,919)		166,723
	456,587	216,607	(49,572)	-	623,622
Capital Assets, Net	$ 198,486	$ 3,705,575	$ (36,037)	$ -	$ 3,868,024

2017	Balance, July 1, 2016	Additions	Deletions	Adjustments	Balance, June 30, 2017
Capital assets being depreciated:					
Furniture and equipment	$ 169,423	$ 532	$	$	$ 169,955
Computer hardware and software	212,831	45,151	(23,845)		234,137
Leasehold improvements	225,844	25,137			250,981
Capital assets not being depreciated:					
WIP solar lease equipment					-
Construction in progress	4,502	9,517	(14,019)		-
	612,600	80,337	(37,864)	-	655,073
Less accumulated depreciation and amortization:					
Furniture and equipment	103,079	33,300			136,379
Computer hardware and software	151,573	37,244	(23,845)		164,972
Leasehold improvements	109,196	46,040			155,236
	363,848	116,584	(23,845)	-	456,587
Capital Assets, Net	$ 248,752	$ (36,247)	$ (14,019)	$ -	$ 198,486

11. CAPITAL ASSETS (CONTINUED)

Discretely presented component units:

2018	Balance, July 1, 2017	Additions	Deletions	Adjustments	Balance, June 30, 2018
Capital assets being depreciated:					
Solar lease equipment	$ 64,930,842	$ 11,467,421	$	$ (795,280)	$ 75,602,983
Capital assets not being depreciated:					
WIP solar lease equipment					-
	64,930,842	11,467,421	-	(795,280)	75,602,983
Less accumulated depreciation and amortization:					
Solar lease equipment	3,619,121	2,760,599		(325,934)	6,053,786
	3,619,121	2,760,599	-	(325,934)	6,053,786
Capital Assets, Net	$ 61,311,721	$ 8,706,822	$ -	$ (469,346)	$ 69,549,197

2017	Balance, July 1, 2016	Additions	Deletions	Adjustments	Balance, June 30, 2017
Capital assets being depreciated:					
Solar lease equipment	$ 47,534,491	$ 21,042,372	$	$ (3,646,021)	$ 64,930,842
Capital assets not being depreciated:					
WIP solar lease equipment	11,931,741	6,685,666	(20,906,922)	2,289,515	-
	59,466,232	27,728,038	(20,906,922)	(1,356,506)	64,930,842
Less accumulated depreciation and amortization:					
Solar lease equipment	1,600,070	2,307,547		(288,496)	3,619,121
	1,600,070	2,307,547	-	(288,496)	3,619,121
Capital Assets, Net	$ 57,866,162	$ 25,420,491	$ (20,906,922)	$ (1,068,010)	$ 61,311,721

11. CAPITAL ASSETS (CONTINUED)

Total Reporting Entity:

2018	Balance, July 1, 2017	Additions	Deletions	Adjustments	Balance, June 30, 2018
Capital assets being depreciated:					
Solar lease equipment	$ 64,930,842	$ 11,467,421	$	$ (795,280)	$ 75,602,983
Furniture and equipment	169,955	3,914,206			4,084,161
Computer hardware and software	234,137	7,976	(26,655)		215,458
Leasehold improvements	250,981		(58,954)		192,027
Capital assets not being depreciated:					
WIP solar lease equipment					-
Construction in progress					-
	65,585,915	15,389,603	(85,609)	(795,280)	80,094,629
Less accumulated depreciation and amortization:					
Solar lease equipment	3,619,121	2,760,599		(325,934)	6,053,786
Furniture and equipment	136,379	145,899			282,278
Computer hardware and software	164,972	36,302	(26,653)		174,621
Leasehold improvements	155,236	34,406	(22,919)		166,723
	4,075,708	2,977,206	(49,572)	(325,934)	6,677,408
Capital Assets, Net	$ 61,510,207	$ 12,412,397	$ (36,037)	$ (469,346)	$ 73,417,221

2017	Balance, July 1, 2016	Additions	Deletions	Adjustments	Balance, June 30, 2017
Capital assets being depreciated:					
Solar lease equipment	$ 47,534,491	$ 21,042,372	$	$ (3,646,021)	$ 64,930,842
Furniture and equipment	169,423	532			169,955
Computer hardware and software	212,831	45,151	(23,845)		234,137
Leasehold improvements	225,844	25,137			250,981
Capital assets not being depreciated:					
WIP solar lease equipment	11,931,741	6,685,666	(20,906,922)	2,289,515	-
Construction in progress	4,502	9,517	(14,019)		-
	60,078,832	27,808,375	(20,944,786)	(1,356,506)	65,585,915
Less accumulated depreciation and amortization:					
Solar lease equipment	1,600,070	2,307,547		(288,496)	3,619,121
Furniture and equipment	103,079	33,300			136,379
Computer hardware and software	151,573	37,244	(23,845)		164,972
Leasehold improvements	109,196	46,040			155,236
	1,963,918	2,424,131	(23,845)	(288,496)	4,075,708
Capital Assets, Net	$ 58,114,914	$ 25,384,244	$ (20,920,941)	$ (1,068,010)	$ 61,510,207

12. GRANT PROGRAMS

The Green Bank, the primary government, recognizes grant revenue based on expenditures or fulfillment of program requirements. For the year ended June 30, 2018 and 2017, the Green Bank recognized related grant revenue of $56,953 and $73,486, respectively under Department of Energy programs.

13. COMMITMENTS AND LOAN GUARANTEES

Commitments

As of June 30, 2018 and 2017, the Board of Directors designated a portion of the Green Bank's unrestricted net position to fund financial incentives for specific commercial and residential projects in the following areas:

Primary Government	Type	June 30, 2018	Type	June 30, 2017
Connecticut Green Bank				
Solar PV	Incentive	$ 48,732,057	Incentive	$ 52,403,654
AD/CHP Programs	Loan	-	Loan	18,464,844
Fuel Cells	Loan	5,000,000	Loan	5,000,000
CPACE	Loan	8,743,524	Loan	2,089,057
Multifamily/LMI Solar PV & Energy Eff.	Loan	3,296,573	Grant/Loan	3,179,452
Education and Outreach	Grant	-	Loan	58,704
Other Technologies	Loan	271,795	Loan	271,795
		66,043,949		81,467,506
Solar PV commitments payable to CT Solar Lease 2 LLC		(3,587,224)		(4,593,338)
Total Reporting Entity		$ 62,456,725		$ 76,874,168

These commitments are expected to be funded over the next one to six fiscal years and are contingent upon the completion of performance milestones by the recipient. All commitments are those of the primary government.

13. COMMITMENTS AND LOAN GUARANTEES (CONTINUED)

Loan Guarantees

As of June 30, 2018 and 2017, the following financial guarantees, approved by the Board of Directors, were outstanding. As of June 30, 2018, CGB has not recognized a liability or made any payments pursuant to these guarantees. Should payments be made in the future, the Green Bank will utilize standard collection efforts to recover payments made on behalf of issuers to those entitled to receive payments pursuant to the obligation guaranteed. All guarantees are those of the primary government.

Guarantor	Issuer	Relationship of Guarantor to Issuer	Type of Obligation Guaranteed	Maximum Amount of Guaranty	Guaranty Obligation as of 6/30/2018	Guaranty Obligation as of 6/30/2017
CGB	Owners of multifamily dwellings in Connecticut	Issuers participate in program administered by CGB and the Housing Development Fund to install energy upgrades in multifamily dwellings.	Commercial and consumer loan products with various terms	$ 5,000,000	$ 3,743,966	$ 1,323,325
CGB	CT Solar Loan I LLC	Blended unit of primary government	Nonrevolving term note	2,510,837	1,588,934	1,969,173
CGB	CT Energy Efficiency Finance Company	Issuer provides loans for the installation of energy efficiency measures in single family homes to credit challenged households to meet the goals outlined in CGB's Comprehensive Plan.	Guarantee limited to $600,000 on revolving credit note of $6,000,000	600,000	600,000	600,000
CGB	New England Hydropower Company	Issuer is the developer of hydropower project in Connecticut approved by the CGB Board of Directors.	Line of credit			3,896,773
CGB	New England Hydropower Company	Issuer is the developer of hydropower project in Connecticut approved by the CGB Board of Directors.	Line of credit	300,000	300,000	300,000
CEFIA Holdings LLC	CEFIA Solar Services Inc.	Holdings is the sole shareholder of Services and an affiliate of CGB	Promissory note for funds received from CHFA upon their issuance of Qualified Energy Conservation Bonds (QECBs) for State Sponsored Housing Projects (SSHP)	1,895,807	1,650,931	1,840,513
				$ 10,306,644	$ 7,883,831	$ 9,929,784

New England Hydropower Company repaid its outstanding line of credit obligation to Key Bank in full during fiscal year 2018 and the Green Bank's obligation to guaranty repayment was terminated.

All commitments and guaranty obligations will be funded from current and future unrestricted cash balances.

14. STATE EMPLOYEES' RETIREMENT SYSTEM

All employees of the Green Bank participate in the State Employees' Retirement System (SERS), which is administered by the State Employees' Retirement Commission. The latest actuarial study was performed on the plan as a whole, as of June 30, 2016, and does not separate information for employees of the Green Bank. Therefore, certain pension disclosures pertinent to the Green Bank otherwise required pursuant to accounting principles generally accepted in the United States of America are omitted. Based upon the 2016 valuation, the Plan, as a whole, utilized the project unit credit cost method to develop employer contributions, and included the following actuarial assumptions: 1) investment return of 6.9% (previously 8%); 2) price inflation of 2.5% (previously 2.75%) for cost of living adjustments; 3) projected salary increases of 3.5% to 19.5% (previously 4% to 20%), Social Security wage base increases of 3.50% per annum; 4) payroll growth of 3.5% (previously 3.75%) per annum; and 5) the RP-2014 White Collar Mortality Table (previously RP-2000 Mortality Table). Information on the total plan funding status and progress, contribution required and trend information can be found in the State of Connecticut's Comprehensive Annual Financial Report available from the Office of the State Comptroller, 55 Elm Street, Hartford, CT 06106.

Plan Description

SERS is a single-employer defined benefit public employee retirement system (PERS) established in 1939 and governed by Sections 5-152 and 5-192 of the Connecticut General Statutes. Employees are covered under one of four tiers. Tier I, Tier IIA and Tier III are contributory plans, and Tier II is a noncontributory plan.

Members who joined the retirement system prior to July 1, 1984 are enrolled in Tier I. Tier I employees who retire at or after age 65 with 10 years of credited service, at or after age 55 with 25 years of service, or at age 55 with 10 years of credited service with reduced benefits are entitled to an annual retirement benefit payable monthly for life, in an amount of 2 percent of the annual average earnings (which are based on the three highest earning years of service) over $4,800 plus 1 percent of $4,800 for each year of credited service. Tier II employees who retire at or after age 60 with 25 years of service, or at age 62 with 10 years of service, or at age 65 with 5 years of service, are entitled to one and one-third percent of the average annual earnings plus one-half of one percent of the average annual earnings in excess of the salary breakpoint in the year of retirement for each year of credited service. Tier II employees between the ages of 55 and 62 with 10 years but less than 25 years of service may retire with reduced benefits. In addition, Tier II and Tier IIA members with at least five but less than ten years of actual state service who terminate their state employment July 2, 1997 or later and prior to attaining age 62 will be in deferred vested status and may commence receipt of normal retirement benefits on the first of the month on or following their sixty-fifth (65) birthday.

Employees hired on and after July 1, 1997, will become members of Tier IIA. Tier IIA plan is essentially the existing Tier II plan with the exception that employee contributions of 2 percent of salary are required. Tier I members are vested after ten years of service, while Tier II and Tier IIA members may be vested after five years of service under certain conditions, and all three plans provide for death and disability benefits.

14. STATE EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

Employees hired on or after July 1, 2011 are covered under the Tier III plan. Tier III requires employee contributions of two percent of salary up to a $250,000 limit after which no additional contributions will be taken on earnings above this limit. The normal retirement date will be the first of any month on or after age 63 if the employee has at least 25 years of vested service or age 65 if the employee has at least 10 but less than 25 years of vested service. Tier III members who have at least 10 years of vested service can receive early reduced retirement benefits if they retire on the first of any month on or following their 58th birthday. Tier III normal retirement benefits include annual retirement benefits for life, in the amount of one and one-third percent of the five-year average annual earnings plus one-half of one percent of the five-year average annual earnings in excess of the salary breakpoint in the year of retirement for each year of credited service plus one and five-eighths of the five-year annual average salary times years of credited service over 35 years.

The total payroll for employees of the Green Bank covered by SERS for the years ended June 30, 2018 and 2017, was $5,120,449 and $5,061,287, respectively.

Contributions Made

Green Bank's contribution is determined by applying a State mandated percentage to eligible salaries and wages as follows for the years ended June 30:

	2018	2017	2016
Contributions made:			
By employees	$ 176,270	$ 100,113	$ 96,614
Percent of current year covered payroll	3.4%	2.0%	2.1%
Percent of required contributions	100.0%	100.0%	100.0%
By Green Bank	$ 1,717,420	$ 1,713,946	$ 1,615,681
Percent of current year covered payroll	33.5%	33.9%	34.4%
Percent of required contributions	100.0%	100.0%	100.0%

The Green Bank has contributed the required amount for each of the past three years.

The implementation of GASB 68 resulted in the Green Bank's reporting an initial net pension liability for fiscal year 2015. The Statement required the Green Bank to recognize a net pension liability for the difference between the present value of the projected benefits for the past service known as the Total Pension Liability (TPL) and the restricted resources held in trust for the payment of pension benefits, known as the Fiduciary Net Position (FNP). For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the FNP of SERS and additions to/deductions from SERS FNP have been determined on the same basis as they are reported by SERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit term. Investments are recorded at fair value.

14. STATE EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

At June 30, 2018 and 2017, the Green Bank reported a liability of $24,636,114 and $25,245,439, respectively, for its proportionate share of the net pension liability. The net pension liability as of June 30, 2018 was measured as of June 30, 2017, and the total pension liability used to calculate the net pension liability was determined by the actuarial valuation as of that date based on actuarial experience studies. The Green Bank's allocation of the net pension liability was based on the 2017 covered payroll multiplied by the SERS 2017 contribution rate of 60.74%. As of June 30, 2018 and 2017, the Green Bank's proportion was 0.11692% and 0.10994%, respectively.

For the years ended June 30, 2018 and 2017, the Green Bank recognized pension expense of $2,354,279 and $3,226,512, respectively. Pension expense is reported in the Green Bank's financial statements as part of general and administration expense. At June 30, 2018 and 2017, the Green Bank reported deferred outflows of resources and deferred inflows of resources related to pension from the following sources:

As of June 30, 2018:	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 588,152	$
Net difference between projected and actual earnings on pension plan investments		47,042
Change of assumptions	3,774,843	
Change in proportion and differences between employer contributions and proportionate share of contributions	2,698,456	
Green Bank contributions subsequent to the measurement date	1,717,219	
	$ 8,778,670	$ 47,042

As of June 30, 2017:	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 701,307	$
Net difference between projected and actual earnings on pension plan investments	791,666	
Change of assumptions	4,501,094	
Change in proportion and differences between employer contributions and proportionate share of contributions	2,180,691	
Green Bank contributions subsequent to the measurement date	1,803,349	
	$ 9,978,107	$ -

14. STATE EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

The contributions subsequent to the measurement date are recognized during the year. The amount recognized as deferred inflows and outflows of resources, representing the net differences between expected and actual experience and changes in assumptions or other inputs, is amortized over a five-year closed period beginning in the year in which the difference occurs and will be recognized in expense as follows:

Year 1 (2019)	$ 1,849,985
Year 2 (2020)	2,017,164
Year 3 (2021)	1,856,866
Year 4 (2022)	1,151,701
Year 5 (2023)	138,693
	$ 7,014,409

Actuarial Methods and Assumption

The total pension liability in the June 30, 2016 actuarial valuation was determined based on the results of an actuarial experience study for the period July 1, 2011 through June 30, 2015. The key actuarial assumptions are summarized below:

Inflation	2.50%
Salary increase	3.50% -19.50% including inflation
Investment rate of return	6.90%, net of pension plan investment expense, including inflation
Cost of living adjustment	2.25%-3.25% for certain tiers

Mortality rates were based on the RP-2014 White Collar Mortality Table projected to 2020 by scale BB at 100% for males and 95% for females is used for the period after service retirement and for dependent beneficiaries. The RP-2014 Disabled Retiree Mortality Table at 65% for males and 85% for females is used for the period after disability.

Discount Rate

The discount rate used to measure the total pension liability at June 30, 2017 was the long term expected rate of return, 6.90%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rates and that employer contributions will be made equal to the difference between the projected actuarially determined contribution and member contributions. Projected future benefit payments for all current plan members were projected through the year 2017.

Expected Rate of Return on Investments

The long term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rate of return by the target asset allocation percentage and by adding expected inflation.

14. STATE EMPLOYEES' RETIREMENT SYSTEM (CONTINUED)

The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Large Cap U.S. Equities	21.0%	5.8%
Developed Non-U.S. Equities	18.0%	6.6%
Emerging Market (non-U.S.)	9.0%	8.3%
Real Estate	7.0%	5.1%
Private Equity	11.0%	7.6%
Alternative Investments	8.0%	4.1%
Fixed Income (Core)	8.0%	1.3%
High Yield Bonds	5.0%	3.9%
Emerging Market Bond	4.0%	3.7%
TIPS	5.0%	1.0%
Cash	4.0%	0.4%
	100.0%	

Sensitivity of Green Bank Proportionate Share of the Net Pension Liability to Changes in the Discount Rates

The following presents the Green Bank's proportionate share of the net pension liability calculated using the discount rate of 6.90%, as well as the proportionate share of the net pension liability using a 1.00% increase or decrease from the current discount rate.

	1% Decrease (5.9%)	Discount Rate (6.9%)	1% Increase (7.9%)
Green Bank's proportionate share of the net pension liability	$ 28,491,179	$ 24,636,114	$ 19,833,689

15. POST EMPLOYMENT BENEFITS

In addition to the pension benefits described in Note 15, the State provides post-employment health care and life insurance benefits in accordance with State statutes, Sections 5-257(d) and 5 259(a), to all eligible employees who retire from the State, including employees of Connecticut Green Bank.

Plan Description

Currently, 6 retirees meet those eligibility requirements. When employees retire, the State pays up to 100% of their health care insurance premium cost (including dependent's coverage) depending upon the plan. The State currently pays up to 20% of the cost for retiree dental insurance (including dependent's coverage) depending upon the plan. In addition, the State pays 100% of the premium cost for a portion of the employees' life insurance continued after retirement. The amount of life insurance, continued at no cost to the retiree, is determined based on the number of years of service that the retiree had with the State at time of retirement as follows: (a) if the retiree had 25 years or more of service, the amount of insurance will be one-half of the amount of insurance for which the retiree was insured immediately prior to retirement, but the reduced amount cannot be less than $10,000; (b) if the retiree had less than 25 years of service, the amount of insurance will be the proportionate amount that such years of service is to 25, rounded to the nearest $100. The State finances the cost of post-employment health care and life insurance benefits on a pay-as you-go basis through an appropriation in the General Fund.

In accordance with the Revised State Employees Bargaining Agent Coalition (SEBAC) 2011 Agreement between the State of Connecticut and the SEBAC, all employees shall pay the three percent (3%) retiree health care insurance contribution for a period of ten (10) years or retirement, whichever is sooner. In addition, participants of Tier III shall be required to have fifteen (15) years of actual State service to be eligible for retirement health insurance. Deferred vested retirees who are eligible for retiree health insurance shall be required to meet the rule of seventy-five (75), which is the combination of age and actual State service equaling seventy-five (75) in order to begin receiving retiree health insurance based on applicable SEBAC agreement.

Contributions Made

Green Bank's contribution is determined by applying a State mandated percentage to eligible salaries and wages as follows for the years ended June 30:

	2018	2017	2016
Contributions made:			
By employees	$ 130,954	$ 139,356	$ 115,852
Percent of current year covered payroll	2.6%	2.8%	2.5%
Percent of required contributions	100.0%	100.0%	100.0%
By Green Bank	$ 1,264,900	$ 956,207	$ 840,178
Percent of current year covered payroll	24.7%	18.9%	17.9%
Percent of required contributions	100.0%	100.0%	100.0%

15. POST EMPLOYMENT BENEFITS (CONTINUED)

OPEB Liabilities, OPEB Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources

The implementation of GASB 75 resulted in the Green Bank's reporting an initial net OPEB liability for fiscal year 2017. The Statement required the Green Bank to recognize a net OPEB liability for the difference between the present value of the projected benefits for the past service known as the Total OPEB Liability (TOL) and the restricted resources held in trust for the payment of OPEB benefits, known as the Fiduciary Net Position (FNP). For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the FNP and additions to/deductions from FNP have been determined on the same basis as they are reported by SERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit term. Investments are recorded at fair value.

At June 30, 2018 and 2017, the Green Bank reported a liability of $24,875,889 and $23,803,688, respectively, for its proportionate share of the net OPEB liability. The net OPEB liability as of June 30, 2018 was measured as of June 30, 2017, and the total OPEB liability used to calculate the net OPEB liability was determined by the actuarial valuation as of that date based on actuarial experience studies. The Green Bank's allocation of the net OPEB liability was based on the 2017 covered payroll multiplied by the OPEB 2017 contribution rate of 36.58%. As of June 30,2017 and 2016, the Green Bank's proportion was 0.313211% and 0.304411%, respectively.

For the year ended June 30, 2018, the Green Bank recognized OPEB expense of $1,919,366. OPEB expense is reported in the Green Bank's financial statements as part of salaries and benefits. At June 30, 2018 the Green Bank reported deferred outflows of resources and deferred inflows of resources related to pension from the following sources:

As of June 30, 2018:	Deferred Outflows of Resources	Deferred Inflows of Resources
Net difference between projected and actual earnings on pension plan investments	$	$ 28,159
Change of assumptions		596,791
Change in proportion and differences between employer contributions and proportionate share of contributions	733,992	
Green Bank contributions subsequent to the measurement date	1,265,019	
	$ 1,999,011	$ 624,950

15. POST EMPLOYMENT BENEFITS (CONTINUED)

As of June 30, 2017:	Deferred Outflows of Resources	Deferred Inflows of Resources
Change in proportion and differences between employer contributions and proportionate share of contributions	$ 900,054	$
Green Bank contributions subsequent to the measurement date	956,207	
	$ 1,856,261	$ -

The contributions subsequent to the measurement date are recognized during the year. The amount recognized as deferred outflows of resources, representing change in proportion and differences between employer contributions and proportionate share of contributions, deferred inflows of resources, representing the net difference between projected and actual earnings, and changes in plan assumptions, is amortized over a five-year closed period beginning in the year in which the difference occurs and will be recognized in expense as follows:

	Outflows	Inflows	Combined
Year 1 (2019)	$ 166,062	$ (142,059)	$ 24,003
Year 2 (2020)	166,062	(142,059)	24,003
Year 3 (2021)	166,062	(142,059)	24,003
Year 4 (2022)	166,062	(142,062)	24,000
Year 5 (2023)	69,744	(56,711)	13,033
	$ 733,992	$ (624,950)	$ 109,042

Actuarial Methods and Assumption

The total OPEB liability in the July 1, 2015 actuarial valuation was determined based on the results of an actuarial experience study for the period July 1, 2011 through June 30, 2015. The key actuarial assumptions are summarized below:

Payroll growth rate	2.50%
Salary increase	3.25% to 19.50% varying by years of service and retirement system
Discount rate	3.68% as of June 30, 2017 and 2.96% as of June 30, 2016
Health care cost trend rates	
Medical	6.5% graded to 4.5% over 4 years
Prescription Drug	8.0% graded to 4.5% over 7 years
Dental and Part B	4.5%
Administrative Expense	3.0%

15. POST EMPLOYMENT BENEFITS (CONTINUED)

Mortality rates were based on the RP-2014 White Collar Mortality Table projected to 2020 by scale BB at 100% for males and 95% for females is used for the period after service retirement and for dependent beneficiaries. The RP-2014 Disabled Retiree Mortality Table at 65% for males and 85% for females is used for the period after disability.

Discount Rate
The discount rate used to measure the total OPEB liability at June 30, 2017 was the long-term expected rate of return, 6.90%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rates and that employer contributions will be made equal to the difference between the projected actuarially determined contribution and member contributions. Projected future benefit payments for all current plan members were projected through the year 2017.

Expected Rate of Return on Investments
The long term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rate of return by the target asset allocation percentage and by adding expected inflation.

The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Large Cap U.S. Equities	21.0%	5.8%
Developed Non-U.S. Equities	18.0%	6.6%
Emerging Market (non-U.S.)	9.0%	8.3%
Real Estate	7.0%	5.1%
Private Equity	11.0%	7.6%
Alternative Investments	8.0%	4.1%
Fixed Income (Core)	8.0%	1.3%
High Yield Bonds	5.0%	3.9%
Emerging Market Bond	4.0%	3.7%
Inflation Linked Bonds	5.0%	1.0%
Cash	4.0%	0.4%
	100.0%	

15. POST EMPLOYMENT BENEFITS (CONTINUED)

Sensitivity of Green Bank Proportionate Share of the Net OPEB Liability to Changes in the Discount Rates

The following presents the Green Bank's proportionate share of the net OPEB liability calculated using the discount rate of 3.68%, as well as the proportionate share of the net OPEB liability using a 1.00% increase or decrease from the current discount rate.

	1% Decrease (4.68%)	Current Discount Rate (3.68%)	1% Increase (2.68%)
Total OPEB liability	$ 21,637,015	$ 24,875,889	$ 28,873,447

Sensitivity of Green Bank Proportionate Share of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the Green Bank's proportionate share of the net OPEB liability, as well as what the Green Bank's share of the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1 percentage point lower or 1 percentage point higher than the current healthcare cost trend rates:

	1% Decrease (4.68%)	Healthcare Cost Trend Rates (3.68%)	1% Increase (2.68%)
Total OPEB liability	$ 21,377,751	$ 24,875,889	$ 29,307,568

16. RESTRICTED NET POSITION

Restricted net position at June 30, 2018 and 2017, consisted of the following:

	2018	2017
Primary Government		
Nonexpendable:		
Connecticut Innovations, Inc. equity interest	$ 95,745	$ 91,121
Energy Programs:		
Connecticut Green Bank:		
Assets restricted for maintaining loan loss and interest rate buydown reserves	5,464,519	8,121,716
Assets restricted by contractual obligations under Clean Renewable Energy Bond	10,556,220	3,276,340
Assets restricted by contractual obligations for maintaining pledge accounts for loan guarantees	1,383,254	5,099,618
Assets restricted by contractual obligations for health safety revolving loan fund	1,500,000	
CT Solar Loan I LLC:		
Assets restricted by contractual obligations for maintaining loan loss reserve	301,063	300,932
	19,205,056	16,798,606
Discretely Presented Component Units		
CT Solar Lease 2 LLC:		
Nonexpendable:		
Firstar Development Corporation equity interest	16,786,995	18,252,032
Firstar Development Corporation invested in capital assets net of related debt	32,547,026	33,174,092
Firstar Development Corporation assets restricted for maintaining loan loss reserve	3,476,188	3,467,757
Firstar Development Corporation assets restricted for operating and maintenance reserve	990,000	990,000
	53,800,209	55,883,881
Energy Programs:		
Assets restricted for maintaining loan loss reserve	35,113	35,028
Assets restricted for operating and maintenance reserve	10,000	10,000
	45,113	45,028
CT Solar Lease 3 LLC:		
Nonexpendable:		
Firstar Development Corporation equity interest	2,296,604	
Firstar Development Corporation invested in capital assets net of related debt	10,303,746	
	12,600,350	--
	$ 85,746,473	$ 72,818,636

17. RISK MANAGEMENT

The Green Bank is subject to normal risks associated with its operations including property damage, personal injury and employee dishonesty. All risks are managed through the purchase of commercial insurance. There have been no losses exceeding insurance coverage, and there have been no decreases in insurance coverage over the last three years.

18. RENEWABLE ENERGY CREDITS (PRIMARY GOVERNMENT)

The Green Bank owns Class 1 Renewable Energy Credits (RECs) that are generated by certain commercial renewable energy facilities for which the Green Bank provided the initial funding. Through its Residential Solar Incentive Program (RSIP), the Green Bank owns the rights to future RECs generated by facilities installed on residential properties placed in service prior to January 1, 2015. The Green Bank has entered into contracts with various third parties to sell RECs generated through vintage year 2019. For the years ended June 30, 2018 and 2017, the Green Bank generated and sold its contractual obligations of 48,471 RECs for vintage year 2018 and 45,000 RECs for vintage year 2017, respectively. Revenues generated from REC sales, net of commissions, for the years ended June 30, 2018 and 2017 were $547,551 and $2,214,000, respectively.

As of June 30, 2018, the Green Bank has a remaining contractual obligation to sell 15,000 vintage year 2018 RECs and 15,000 vintage year 2019 RECs. Based on historical performance, management believes that the RECs it will receive from these commercial and residential facilities will exceed its commitment under the agreement.

RECs trade on the New England Power Pool (NEPOOL) market. The market price of Connecticut Class 1 RECs as of June 30, 2018 ranged from $13.00 to $14.50. The Green Bank's inventory of RECs generated by commercial facilities as of June 30, 2018 and 2017, was $40,520 and $44,682, respectively. The Green Bank recorded its inventory as of June 30, 2018 at cost, which is below market price.

18. RENEWABLE ENERGY CREDITS (PRIMARY GOVERNMENT) (CONTINUED)

Public Act No.15-194 (the Act) enacted on October 1, 2015 and as amended by Public Act 16-212 created a Solar Home Energy Credit (SHREC) associated with energy generated from qualifying residential solar PV systems that have received incentives under the Green Bank's RSIP. Each SHREC represents 1 megawatt hour of electrical generation. Under the Act, the Green Bank will own these SHRECs. The Act requires these SHRECs to be purchased by the State's two investor owned public utilities from the Green Bank through a Master Purchase Agreement (MPA) which was executed on February 7,2017. The MPA commences on January 1, 2015 and terminates the earlier of the year ending December 31, 2022 or with the deployment of solar PV systems that in the aggregate can generate 300 megawatts of electricity. During each year of the MPA's term, solar PV facilities that commence operation will be aggregated into a tranche agreement between the Green Bank and the utility companies which will be approved by the State's Public Utility Regulatory Authority (PURA) prior to its execution. Each tranche will state the price set by the Green Bank for the purchase of a SHREC generated by the PV systems within that tranche for a period of 15 years. The first tranche agreement for the calendar year 2017 was executed on July 1, 2107 at a price of $50 per SHREC. The second tranche agreement was executed on July 15, 2018, at a price of $49 per SHREC. SHRECs are created and certificated in the New England Power Pool Generation System (NEPOOL GIS). SHRECs are certificated by NEPOOL GIS during the fifth month subsequent to the end of the quarter in which the electricity was generated. Once certificated ownership of the SHRECs is transferred to each public utility, payment is received by the Green Bank 30 days later. The Green Bank recognizes income upon the delivery of the SHRECs to each public utility. The Green Bank is not committed to deliver a specific amount of SHRECs to each utility during the term of the MPA. For the year ended June 30, 2018, the Green Bank recognized $2,259,250 in SHREC sales. No SHREC sales were made for the year ended June 30, 2017.

19. PRIOR PERIOD ADJUSTMENT AND RESTATEMENT

The following restatements were recorded to the beginning net position as a result of implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*:

Net position at June 30, 2017, as previously reported	$	128,663,383
Adjustments:		
Record total OPEB liability per GASB No. 75		(23,803,688)
Record deferred outflows per GASB No. 75		1,856,261
Net Position at July 1, 2017, as Restated	$	106,715,956

REQUIRED SUPPLEMENTARY INFORMATION

CONNECTICUT GREEN BANK
SCHEDULE OF GREEN BANK'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY
LAST FOUR FISCAL YEARS*

As of June 30,	2018	2017	2016	2015
Green Bank's portion of the net pension liability	0.11692%	0.10994%	0.09741%	0.09304%
Green Bank's proportionate share of the net pension liability	$ 24,636,114	$ 25,245,439	$ 16,096,113	$ 14,899,766
Green Bank's covered employee payroll	$ 5,120,449	$ 5,061,287	$ 4,695,647	$ 4,013,411
Green Bank's proportionate share of the net pension liability as a percentage of its covered-employee payroll	481.11%	498.79%	342.79%	371.25%
Plan fiduciary net position as a percentage of the total pension liability	36.25%	31.69%	39.23%	39.54%

*Note: This schedule is intended to show information for ten years. Additional years' information will be displayed as it becomes available.

CONNECTICUT GREEN BANK
SCHEDULE OF GREEN BANK'S PROPORTIONATE CONTRIBUTIONS TO THE STATE EMPLOYEES' RETIREMENT SYSTEM (SERS)
LAST SEVEN FISCAL YEARS*

	2018	2017	2016	2015	2014	2013	2012*
Contractually required contribution	$ 1,717,420	$ 1,713,946	$ 1,615,681	$ 1,974,507	$ 1,669,961	$ 1,125,649	$ 601,014
Contributions in relation to the contractually required contribution	1,717,420	1,713,946	1,615,681	1,974,507	1,669,961	1,125,649	601,014
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Green Bank's covered employee payroll	$ 5,120,449	$ 5,061,287	$ 4,695,647	$ 4,013,411	$ 3,121,583	$ 2,517,190	$ 1,541,308
Contributions as a percentage of covered-employee payroll	33.54%	33.86%	34.41%	49.20%	53.50%	44.72%	38.99%

* The Green Bank had no employees prior to 2012 and accordingly there is no activity for 2011 and 2010.

CONNECTICUT GREEN BANK
SCHEDULE OF GREEN BANK'S PROPORTIONATE SHARE OF THE NET OPEB LIABILITY
LAST TWO FISCAL YEARS*

As of June 30,

	2018	2017
Green Bank's portion of the net OPEB liability	0.14327%	0.13805%
Green Bank's proportionate share of the net OPEB liability	$ 24,875,889	$ 23,803,688
Green Bank's covered employee payroll	$ 5,120,449	$ 5,061,287
Green Bank's proportionate share of the net OPEB liability as a percentage of its covered-employee payroll	485.81%	470.31%
Plan fiduciary net position as a percentage of the total OPEB liability	3.03%	1.94%

*Note: This schedule is intended to show information for ten years. Additional years' information will be displayed as it becomes available.

CONNECTICUT GREEN BANK
SCHEDULE OF GREEN BANK'S PROPORTIONATE CONTRIBUTIONS TO THE STATE EMPLOYEES' OTHER POST EMPLOYMENT BENEFIT PLAN
LAST THREE FISCAL YEARS*

	2018	2017	2016
Contractually required contribution	$ 1,264,900	$ 956,207	$ 840,178
Contributions in relation to the contractually required contribution	1,264,900	956,207	840,178
Contribution deficiency (excess)	$ -	$ -	$ -
Green Bank's covered employee payroll	$ 5,120,449	$ 5,061,287	$ 4,695,647
Contributions as a percentage of covered-employee payroll	24.70%	18.89%	17.89%

*Note: This schedule is intended to show information for ten years. Additional years' information will be displayed as it becomes available.

STATISTICAL SECTION
(unaudited)

FINANCIAL STATISTICS

CONNECTICUT GREEN BANK
STATISTICAL SECTION INTRODUCTION

This part of the Connecticut Green Bank's (CGB's) comprehensive annual financial report presents detailed information as a context for understanding what the information about the primary government and the discretely presented component units in the financial statements, note disclosures, and required supplementary information says about the benefits of CGB's investments.

FINANCIAL STATISTICS

CONTENTS **PAGE**

CONNECTICUT GREEN BANK
NET POSITION BY COMPONENT
Last Seven Fiscal Years*

	Year Ended June 30,						
	2018	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**
Primary Government							
Invested in capital assets, net of related debt	$ 963,469	$ 198,486	$ 248,752	$ 263,839	$ 289,932	$ 362,505	$ 91,329
Restricted Net Position:							
Nonexpendable	95,745	91,121	79,179	41,845	8,379	1,000	
Restricted - energy programs	19,205,056	16,798,606	5,249,983	4,299,005	4,595,715	5,036,656	176,974
Unrestricted	59,206,810	79,830,841	116,273,628	104,840,938	97,747,386	93,717,230	80,920,002
	79,471,080	96,919,054	121,851,542	109,445,627	102,641,412	99,117,391	81,188,305
CT Solar Lease 2 LLC							
Invested in capital assets, net of related debt	1,347,368	1,356,697	485,108	278,307	35,390		
Restricted Net Position:							
Nonexpendable	62,208,324	64,596,932	66,364,332	36,508,164	7,617,084	4,691,594	
Restricted - energy programs	45,113	45,028	45,000	45,000	45,000	45,000	
Unrestricted (deficit)	(24,203,415)	(25,125,419)	(32,934,704)	(21,703,932)	(4,105,401)	(1,853,380)	
	39,397,390	40,873,238	33,959,736	15,127,539	3,592,073	2,883,214	-
CEFIA Solar Services, Inc.							
Restricted Net Position:							
Nonexpendable							
Restricted - energy programs							
Unrestricted (deficit)	559,958	486,565	346,379	224,754	109,223	100	
	559,958	486,565	346,379	224,754	109,223	100	-
CT Solar Lease 3 LLC							
Invested in capital assets, net of related debt	111,852						
Restricted Net Position:							
Nonexpendable	13,369,938						
Restricted - energy programs							
Unrestricted (deficit)	(4,076,898)						
	9,404,892	-	-	-	-	-	-
Eliminations	(39,454,629)	(31,562,901)	(28,795,323)	(15,630,676)	(5,549,471)	(3,500,100)	
Total Net Position	$ 89,378,691	$ 106,715,956	$ 127,362,334	$ 109,167,244	$ 100,793,237	$ 98,500,605	$ 81,188,305

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
CHANGES IN NET POSITION
Last Seven Fiscal Years*

	Year Ended June 30,						
	2018	2017	2016	2015	2014	2013	2012
Primary Government							
Operating Revenues	$ 44,481,207	$ 44,040,016	$ 69,250,883	$ 72,038,472	$ 52,301,283	$ 43,343,093	$ 39,753,684
Operating Expenses							
Cost of good sold - energy systems	12,979,629	11,333,034	28,826,974	22,526,874	2,794,270		
Grants and program expenditures	18,932,920	18,128,022	11,539,070	10,686,366	13,798,012	17,767,885	27,977,688
Program administration expenditures	13,206,508	13,228,749	13,964,097	10,833,325	9,150,664	5,866,580	3,144,667
General and administrative expenses	5,431,801	5,228,711	4,445,648	2,984,178	2,408,715	1,811,227	1,387,854
Total Operating Expenses	50,550,858	47,918,516	58,775,789	47,030,743	28,151,661	25,445,692	32,510,209
Operating Income (Loss)	(6,069,651)	(3,878,500)	10,475,094	25,007,729	24,149,622	17,897,401	7,243,475
Nonoperating Revenue (Expenses)							
Interest income - promissory notes	3,291,701	2,921,710	2,895,504	2,625,308	1,034,953	583,575	589,007
Interest income - short-term investments	311,730	189,237	92,536	83,761	98,383	103,928	140,786
Interest income	62,981	61,455	60,127	58,511	57,407		
Interest expense - long-term debt	(172,817)	(228,502)	(61,796)	(26,985)			
Realized gain (loss) on investments	(510,207)	(93,974)	(33,723)	(1,180,285)	(350,000)	(1,034,605)	
Unrealized gain (loss) on investments		(999,998)			349,999	378,059	434,702
Provision for loan losses	(361,711)	(956,489)	(1,021,826)	(563,825)	(1,310,933)		
Net Nonoperating Revenues (Expenses)	2,621,677	893,439	1,930,822	996,485	(120,191)	30,957	1,164,495
Income (Loss) Before Transfers, Capital Contributions and Member (Distributions)	(3,447,974)	(2,985,061)	12,405,916	26,004,214	24,029,431	17,928,358	8,407,970
Capital Contributions						1,000	
Transfers to State of Connecticut	(14,000,000)			(19,200,000)	(6,200,000)		
Change in Net Position	$ (17,447,974)	$ (2,985,061)	$ 12,405,916	$ 6,804,214	$ 17,829,431	$ 17,929,358	$ 8,407,970

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
CHANGES IN NET POSITION (CONTINUED)
Last Seven Fiscal Years*

	Year Ended June 30,						
	2018	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**
CT Solar Lease 2 LLC							
Operating Revenues	$ 3,836,228	$ 3,659,883	$ 2,416,597	$ 210,869	$ 1,770	$	$
Operating Expenses							
Program administration expenditures	4,083,177	3,884,129	3,078,633	1,201,123	600,186		
General and administrative expenses	288,724	620,912	305,217	124,748	127,511	853,480	
Total Operating Expenses	4,371,901	4,505,041	3,383,850	1,325,871	727,697	853,480	
Operating Income (Loss)	(535,673)	(845,158)	(967,253)	(1,115,002)	(725,927)	(853,480)	-
Nonoperating Revenue (Expenses)							
Interest on short-term investments	23,541	17,615	27,777	9,207	8,642		
Interest expense	(1,281,262)	(1,054,848)	(729,170)	(150,871)	(57,407)		
Unrealized gain (loss) on investments	712,355	1,086,987	(967,791)	(660,073)			
Net Nonoperating Revenues (Expenses)	(545,366)	49,754	(1,669,184)	(801,737)	(48,765)	-	-
Income (Loss) Before Transfers, Capital Contributions and Member (Distributions)	(1,081,039)	(795,404)	(2,636,437)	(1,916,739)	(774,692)	(853,480)	
Capital Contributions	114,755	8,145,358	21,770,182	13,556,783	1,496,135	3,736,694	
Distributions to Members	(509,564)	(436,452)	(301,548)	(104,579)	(12,584)		
Change in Net Position	$ (1,475,848)	$ 6,913,502	$ 18,832,197	$ 11,535,465	$ 708,859	$ 2,883,214	$ -

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
CHANGES IN NET POSITION (CONTINUED)
Last Seven Fiscal Years*

	Year Ended June 30,						
	2018	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**
CEFIA Solar Services, Inc.							
Operating Revenues	$ 132,458	$ 129,227	$ 126,075	$ 123,000	$ 120,000	$	$
Operating Expenses							
Grants and program expenditures	61,520						
General and administrative expenses	4,601	4,998	4,750	8,450	10,877		
Total Operating Expenses	66,121	4,998	4,750	8,450	10,877	-	-
Operating Income (Loss)	66,337	124,229	121,325	114,550	109,123	-	-
Nonoperating Revenue (Expenses)							
Interest on short-term investments	4,827	16,446	300	981			
Interest income	46,958	31,437					
Interest expense long-term debt	(44,729)	(31,926)					
Net Nonoperating Revenues (Expenses)	7,056	15,957	300	981	-	-	-
Income (Loss) Before Transfers, Capital Contributions and Member (Distributions)	73,393	140,186	121,625	115,531	109,123	-	-
Capital Contributions						100	
Change in Net Position	$ 73,393	$ 140,186	$ 121,625	$ 115,531	$ 109,123	$ 100	$ -

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

	Year Ended June 30,						
	2018	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**
CT Solar Lease 3 LLC							
Operating Revenues	$ 343,814	$	$	$	$	$	$
Operating Expenses							
Grants and program expenditures	354,566						
General and administrative expenses	37,332						
Total Operating Expenses	391,898	-	-	-	-	-	-
Operating Income (Loss)	(48,084)	-	-	-	-	-	-
Nonoperating Revenue (Expenses)							
Interest on short-term investments	15						
Net Nonoperating Revenues	15	-	-	-	-	-	-
Income (Loss) Before Transfers, Capital Contributions and Member (Distributions)	(48,069)	-	-	-	-	-	-
Capital Contributions	9,483,568						
Distributions to Members	(30,607)						
Change in Net Position	$ 9,404,892	$ -	$ -	$ -	$ -	$ -	$ -

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
OPERATING REVENUE BY SOURCE
Last Seven Fiscal Years Ending June 30, *

	Total Operating Revenues	Utility Remittances		RGGI Auction Proceeds		Grant Revenue		Sales of Energy Equipment		Sales of Renewable Energy Certificates		Other Revenues	
		Revenue	% of Annual	Revenue	% of Annual	Revenue	% of Annual	Revenue	% of Annual	Revenue	% of Annual	Revenue	% of Annual
Primary Government													
2018	$ 44,481,207	$ 25,943,182	58.3 %	$ 1,250,260	2.8 %	$ 81,952	0.2 %	$ 13,559,517	30.5 %	$ 2,827,682	6.4 %	$ 818,614	1.8 %
2017	44,040,016	26,404,349	60.0 %	2,392,647	5.4 %	98,486	0.2 %	12,689,540	28.8 %	2,214,000	5.0 %	240,994	0.5 %
2016	69,250,883	26,605,084	38.4 %	6,481,562	9.4 %	589,917	0.9 %	32,767,009	47.3 %	2,419,990	3.5 %	387,321	0.6 %
2015	72,038,471	27,233,987	37.8 %	16,583,545	23.0 %	192,274	0.3 %	25,912,414	36.0 %	1,474,488	2.0 %	641,763	0.9 %
2014	52,301,283	27,779,345	53.1 %	20,074,668	38.4 %	321,642	0.6 %	3,548,840	6.8 %	376,559	0.7 %	200,229	0.4 %
2013	43,343,093	27,621,409	63.7 %	4,744,657	10.9 %	10,035,250	23.2 %	--	- %	147,000	0.3 %	794,777	1.8 %
2012	39,753,684	27,025,088	68.0 %	2,052,748	5.2 %	10,435,251	26.2 %	--	- %	142,738	0.4 %	97,860	0.2 %
CT Solar Lease 2 LLC													
2018	$ 3,836,228	$ --	- %	$ --	- %	$ --	- %	$ --	- %	$ 700,015	18.2 %	$ 3,136,213	81.8 %
2017	3,659,883	--	- %	--	- %	--	- %	--	- %	356,647	9.7 %	3,303,236	90.3 %
2016	2,416,597	--	- %	--	- %	--	- %	--	- %	233,793	9.7 %	2,182,804	90.3 %
2015	210,869	--	- %	--	- %	--	- %	--	- %	--	- %	210,869	100.0 %
2014	1,770	--	- %	--	- %	--	- %	--	- %	--	- %	1,770	100.0 %
2013	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	- %
2012	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	- %
CEFIA Solar Services Inc.													
2018	$ 132,458	$ --	- %	$ --	- %	$ --	- %	$ --	- %	$ --	- %	$ 132,458	100.0 %
2017	129,227	--	- %	--	- %	--	- %	--	- %	--	- %	129,227	100.0 %
2016	126,075	--	- %	--	- %	--	- %	--	- %	--	- %	126,075	100.0 %
2015	123,000	--	- %	--	- %	--	- %	--	- %	--	- %	123,000	100.0 %
2014	120,000	--	- %	--	- %	--	- %	--	- %	--	- %	120,000	100.0 %
2013	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	- %
2012	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	- %
CT Solar Lease 3 LLC													
2018	$ 343,814	$ --	- %	$ --	- %	$ --	- %	$ --	- %	$ 131,823	38.3 %	$ 211,991	61.7 %
2017	--	--	- %	--	- %	--	- %	--	- %	--	-- %	--	-- %
2016	--	--	- %	--	- %	--	- %	--	- %	--	-- %	--	-- %
2015	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	-- %
2014	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	-- %
2013	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	- %
2012	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	- %
Eliminations													
2018	$ (11,912,052)	$ --	- %	$ --	- %	$ --	-- %	$ (10,777,111)	90.5 %	$ --	- %	$ (1,134,941)	9.5 %
2017	(13,862,578)	--	- %	--	- %	--	-- %	(12,689,540)	91.5 %	--	- %	(1,173,038)	8.5 %
2016	(34,005,320)	--	- %	--	- %	--	-- %	(32,767,009)	96.4 %	--	- %	(1,238,311)	3.6 %
2015	(26,077,923)	--	- %	--	- %	--	- %	(25,895,727)	99.3 %	--	- %	(182,196)	0.7 %
2014	(3,668,840)	--	- %	--	- %	--	- %	(3,548,840)	96.7 %	--	- %	(120,000)	3.3 %
2013	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	- %
2012	--	--	- %	--	- %	--	- %	--	- %	--	- %	--	- %
Total Reporting Entity													
2018	$ 36,881,655	$ 25,943,182	70.3 %	$ 1,250,260	3.4 %	$ 81,952	0.2 %	$ 2,782,406	7.5 %	$ 3,659,520	9.9 %	$ 3,164,335	8.6 %
2017	33,966,548	26,404,349	77.7 %	2,392,647	7.0 %	98,486	0.3 %	--	- %	2,570,647	7.6 %	2,500,419	7.4 %
2016	37,788,235	26,605,084	70.4 %	6,481,562	17.2 %	589,917	1.6 %	--	- %	2,653,783	7.0 %	1,457,889	3.9 %
2015	46,294,417	27,233,987	58.8 %	16,583,545	35.8 %	192,274	0.4 %	16,687	0.0 %	1,474,488	3.2 %	793,436	1.7 %
2014	48,754,213	27,779,345	57.0 %	20,074,668	41.2 %	321,642	0.7 %	--	- %	376,559	0.8 %	201,999	0.4 %
2013	43,343,093	27,621,409	63.7 %	4,744,657	10.9 %	10,035,250	23.2 %	--	- %	147,000	0.3 %	794,777	1.8 %
2012	39,753,684	27,025,088	68.0 %	2,052,748	5.2 %	10,435,251	26.2 %	--	- %	142,738	0.4 %	97,860	0.2 %

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
SIGNIFICANT SOURCES OF OPERATING REVENUE
Last Seven Fiscal Years*

	Year Ended June 30,													
	2018		2017		2016		2015		2014		2013		2012	
	Revenue	% of Total	Revenue	% of Total	Revenue	% of Total	Revenue	% of Total	Revenue	% of Total	Revenue	% of Total	Revenue	% of Total
Utility Remittances [1][4]														
Eversource	$ 20,842,169	80.3 %	$ 21,135,147	80.0 %	$ 21,223,577	79.8 %	$ 21,899,541	80.4 %	$ 22,322,100	80.4 %	$ 22,144,093	80.2 %	$ 22,037,771	81.5 %
United Illuminating	5,101,013	19.7 %	5,269,202	20.0 %	5,381,507	20.2 %	5,334,446	19.6 %	5,457,245	19.6 %	5,477,316	19.8 %	4,987,317	18.5 %
Total	$ 25,943,182	$ 100.0 %	$ 26,404,349	$ 100.0 %	$ 26,605,084	$ 100.0 %	$ 27,233,987	100.0 %	$ 27,779,345	100.0 %	$ 27,621,409	100.0 %	$ 27,025,088	100.0 %
RGGI Auction Proceeds [2]														
Renewables	$ 1,250,260	100.0 %	$ 2,392,647	100.0 %	$ 6,481,562	100.0 %	$ 5,631,156	34.0 %	$ 7,476,158	37.2 %	$ 4,744,657	100.0 %	$ 2,052,748	100.0 %
Energy Efficiency	--	-- %	--	-- %	--	-- %	10,952,389	66.0 %	12,598,510	62.8 %	--	-- %	--	-- %
Total	$ 1,250,260	100.0 %	$ 2,392,647	100.0 %	$ 6,481,562	100.0 %	$ 16,583,545	100.0 %	$ 20,074,668	100.0 %	$ 4,744,657	100.0 %	$ 2,052,748	100.0 %
Grant Revenue														
Federal ARRA Grants	$ --	-- %	$ --	-- %	$ --	-- %	$ --	-- %	$ --	-- %	$ 8,376,681	83.5 %	$ 8,738,726	83.8 %
DOE Grants	56,953	69.5 %	73,486	74.6 %	589,917	100.0 %	143,614	74.7 %	321,642	100.0 %	1,622,569	16.2 %	1,645,525	15.8 %
Private Foundation	24,999	30.5 %	25,000	25.4 %	--	-- %	48,660	25.3 %	--	-- %	36,000	0.4 %	50,000	0.5 %
Total	$ 81,952	100.0 %	$ 98,486	100.0 %	$ 589,917	100.0 %	$ 192,274	100.0 %	$ 321,642	100.0 %	$ 10,035,250	100.0 %	$ 10,434,251	100.0 %
Sales of Renewable Energy Certificates [3]														
Gross Proceeds	$ 3,670,367	100.3 %	$ 2,584,147	100.5 %	$ 2,677,317	100.9 %	$ 1,474,488	100.0 %	$ 381,444	101.3 %	$ 150,000	102.0 %	$ 146,038	102.3 %
Commissions	(10,847)	(0.3 %)	(13,500)	(0.5 %)	(23,534)	(0.9 %)		-- %	(4,885)	(1.3 %)	(3,000)	(2.0 %)	(3,300)	(2.3 %)
Total	$ 3,659,520	100.0 %	$ 2,570,647	100.0 %	$ 2,653,783	100.0 %	$ 1,474,488	100.0 %	$ 376,559	100.0 %	$ 147,000	100.0 %	$ 142,738	100.0 %

(1) *Revenue based on Statutory rate of 1 mil per kWh generated by the utility.*

(2) *The Regional Greenhouse Gas Initiative (RGGI) is a cooperative effort among nine Northeastern and Mid-Atlantic states to reduce greenhouse gas emissions. RGGI holds quarterly auctions of the member state's CO2 allowances. At auction, a market-based clearing price is determined from prices submitted in the winning bids and is used to value proceeds returned to the states. The Connecticut Green Bank receives a portion of Connecticut's auction proceeds which is recognized as revenue and invested in clean energy programs.*

(3) *CGB owns Class 1 Renewable Energy Credits (RECs) generated by certain commercial renewable energy facilities for which CGB provided the initial funding. Through its RSIP program, CGB owns the rights to future RECs generated by facilities installed on residential properties. CGB enters into contracts to sell RECs generated during specified time periods. RECs trade on the New England Power Pool (NEPOOL) market.*

(4) *In fiscal year 2018 the Green Bank made a cash payment to the State of Connecticut of $14,000,000 sourced primarily from utility remittances, a major component of its operating revenues. During fiscal year 2019 the Green Bank will make an additional payment of $14,000,000 to the State of Connecticut sourced primarily from utility remittances.*

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
OUTSTANDING DEBT BY TYPE
Last Seven Fiscal Years*

	Year Ended June 30,						
	2018	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**
Primary Government							
Line of Credit (including adjustments)	$ 1,100,000	$ 1,100,000	$ 1,100,000	$ 1,100,000	$ 4,000,000	$ --	$ --
Cumulative Advances	1,085,956	1,085,956	1,085,956	1,085,956	126,088	--	--
Cumulative Repayments	(712,478)	(577,162)	(394,249)	(232,431)	--	--	--
Cumulative Outstanding Debt	373,478	508,794	691,707	853,525	126,088	--	--
Available LOC	--	--	--	--	3,873,912	--	--
Primary Government							
Line of Credit (including adjustments)	10,000,000	--	--	--	--	--	--
Cumulative Advances	1,000,000	--	--	--	--	--	--
Cumulative Repayments	--	--	--	--	--	--	--
Cumulative Outstanding Debt	1,000,000	--	--	--	--	--	--
Available LOC	9,000,000	--	--	--	--	--	--
Primary Government							
Original Term Note	2,510,837	2,510,837	2,510,837	--	--	--	--
Repayments	(921,903)	(541,664)	(8,619)	--	--	--	--
Cumulative Outstanding Debt	1,588,934	1,969,173	2,502,218	--	--	--	--
Primary Government							
Clean Renewable Energy Bond	2,957,971	2,957,971	--	--	--	--	--
Repayments	(53,417)	--	--	--	--	--	--
Cumulative Outstanding Debt	2,904,554	2,957,971	--	--	--	--	--
Primary Government							
Clean Renewable Energy Bond	9,101,729	--	--	--	--	--	--
Repayments	--	--	--	--	--	--	--
Cumulative Outstanding Debt	9,101,729	--	--	--	--	--	--
CT Solar Lease 2 LLC							
Line of Credit (including adjustments)	27,600,000	27,600,000	24,000,000	26,700,000	26,700,000	26,700,000	--
Cumulative Advances	27,500,633	27,500,633	18,000,000	3,000,000	--	--	--
Cumulative Repayments	(3,835,166)	(2,392,925)	(832,325)	--	--	--	--
Cumulative Outstanding Debt	23,665,467	25,107,708	17,167,675	3,000,000	--	--	--
Available LOC	--	--	6,000,000	23,700,000	26,700,000	26,700,000	--
CEFIA Solar Services Inc.							
Original Term Note	1,895,807	1,895,807	--	--	--	--	--
Repayments	(150,085)	(55,295)	--	--	--	--	--
Cumulative Outstanding Debt	1,745,722	1,840,512	--	--	--	--	--
Total Reporting Entity							
Cumulative Outstanding Debt	$ 40,379,884	$ 32,384,158	$ 20,361,600	$ 3,853,525	$ 126,088	$ --	$ --

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
DEMOGRAPHIC AND ECONOMIC STATISTICS - FOR THE STATE OF CONNECTICUT
Last Seven Fiscal Years*

Fiscal Year	Population [1]	Median Age [2]	Per Capita Income [3]	Median Household Income [3]	Population 3 Years and Over Enrolled in Public School [4]	Unemployment Rate [5]
2018	n/a	n/a	n/a	n/a	n/a	4.4%
2017	3,588,184	40.9	$ 42,029	$ 74,168	718,887	5.0%
2016	3,587,685	40.7	$ 41,087	$ 73,433	724,486	5.2%
2015	3,593,682	40.6	$ 39,430	$ 71,346	730,132	5.5%
2014	3,600,188	40.3	$ 39,373	$ 70,048	733,536	6.5%
2013	3,602,470	40.2	$ 37,726	$ 67,098	751,810	7.8%
2012	3,597,705	40.0	$ 36,891	$ 67,276	760,146	8.5%

Sources: (1) US Census Bureau - Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017
(2) US Census Bureau - Annual Population Estimates for Selected Age Groups by Sex
(3) US Census Bureau - SELECTED ECONOMIC CHARACTERISTICS
American Community Survey 1-Year Estimates
(4) US Census Bureau - SCHOOL ENROLLMENT
American Community Survey 1-Year Estimates
(5) US Department of Labor - Databases, Tables & Calculators by Subject
Local Area Unemployment Statistics

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
PRINCIPAL EMPLOYERS - FOR THE STATE OF CONNECTICUT
Last Five Calendar Years*

	2017			2016			2015			2014			2013		
Employer	**Employees** [1]	**Rank**	**Percentage of Total State Employment** [2]	**Employees** [1]	**Rank**	**Percentage of Total State Employment** [2]	**Employees** [1]	**Rank**	**Percentage of Total State Employment** [2]	**Employees** [1]	**Rank**	**Percentage of Total State Employment** [2]	**Employees** [1]	**Rank**	**Percentage of Total State Employment** [2]
State of Connecticut	47,752	1	2.63%	48,912	1	2.71%	51,646	1	2.89%	54,230	1	3.05%	53,951	1	3.10%
Yale New Haven Health System	21,867	2	1.21	19,920	2	1.10	20,071	3	1.12	18,869	3	1.06	18,639	3	1.07
Hartford Healthcare	18,425	3	1.02	18,135	3	1.01	18,107	4	1.01	18,597	4	1.05	16,951	4	0.98
Yale University	16,184	4	0.89	15,018	4	0.83	14,787	5	0.83	14,787	5	0.83	14,750	5	0.85
United Technologies	16,000	5	0.88	15,000	5	0.83	24,000	2	1.34	25,000	2	1.40	27,000	2	1.55
General Dynamics Electric Boat	11,430	6	0.63	10,230	6	0.57	9,583	6	0.54	8,896	7	0.50	8,817	6	0.51
University of Connecticut	10,019	7	0.55	9,861	7	0.55									
Wal-Mart Stores Inc.	8,974	8	0.50	8,800	8	0.49	8,800	7	0.49	9,289	6	0.52	8,761	7	0.50
Sikosrsky, A Lockheed Martin Company	7,730	9	0.43	8,000	9	0.44	N/A	---	--	N/A	---	--	N/A	---	--
The Travelers Cos. Inc.	7,400	10	0.41	7,400	10	0.41	7,300	8	0.41	7,400	9	0.42	7,400	9	0.43
The Hartford Financial Services Group	6,800	11	0.38	7,000	11	0.39	7,000	9	0.39	7,000	11	0.39	7,700	11	0.44
Mohegan Sun	6,800	11	0.38	6,735	12	0.37	6,900	10	0.39	7,300	10	0.41	7,300	10	0.42
Foxwoods Resort Casino	6,500	13	0.36	6,500	13	0.36	5,301	14	0.30	7,600	8	0.43	7,667	8	0.44

Sources: (1) Hartford Business Journal, Book of Lists: Connecticut's largest employers
(For 2017, reduced employee count for #1 State of Connecticut by employee count for #7 University of Connecticut due to double counting of the employees.)
(2) Total State Employment from US Department of Labor - Databases, Tables & Calculators by Subject - Local Area Unemployment Statistics

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
FTEs BY FUNCTION
Last Seven Fiscal Years*

	As of August 3, 2018 [1]	Year Ended June 30,						
		2018	2017	2016	2015	2014	2013	2012
Program Services								
Statutory & Infrastructure	9.00	9.00	9.00	9.00	8.00	7.00	7.00	9.00
Residential	1.00	6.00	6.00	6.00	6.00	5.00	3.00	1.00
Commercial & Industrial	4.00	4.00	4.00	4.00	2.00	4.00	2.00	
Institutional					1.00	1.00	1.00	1.00
Subtotal Program Services	14.00	19.00	19.00	19.00	17.00	17.00	13.00	11.00
Administrative & Support								
Executive	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Finance	4.00	6.00	5.00	6.00	5.00	4.00	3.00	1.00
Accounting	5.75	5.75	5.75	5.75	5.30	3.50	2.75	2.20
Legal & Policy	3.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00
Marketing	5.00	5.00	6.00	6.00	6.00	5.00	5.00	5.00
Operations	3.00	3.50	3.50	3.90	3.50	3.80	4.00	3.85
Subtotal Administrative & Support	24.75	27.25	27.25	28.65	26.80	22.30	20.75	18.05
Total FTEs by Function	38.75	46.25	46.25	47.65	43.80	39.30	33.75	29.05

(1) Reflects staff reductions as a result of the cash payment of $14,000,000 made to the State of Connecticut in FY 2018 and the cash payment of $14,000,000 to be made in FY 2019.

Source: Connecticut Green Bank internal payroll records

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
OPERATING INDICATORS BY FUNCTION
Last Seven Fiscal Years*

	Year Ended June 30,						
	2018	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**
Clean Energy Investment *($s in Millions)*							
CGB Dollars Invested	$ 33.6	$ 33.5	$ 39.4	$ 57.1	$ 0.0	$ 18.7	$ 4.8
Private Dollars Invested	232.2	172.2	268.1	267.6	75.4	92.7	10.1
Total Project Investment	265.9	205.7	307.5	324.7	107.9	111.3	14.8
Number of Clean Energy Projects	7,364	5,071	7,309	6,507	2,456	1,114	413
Annual Energy Savings of Clean Energy *(MMBtu)*	267,805	534,357	346,080	710,654	246,307	463,225	11,053
Installed Capacity of Clean Energy *(MW)*							
Anaerobic Digesters	--	--	1.0	--	--	--	--
Biomass	--	--	--	0.6	--	--	--
CHP	--	--	--	0.3	3.0	0.7	--
CHP/Microgrid	--	0.8	--	--	--	--	--
Fuel Cell	--	--	0.1	--	--	--	--
Energy Efficiency	--	--	--	--	--	14.8	--
Geothermal	--	--	--	--	--	--	--
Hydro	--	0.2	--	0.9	--	--	--
Solar PV	57.8	48.7	65.4	55.8	20.4	8.0	2.8
Wind	--	--	--	5.0	--	--	--
Total	57.8	49.7	66.5	62.5	23.4	23.4	2.8
Lifetime Production of Clean Energy *(MWh)*							
Anaerobic Digesters	--	--	106,171	--	--	--	--
Biomass	--	--	--	--	--	--	--
CHP	--	--	--	31,930	354,780	81,008	--
CHP/Microgrid	--	94,017	--	--	--	--	--
Energy Efficiency	121,083	70,681	109,437	43,782	57,214	4,846	--
Fuel Cell	--	--	--	--	--	1,166,832	--
Geothermal	152	329	295	38	84	--	--
Hydro	--	20,626	--	96,185	--	--	--
Solar PV	1,708,857	1,438,657	1,885,256	1,595,544	581,969	226,563	80,989
Wind	--	--	--	118,260	--	--	--
Total	1,830,092	1,624,311	2,101,159	1,885,740	994,047	1,479,250	80,989
Jobs Created by Year							
Direct Jobs *(# of Jobs)*	914	795	1,624	1,589	595	579	88
Indirect and Induced Jobs *(# of Jobs)*	1,191	1,090	2,611	2,555	955	1,164	141
Lifetime CO2 Emission Reductions *(Tons)*							
Avoided Emissions	991,066	848,359	1,125,785	1,047,353	355,971	210,298	45,279
Homes' Energy Use for One Year	97,083	83,104	110,280	102,597	34,870	20,600	4,435
Passenger Vehicles Driven for One Year	189,916	162,569	215,732	200,702	68,214	40,299	8,677
Acres of U.S. Forests in One Year	1,058,987	906,500	1,202,938	1,119,131	380,367	224,710	48,382

Source: Internal Connecticut Green Bank Reporting: Key Performance Indicators Data File

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

CONNECTICUT GREEN BANK
CAPITAL ASSETS STATISTICS BY FUNCTION
Last Seven Fiscal Years*

	Year Ended June 30,						
	2018	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**
Capital assets being depreciated:							
Solar lease equipment	$ 75,602,983	$ 64,930,842	$ 47,534,491	$ 21,011,832	$ 1,035,159	$ --	$ --
Furniture and equipment	4,084,161	169,957	169,423	222,701	338,938	335,744	13,049
Computer hardware and software	215,458	234,136	212,832	128,628	88,337	136,659	28,460
Leasehold improvements	192,027	250,981	225,844	153,657	139,682	71,470	56,224
Capital assets not being depreciated:							
WIP solar lease equipment	--	--	11,931,740	6,014,560	1,759,111	--	--
Construction in progress	--	--	4,502	7,141	7,141	--	--
	80,094,629	65,585,916	60,078,832	27,538,519	3,368,368	543,873	97,733
Less accumulated depreciation and amortization:							
Solar lease equipment	6,053,786	3,619,121	1,600,070	319,144	9,865	--	--
Furniture and equipment	282,278	136,379	103,079	122,149	205,820	146,560	626
Computer hardware and software	174,621	164,973	151,573	50,906	33,845	18,093	3,807
Leasehold improvements	166,723	155,236	109,196	75,232	44,501	16,715	1,971
	6,677,408	4,075,709	1,963,918	567,431	294,031	181,368	6,404
Capital assets, net	$ 73,417,221	$ 61,510,207	$ 58,114,914	$ 26,971,088	$ 3,074,337	$ 362,505	$ 91,329

Source: Connecticut Green Bank Comprehensive Annual Financial Report: Notes to Financial Statements - Capital Assets Footnote

*Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011. Accordingly, financial results are only shown beginning with Fiscal Year 2012.

NON-FINANCIAL STATISTICS

Contents

1. Statement of the Connecticut Green Bank

June 30, 2018

Re: Statement of the Connecticut Green Bank on the Non-Financial Statistics Contents of the Comprehensive Annual Financial Report for FY 2018 - Background and Market, Measures of Success, and Market Transformation

Dear Reader:

This is the "Non-Financial Statistics" section of the Comprehensive Annual Financial Report for FY 2018.

In FY 2018, our seventh year of operation, we continued building public private partnerships that leverage limited public funds by attracting private capital to spark the growth of green energy in Connecticut. It was a year filled with milestones, as well as setbacks for our organization:

- In July 2017, the Connecticut Green Bank was awarded the prestigious "Innovations in American Government Awards" for 2017 by the Harvard Kennedy School's Ash Center for Democratic Governance and Innovation for its "Sparking the Green Bank Movement" nomination by the Coalition for Green Capital, winning $100,000.

- In October 2017, the Connecticut General Assembly ("CGA") approved of an FY 2018 and FY 2019 budget that sweeps $16.3 million a year – $32.6 million in total – from funds administered by the Connecticut Green Bank (i.e. Clean Energy Fund and RGGI allowance proceeds).

- In November 2017, the Connecticut Permit to Plug-In Challenge team, led by the Connecticut Green Bank, was a finalist in the U.S. Department of Energy's SunShot Prize "Race to 7-Day Solar," a national competition intended to reduce the time it takes to "go solar" across the country.

- In December 2017, in response to the sweeps by the CGA, the Connecticut Green Bank Board of Directors approved of the Green Bank's Sustainability Plan to reduce operating expenses and put the organization on a pathway to breakeven through its incentive and investment businesses, and support for the creation of a nonprofit organization, Inclusive Prosperity Capital.

- Also, in December 2017, the Connecticut Green Bank, after much support from the Connecticut State Treasurer's Office and the Connecticut Attorney General's Office, issued Clean Renewable Energy Bonds (CREBS) in support of the state's Lead by Example Initiative to install solar panels on Connecticut State Colleges and Universities that are expected to save over $12.7 million over the life of the systems.

- In January 2018, the C-PACE program closed its 200th transaction with investment totaling nearly $115 million to finance clean energy improvements on commercial, industrial, nonprofit, and multifamily properties.

- In April 2018, the Residential Solar Investment Program ("RSIP") passed 200 MW of approved projects, putting it on course to meet the 300 MW public policy target by the end of 2018 – 3 years ahead of schedule. Through a Solar Home Renewable Energy Credit ("SHREC") securitization being pursued in FY 2019, the administration of the program will be fully cost-recovered.

- In May 2018, the Connecticut Green Bank was awarded a State Leadership in Clean Energy ("SLICE") award for its partnership with PosiGen and the "Solar for All" program to deliver an innovative solar PV lease and energy efficiency energy savings agreement financing offer to low-to-moderate income households in Connecticut. It should be noted that Connecticut was identified as a "parity" state by the Lawrence Berkeley National Laboratory for LMI households installing solar PV proportionally to non-LMI households.[1]

- In June 2018, the C-PACE program launched a "New Construction Pilot" to build on this innovative benefit assessment financing mechanism with a focus on new construction.

We are making steady progress ensuring that the green economy is accessible to everyone – and throughout this report, the reader will see the progress we are making in underserved markets.

The assembly of the "Non-Financial Statistics" section of the Comprehensive Annual Financial Report is a process of continuous improvement, at the forefront of such is having established methodologies for monitoring and evaluating impact. During the course of FY2018, we continued to make great strides in terms of our Evaluation, Measurement, and Verification agenda. Building on our economic development (i.e., job creation) and environmental protection (i.e., air emission reductions) metrics, we worked with the U.S. Environmental Protection Agency, Connecticut Department of Energy and Environmental Protection ("DEEP") and Connecticut Department of Public Health, to develop a methodology for calculating the public health benefits (e.g. reduced hospitalizations, sick days, etc.) from clean energy deployment. We intend to build on this progress in FY2019 by continuing our focus on economic development methodologies for tax revenue generation (i.e. personal, income, and sales) as well as energy burden reduction through investment in clean energy in Connecticut.

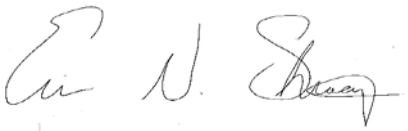
As we continue to bolster our work on social impact methodology and transparency, we have re-engaged SustainAbility to assess the Green Bank's methods for representing impact using our indicators. The team from SustainAbility has reviewed and endorsed the Green Bank's current methodologies and found the Connecticut Green Bank's reporting to provide a high degree of transparency both in terms of activity and the underlying methodologies used to calculate this activity. They also reviewed the Green Bank's calculations.

[1] Income Trends of Residential PV Adopters: An Analysis of Household-Level Income Estimates by Galen Barbose, Darghouth, Hoen, and Wiser of LBNL (April 2018).

The result is an ever evolving and more transparent Non-Financial Statistics section that we hope is useful to those striving to learn from the successes and challenges of the Connecticut Green Bank.

Regards,

Bryan Garcia
President and CEO



Eric Shrago
Director of Operations

2. Statement of Non-Financial Statistics Auditor

SustainAbility

81 Prospect Street
Brooklyn
NY11201
+1 347 677 4259
www.sustainability.com

Connecticut Green Bank
845 Brook Street
Rocky Hill, CT 06067

26th September 2018

To the Board of Directors
Connecticut Green Bank

Report on Non-Financial Metrics

In July 2018, the Connecticut Green Bank (the company) asked SustainAbility, Inc., to conduct an independent, external review of the metrics and underlying data collection and calculation methods, outlined in the non-financial statistics section of the company's Comprehensive Annual Financial Report.

SustainAbility evaluated the company's data collection methods and performance calculation methodologies as well as the degree of transparency exhibited by the company in reporting on the following metrics: staff diversity, clean energy generated, job years created, public health benefits, CO2 savings, NOx, SQx and particulate matter avoided. SustainAbility also provided recommendations on how to demonstrate and discuss social and environmental impacts in the report.

Based on the information provided to SustainAbility by the company and our understanding of best practice in goal setting, measurement and disclosure, it is our opinion that the company's metrics, data collection and calculation methodologies are sound and represent best practice. It is our opinion that Connecticut Green Bank adequately reports on these metrics and performance against them and demonstrates a high level of transparency.

Sincerely,

Christina Wong
Director
SustainAbility

3. Organizational Background

The Connecticut Green Bank is the nation's first green bank. The organization is creating a thriving marketplace to accelerate clean energy adoption in Connecticut by making clean energy financing accessible and affordable for homeowners, businesses and institutions.

Governance

Board of Directors

Pursuant to Section 16-245n of the General Statutes of Connecticut, the powers of the Connecticut Green Bank are vested in and exercised by the Board of Directors that is comprised of eleven voting and one non-voting member each with knowledge and expertise in matters related to the purpose of the organization – see Table 1.

Table 1. Composition of the Board of Directors of the Connecticut Green Bank for FY 2018

Position	Name	Status	Voting
Commissioner of DECD (or designee)	Catherine Smith	Ex Officio	Yes
Commissioner of DEEP (or designee)	Rob Klee	Ex Officio	Yes
State Treasurer (or designee)	Bettina Bronisz	Ex Officio	Yes
Finance of Renewable Energy	Unfilled	Resigned	Yes
Finance of Renewable Energy	Kevin Walsh	Appointed	Yes
Labor Organization	John Harrity	Appointed	Yes
R&D or Manufacturing	Gina McCarthy	Appointed	Yes
Investment Fund Management	Eric Brown[2]	Appointed	Yes
Environmental Organization	Matthew Ranelli	Appointed	Yes
Finance or Deployment	Tom Flynn	Appointed	Yes
Residential or Low Income	Betsy Crum	Appointed	Yes
President of the Green Bank	Bryan Garcia	Ex Officio	No

The Board of Directors of the Connecticut Green Bank is governed through statute, as well as an Ethics Statement[3] and Ethical Conduct Policy[4], Resolutions of Purposes[5], Bylaws[6], Joint Committee Bylaws[7], and Comprehensive Plan[8]. The Comprehensive Plan for the Connecticut Green Bank provides a multi-

[2] The first official board meeting of Eric Brown was September 28, 2017
[3]Ethics Statement: http://www.ctgreenbank.com/wp-content/uploads/2017/02/Green-Bank_Ethics-Statement-CLEAN-REVISED-102214.pdf
[4] Ethical Conduct Policy: https://www.ctgreenbank.com/wp-content/uploads/2017/08/Green-Bank_Ethical-Conduct-Policy_BOD_CLEAN_REVISED-101714.pdf
[5] Resolutions of Purposes: https://www.ctgreenbank.com/wp-content/uploads/2016/01/Financial-and-Gov._-CT-Green-Bank-Resolution-of-Purpose.pdf
[6] Bylaws: https://www.ctgreenbank.com/wp-content/uploads/2017/02/CTGreenBank-Bylaws-sec16-245n-CTGS-r12162016.pdf
[7] Joint Committee Bylaws: http://www.ctgreenbank.com/wp-content/uploads/2015/12/ECMB_CGB_Joint_Committee_Bylaws_October_2014FINAL.pdf
[8] Comprehensive Plan: https://www.ctgreenbank.com/wp-content/uploads/2018/08/Comp-Plan_FY17-FY19_Final_072718.pdf

year strategy to support the vision and mission of the organization and the public policy objective of delivering consumers cheaper, cleaner, and more reliable sources of energy while creating jobs and supporting local economic development. An Employee Handbook and Operating Procedures[9] have also been approved by the Board of Directors and serve to guide the staff to ensure that it is following proper contracting, financial assistance, and other requirements.

As noted above, the Connecticut Green Bank's Board of Directors is comprised of eleven (11) ex officio and appointed voting members and two (2) ex officio non-voting members. The leadership of the Board of Directors, includes:

- **Chair** - Catherine Smith, Commissioner of DECD (designated as the Chair of the Connecticut Green Bank by Governor Malloy)
- **Vice Chair** - Rob Klee, Commissioner of DEEP (voted in by his peers of the Connecticut Green Bank Board of Directors)
- **Secretary** - Matthew Ranelli, Partner at Shipman and Goodwin (voted in by his peers of the Connecticut Green Bank Board of Directors)
- **Staff Lead** – Bryan Garcia, President and CEO

During FY 2018, the Board of Directors of the Connecticut Green Bank met fifteen (15) times, including eight (8) regularly scheduled meetings and seven (7) special meetings. There was an attendance rate of 80% by the Board of Directors and 42 approved resolutions. For a link to the materials from the Board of Directors meetings that are publicly accessible – click here[10].

Committees of the Board of Directors

There are four (4) committees of the Board of Directors of the Connecticut Green Bank, including:

- Audit, Compliance, and Governance
- Budget and Operations
- Deployment
- Joint Committee of the Energy Efficiency Board and the Connecticut Green Bank

Audit, Compliance and Governance Committee

The Connecticut Green Bank's Audit, Compliance and Governance (ACG) Committee is comprised of three (3) ex officio and appointed voting members. The leadership of the ACG Committee includes:

- **Chair** – Matthew Ranelli, Partner and Shipman and Goodwin (designated as the Chair by Catherine Smith)
- **Members**[11] –Gina McCarthy and Tom Flynn (designated as a member of the Committee by Catherine Smith)

During FY 2018, the ACG Committee of the Connecticut Green Bank met three (3) times, including one (1) special meeting and two (2) regular meetings. There was an attendance rate of 100% by the

[9] Operating Procedures: https://www.ctgreenbank.com/wp-content/uploads/2017/02/CTGreenBank-Operating-Procedures-sec16-245n-CTGS-r12162016.pdf
[10] Board of Directors meetings: http://www.ctgreenbank.com/about-us/governance/connecticut-grboard-meetings/
[11] Note – the Chair and/or Vice Chair of the Board of Directors of the Connecticut Green Bank can attend the Audit, Compliance, and Governance Committee meeting to establish a quorum.

Committee members and 8 approved resolutions. For a link to the materials from the ACG Committee meetings that are publicly accessible – click here[12].

Budget and Operations Committee

The Connecticut Green Bank's Budget & Operations (B&O) Committee is comprised of three (3) ex officio and appointed voting members. The leadership of the B&O Committee, includes:

- **Chair** - John Harrity, retired President of the Connecticut State Council of Machinists (designated as the Chair by Catherine Smith)
- **Members**[13] - Eric Brown and Rob Klee (designated as members of the Committee by Catherine Smith)

During FY 2018, the B&O Committee of the Connecticut Green Bank met five (5) times, including four (4) regularly scheduled meetings and one (1) special meeting. There was an attendance rate of 87% by the Committee members and 2 approved resolutions. For a link to the materials from the B&O Committee meetings that are publicly accessible – click here[14].

Deployment Committee

The Connecticut Green Bank's Deployment Committee is comprised of four (4) ex officio and appointed voting members. The leadership of the Deployment Committee includes:

- **Chair** - Rob Klee, Commissioner of DEEP (designated as the Chair by Catherine Smith)
- **Members** - Bettina Bronisz (ex officio per bylaws), Matthew Ranelli, and / Betsy Crum (designated as members of the Committee by Catherine Smith)

During FY 2018, the Deployment Committee of the Connecticut Green Bank met two (2) times, including two (2) regularly scheduled meetings and no special meetings. There was an attendance rate of 88% by Committee members and 3 approved resolutions. For a link to the materials from the Deployment Committee meetings that are publicly accessible – click here[15].

Joint Committee

A Joint Committee of the Energy Efficiency Board and the Connecticut Green Bank was established pursuant to Section 16-245m(d)(2) of the Connecticut General Statutes. Per by-laws established and approved by the EEB and Connecticut Green Bank, the Joint Committee is comprised of four (4) appointed and voting members, one (1) ex officio and voting member, and four (4) ex officio and non-voting members. The leadership of the Joint Committee includes:

- **Chair** - Eric Brown, Attorney with CBIA (voted in by his peers of the EEB and the Connecticut Green Bank)
- **Vice Chair** - Diane Duva, DEEP (voted in by her peers of the EEB and the Connecticut Green Bank)

[12] ACG, B&O, Deployment Committee meetings: https://www.ctgreenbank.com/about-us/governance/connecticut-grittee-meetings/
[13] Note – the Chair and/or Vice Chair of the Board of Directors of the Connecticut Green Bank can attend the Audit, Compliance, and Governance Committee meeting to establish a quorum.
[14] ACG, B&O, Deployment Committee meetings: http://www.ctgreenbank.com/about-us/governance/connecticut-grittee-meetings/
[15] ACG, B&O, Deployment Committee meetings: http://www.ctgreenbank.com/about-us/governance/connecticut-grittee-meetings/

- **Secretary** - Bryan Garcia, Connecticut Green Bank, and Craig Diamond, Connecticut Energy Efficiency Fund (voted in by their peers of the EEB and the Connecticut Green Bank)
- **Members**[16] - Bert Hunter (non-voting), and John Harrity (designated as members of the Committee by Catherine Smith)

During FY 2018, the Joint Committee of the EEB and the Connecticut Green Bank met four (4) times, including four (4) regularly scheduled meetings and no special meetings. There was an attendance rate of 91% by the Joint Committee members and 0 approved resolutions. For a link to the materials from the Joint Committee meetings that are publicly accessible – click here[17].

Open Connecticut

Open Connecticut centralizes state financial information to make it easier to follow state dollars. In Connecticut, quasi-public agencies are required to submit annual reports to the legislature, including a summary of their activities and financial information. In addition, the comptroller's office requested that quasi-public agencies voluntarily provide checkbook-level vendor payment data for display on Open Connecticut. The Connecticut Green Bank has voluntarily submitted this information since the inception of Open Connecticut. To access this information, click here[18].

Ethics and Transparency

Statement of Financial Interest

It is required by state ethics laws and a determination of the Governor's standard that senior-level staff (i.e. Director-level and above) and members of the Board of Directors annually file a Statement of Financial Interest (SFI). The Governor's standard is the following:

> "Governor Malloy has established a standard which requires "filing of Annual Statements of Financial Interests by all persons in the Executive Branch and Quasi-Public Agencies who exercise (i) significant policy-making, regulatory or contractual authority; (ii) significant decision-making and/or supervisory responsibility for the review and/or award of State contracts; or (iii) significant decision-making and/or supervisory responsibility over staff that monitor State contracts."

These statements include information such as names of all associated business, income over $1,000, a list of all real property, and a list of creditors. SFIs that have been filed are available to the public under the Freedom of Information Act. The SFIs serve two purposes. First, the financial disclosure provides a checklist or reminder to the official/employee to be mindful of potential conflicts of interest. Second, the statements serve as a tool to maximize public confidence in governmental decision making.

With respect to the 2018 SFI filing – required by May 1, 2018 – the Connecticut Office of State Ethics received the following from the Connecticut Green Bank – see Table 2.

[16] Note – these members are representatives from the Connecticut Green Bank.
[17] Joint Committee meeting: http://www.ctgreenbank.com/about-us/governance/connecticut-grittee-meetings/
[18] Open Connecticut: http://www.osc.ct.gov/openCT/quasi.html

Table 2. Summary of State of Financial Interest Filings with the Office of State Ethics for FY 2018

	Number of SFIs Submitted	% Submitted on Time
Senior Staff	9	100%
Board of Directors	8	100%

The Connecticut Green Bank received a Certificate of Excellence Ethics Compliance from the Connecticut Office of State Ethics. The organization has received this designation in each of its first seven years of operation.

Small and Minority Business Procurement

The State of Connecticut's Supplier Diversity Program was established to ensure Connecticut small businesses have an opportunity to bid on a portion of the State's purchases. Through Fiscal Year 2015, the program required agencies and political subdivisions to set aside 25% of their annual budgets for construction, housing rehabilitation, and purchasing goods and services (after approved exemptions by the Department of Administrative Services) to be awarded to certified small businesses, with 25% of this amount to be awarded to certified minority business enterprises. Although reporting is no longer required, the Connecticut Green Bank is performing the analysis to ensure we are still committed to voluntarily meeting our set aside goals.

Table 3. Small Business Procurement

Year	Goal	Actual	Percentage
2012	$59,775	$39,520	66%
2013	$62,598	$59,340	95%
2014	$135,320	$120,560	89%
2015	$221,750	$251,980	113%
2016	$238,550	$510,797	214%
2017	$ 209,725	$ 379,246	180%
2018	$187,142	$537,962	287%

Table 4. Minority Business Enterprise Procurement

Year	Goal	Actual	Percentage
2012	$14,944	$31,474	211%
2013	$15,649	$52,308	334%
2014	$33,830	$88,427	261%
2015	$55,438	$153,319	277%
2016	$ 9,638	$96,020	161%
2017	$52,431	$ 107,974	205%
2018	$46,785	$28,075	60%[19]

[19] This decrease is due to CGB converting some staff from temporary to permanent status and is due to the loss of 1 vendor, the temporary employment agency.

Operational Efficiency

As a result of the Connecticut General Assembly's sweeps for FY 2018, the Green Bank has reduced financial resources, real estate, and human capital. As demonstrated in the following table, staff has grown by 1.6 FTEs, office space has increased by 3.4 times, and general administration has increased by 2.8 times since 2012. As a result of the FY 2018 sweeps, CEF and RGGI revenues have declined by over 55 percent and nearly 40 percent respectively.

Table 5. Human and Financial Resources of the Green Bank FY 2012 vs FY 2018

	Human Resources		Financial Resources				
Fiscal Year	FTE	Office Space (ft2)	Total Expenses	General Admin & Program Admin	General Admin	SBC Revenue	RGGI Revenue
2012	29.1	3,626	$32,510,209	$4,532,520	$1,387,854	$27,025,088	$2,052,748
2018	46.3	12,496	$41,267,452	$23,337,015	$5,957,995	$11,943,182	$1,250,260
Multiple	1.6x	3.4x	1.3x	5.1x	4.3x	0.4x	0.6x

With a sixty percent increase in FTEs, the impact of the organization has grown significantly. The Green Bank has also had to do more with less due to the sweeps of its funding and has significantly cut its expenses, not reflected in the above numbers. Private Investment and clean energy deployment have increased over 19-fold as demonstrated in Table 6.

Table 6. Green Bank Impact FY 2012 vs FY 2018

	Impact					
Fiscal Year	Private Investment	Clean Energy Deployment (MW)	Expected Annual Generation (MWh)	Annual Saved / Produced (MMBtu)	Job Years Supported	Annual CO2 Savings (tons)
2012	$10,184,827	2.9	3,278	11,183	231	1,833
2018	$232,232,627	57.8	78,465	267,855	2,105	42,456
Multiple	22.8x	19.9x	23.9x	24.0x	9.1x	23.2x

As a quasi-public organization, the Connecticut Green Bank strives to leverage its resources in attracting investment and in deploying clean energy as efficiently as possible. Reviewing the Green Bank's human capital, real estate, and expenses versus the amount of private investment and clean energy deployed shows a marked increase during the organization's first seven years of existence.

Table 7. Green Bank Deployment Efficiency FY 2012 vs FY 2018

Impact Delivered to Human and Financial Resources Used						
Fiscal Year	Private Investment / FTE	Clean Energy Deployment / FTE	Private Investment / Total Expenses	Private Investment / General Admin	Private Investment / Office Space	Clean Energy Deployment / Office Space
	($/FTE)	(kW/FTE)			($/ft2)	(kW/ft2)
2012	$350,596	100	0.31	7.34	$2,809	0.8
2018	$5,021,246	1,249	6.63	59.85	$18,585	4.6
Multiple	14.3x	12.5x	21.4x	8.2x	6.6x	5.8x

Workforce and Diversity

In order to achieve its mission, the Connecticut Green Bank is primarily reliant upon its most valuable asset: its people. The organization's staff is comprised of Program Staff, charged with designing and implementing products and programs that bring clean energy into the targeted markets in the state, Investment Staff, charged with tapping and leveraging efficient sources of capital, and Support Staff including marketing, legal, operations, and accounting functions.

In Fiscal Year 2018, the Green Bank added no new positions, hired two new members to fill open vacancies, and converted 2 temporary employees to full time. Due to the sweeps to the Green Bank's revenues, the organization eliminated 4 positions that took effect in FY18. The organization had a turnover rate of 4%.

The Green Bank realizes that part of having a strong team is ensuring that different perspectives are included in its workforce. To that end, the Green Bank monitors the diversity of its team and, per Connecticut regulations, informs the Governor's office of this. The following is the report that will be filed for the fiscal year ending June 30, 2018.

Table 8. Green Bank Workforce Analysis FY 2018

Category or class	Grand Total	Total Male	Total Female	White Male	White Female	Black Male	Black Female	Hispanic Male	Hispanic Female	Other Male	Other Female
Officials/Managers	33	20	13	16	12	1	0	2	0	1	1
Professionals	9	2	7	2	7	0	0	0	0	0	0
Administrative - Clerical	5	0	5	0	2	0	2	0	1	0	0
TOTALS	**47**	**22**	**25**	**18**	**21**	**1**	**2**	**2**	**1**	**1**	**1**

4. Measures of Success

The Green Bank develops a comprehensive plan every two to three years, establishing targets based on its Key Performance Indicators: Capital Deployed, Projects Completed, and Clean Energy Generated. In addition to these KPIs, the Green Bank reports its several program-associated societal benefits including economic development, environmental protection, public health, and others.

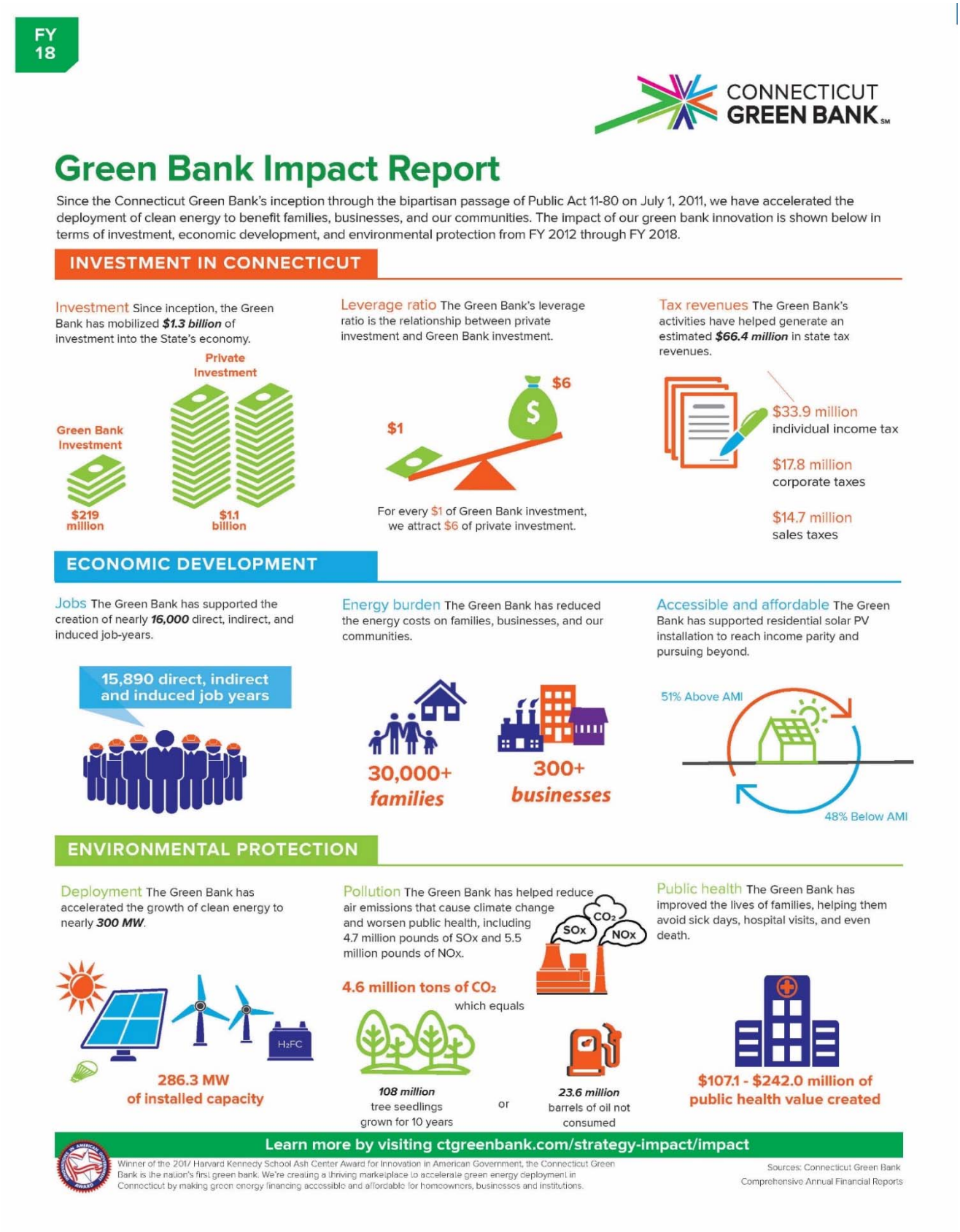
Table 9. Green Bank Actuals vs Targets by FY Closed[20]

	Target	Actual	% of Target
Fiscal Year	**Closed Projects**		
2012	-	413	0%
2013	-	1,114	0%
2014	4,396	2,456	56%
2015	4,485	6,507	145%
2016	14,252	7,309	51%
2017	6,846	5,071	74%
2018	5,566	7,364	132%
Total	**35,545**	**30,234**	**85%**
	Capital Deployed		
2012	-	$14,840,887	0%
2013	-	$111,041,476	0%
2014	$56,439,000	$101,891,614	181%
2015	$291,602,500	$312,627,075	107%
2016	$591,131,745	$302,218,144	51%
2017	$264,858,518	$199,964,562	75%
2018	$211,296,752	$254,563,228	120%
Total	**$1,415,328,515**	**$1,297,146,987**	**92%**
	Capacity Installed (MW)		
2012	-	2.8	0%
2013	-	23.4	0%
2014	29.6	23.4	79%
2015	55.5	62.5	113%
2016	119.5	66.5	56%
2017	66.2	49.8	75%
2018	48.6	57.8	119%
Total	**319.4**	**286.3**	**90%**

The above metrics show that the Green Bank continues to deploy capital to new projects that lead to increased deployment of clean energy. The Green Bank continues to set ambitious targets each year after consulting its Comprehensive Plan, which analyzes markets and directs the programs of the organization.

[20] Residential solar projects that receive financing also receive an incentive under the Residential Solar Incentive Program and Multifamily and Commercial Lease projects may also use C-PACE so they are counted in each sector's results. In this document, unless we are separating out a specific program, these projects have been removed from the total to avoid double counting.

The following info-graphic illustrates the activity and impact of the Connecticut Green Bank:



Activity

The Connecticut Green Bank tracks projects through three phases as they move through the pipeline from application until the completed implementation – Approved, Closed, and Completed. "Approved" signifies that the appropriate authority within the Connecticut Green Bank, whether President & CEO, Deployment Committee, or Board of Directors, has approved the Connecticut Green Bank's investment in the project per the Comprehensive Plan and Budget. "Closed" indicates all financial and legal documents have been executed and any additional funding has been secured. "Completion" indicates the project has closed, all construction and installation are complete and the project is operational. The full energy, economic, and environmental benefits from these projects begin to be fully accounted and reported after they close. Table 10 below presents annual project activity by these three phases.

Table 10. Green Bank Project Activity by FY Closed

Fiscal Year	Approved	Closed	Completed
2012	413	413	156
2013	1,130	1,114	939
2014	2,472	2,456	1,500
2015	6,444	6,507	5,104
2016	7,431	7,309	7,875
2017	5,207	5,071	5,365
2018	7,574	7,364	5,427
Total	**30,671**	**30,234**	**26,366**

Summary by fields such as "Number of projects" does not capture the extent of the organization's activities in a year as different projects have different sizes. Further demonstration of the organization's reach can be seen in the number of multi-family units impacted by closed projects each year.

Table 11. Green Bank Number of Multifamily Housing Units Impacted by FY Closed

Fiscal Year	Affordable	Market Rate	Total
2014	120		120
2015	326	82	408
2016	1,603	191	1,794
2017	1,288	100	1,388
2018	1,688	6	1,694
Total	**5,025**	**379**	**5,404**

Capital Deployed

Clean Energy Investment

The Connecticut Green Bank's intent, stated in the Comprehensive Plan, is to use public funds to attract multiples of private investment into Connecticut's green energy economy, both to decrease the reliance on public funds over time, as well as expand the scale of clean energy investments in the state. Several of the tables below, including Tables 12-13 show activity to date on this subject.

Table 12. Green Bank Clean Energy Investment by Source - Public and Private by FY Closed

Fiscal Year	CGB Investment	Private Investment	Total Investment
2012	$4,759,775	$10,081,113	$14,840,887
2013	$18,667,797	$92,674,475	$111,342,271
2014	$32,530,125	$75,355,679	$107,885,804
2015	$57,094,968	$267,629,721	$324,724,689
2016	$39,390,835	$268,082,228	$307,473,063
2017	$33,542,187	$172,164,532	$205,706,719
2018	$33,638,768	$232,232,627	$265,871,395
Total	**$219,624,454**	**$1,118,220,374**	**$1,337,844,828**

The table above shows the average total investment of public and private funds per project, by fiscal year, and in total. In reviewing the results from year to year it is important to note that the mix, size, and financial requirements of projects differ significantly across the program portfolio offered by the Green Bank.

Table 13. Green Bank Clean Energy Projects - Average Public and Private Investments by FY Closed

Fiscal Year	Average Investment
2012	$35,934.35
2013	$99,948.18
2014	$43,927.44
2015	$49,903.90
2016	$42,067.73
2017	$40,565.32
2018	$36,104.21
Total	**$44,249.68**

The table above shows that the average investment per project since the inception of the Green Bank is approximately $45,000.

Leverage Ratio

The table below shows in ratio form the extent to which public monies are driving private investment into the Green Bank's programs and the clean energy economy. The Green Bank's "leverage ratio," as it is commonly referenced, is calculated by dividing the total monies available in each period – here the Green Bank's fiscal year periods – by the amount of public investment. The table presents these ratios by fiscal year and the Green Bank's program categories. The leverage ratios for the Connecticut Green Bank are increasing over time, with FY 2018 our highest performing year to-date.

Table 14. Green Bank Sector Leverage Ratios by FY Closed

Fiscal Year	Commercial	Infrastructure	Residential	Strategic	Total
2012	0.0	3.1	0.0	0.0	3.1
2013	3.8	3.2	1.8	12.2	6.0
2014	2.2	3.9	9.2	0.0	3.3
2015	2.8	6.5	4.5	17.5	5.7
2016	4.6	11.0	5.8	0.0	7.8
2017	4.5	10.3	6.5	1.2	6.1
2018	4.0	13.0	7.0	0.0	7.9
Total	**3.5**	**7.5**	**6.1**	**10.2**	**6.1**

Clean Energy Produced and Energy Saved

The data below present the output of the projects supported by the Green Bank: electric capacity (megawatts [MW]), electricity production (megawatt hours [MWh]), and Energy Saved or Produced (MMBtu) – see Table 14.

Table 15. Green Bank Installed Capacity, Estimated Generation and Energy Saved and/or Produced by FY Closed[21]

		Estimated Generation (MWh)			Energy Saved/Produced (MMBtu)		
Fiscal Year	MW	Annual	Lifetime[22]	Lifetime Clean Energy Produced (kWh) / Green Bank Investment($)	Annual	Lifetime	Green Bank Investment($) / Lifetime Combined Energy Generated & Saved (MMBtu)
2012	2.8	3,240	80,989	17.0	11,053	276,333	17.2
2013	23.4	131,550	1,479,250	79.2	463,225	5,265,521	3.5
2014	23.4	51,702	994,047	30.6	246,307	4,521,304	7.2
2015	62.5	209,943	1,885,740	33.0	710,654	6,293,048	9.1
2016	66.5	91,652	2,101,159	53.3	346,080	7,795,086	5.1
2017	49.8	70,542	1,624,311	48.4	534,357	10,053,147	3.3
2018	57.8	78,465	1,830,092	54.4	267,805	6,246,198	5.4
Total	**286.3**	**637,095**	**9,995,588**	**45.5**	**2,579,481**	**40,450,638**	**5.4**

Clean Energy Technology Deployment

The Connecticut Green Bank takes a technology-agnostic approach to its financing products, with any commercially available technology that meets eligibility guidelines. The tables below present the number of projects by technology and project type by FY closed.

Clean energy means solar photovoltaic energy, solar thermal, geothermal energy, wind, ocean thermal energy, wave or tidal energy, fuel cells, landfill gas, hydropower that meets the low-impact standards of the Low-Impact Hydropower Institute, hydrogen production and hydrogen conversion technologies, low emission advanced biomass conversion technologies, alternative fuels, used for electricity generation including ethanol, biodiesel or other fuel produced in Connecticut and derived from agricultural produce, food waste or waste vegetable oil, provided the Commissioner of Energy and Environmental Protection determines that such fuels provide net reductions in greenhouse gas emissions and fossil fuel consumption, usable electricity from combined heat and power systems with waste heat recovery systems, thermal storage systems, other energy resources and emerging technologies which have significant potential for commercialization and which do not involve the combustion of coal, petroleum or petroleum products, municipal solid waste or nuclear fission, financing of energy efficiency projects, projects that seek to deploy electric, electric hybrid, natural gas or alternative fuel vehicles and

[21] Residential solar projects that receive financing also receive an incentive under the Residential Solar Incentive Program and Multifamily and Commercial Lease projects may also use C-PACE so they are counted in each sector's results. These projects have been removed from the total to avoid double counting.

[22] The lifetime numbers are based on the aggregation of projects' impact for one year multiplied by the useful life of the technology for each project

associated infrastructure, any related storage, distribution, manufacturing technologies or facilities and any Class I renewable energy source, as defined in section 16-1.[23]

Table 16. Green Bank Projects by Technology[24] by FY Closed [25]

	2012	2013	2014	2015	2016	2017	2018	Total
	# of Projects							
AD	0	0	0	0	1	0	0	1
Biomass	0	0	0	1	0	0	0	1
CHP	0	2	1	4	0	0	0	7
CHP/Microgrid	0	0	0	0	0	1	0	1
EE	0	4	101	134	128	374	1,329	2,070
Fuel Cell	0	1	0	0	0	0	0	1
Geothermal	0	0	2	1	8	6	5	22
Hydro	0	0	0	1	0	1	0	2
PV	413	1,106	2,345	6,352	7,166	4,669	5,968	28,019
Waste Heat Recovery	0	0	0	1	0	0	0	1
Wind	0	0	0	1	0	0	0	1
Other	0	1	7	12	6	20	62	108
Total	**413**	**1,114**	**2,456**	**6,507**	**7,309**	**5,071**	**7,364**	**30,234**
	MW							
AD	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0
Biomass	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.6
CHP	0.0	0.7	3.0	0.3	0.0	0.0	0.0	4.0
CHP/Microgrid	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8
EE	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Fuel Cell	0.0	14.8	0.0	0.0	0.0	0.0	0.0	14.8
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.9	0.0	0.2	0.0	1.1
PV	2.8	8.0	20.4	55.8	65.4	48.7	57.8	258.9
Waste Heat Recovery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.0	0.0	0.0	5.0	0.0	0.0	0.0	5.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**2.8**	**23.4**	**23.4**	**62.5**	**66.5**	**49.8**	**57.8**	**286.3**
	Expected Lifetime Savings or Generation (MWh)							
AD	0	0	0	0	106,171	0	0	106,171
Biomass	0	0	0	0	0	0	0	0
CHP	0	81,008	354,780	31,930	0	0	0	467,718
CHP/Microgrid	0	0	0	0	0	94,017	0	94,017
EE	0	4,846	57,214	43,782	109,437	70,681	121,083	407,045
Fuel Cell	0	1,166,832	0	0	0	0	0	1,166,832
Geothermal	0	0	84	38	295	329	152	898
Hydro	0	0	0	96,185	0	20,626	0	116,811
PV	80,989	226,563	581,969	1,595,544	1,885,256	1,438,657	1,708,857	7,517,835
Waste Heat Recovery[26]	0	0	0	0	0	0	0	0

[23] Connecticut Public Act 11-80

[24] Commercial and Residential projects can be a combination of RE and EE measures and the data presented includes the EE generation for those projects but it is assigned to the applicable RE technology.

[25] 98% of RSIP projects are accompanied by energy efficiency measures made by the energy assessment required by the program. See the Residential Solar Investment Program case study for more information.

[26] The expected annual generation for the Bridgeport Heating Loop project is 12,611 MWh. Lifetime generation is not available.

	2012	2013	2014	2015	2016	2017	2018	Total
Wind	0	0	0	118,260	0	0	0	118,260
Other	0	0	0	0	0	0	0	0
Total	**80,989**	**1,479,250**	**994,047**	**1,885,740**	**2,101,159**	**1,624,311**	**1,830,092**	**9,995,588**

Table 17. Green Bank Project Types by FY Closed[27]

	2012	2013	2014	2015	2016	2017	2018	Total
	# of Projects							
EE	0	4	101	134	128	374	1,329	2,070
RE	413	1,108	2,339	6,283	6,940	4,166	5,373	26,622
RE/EE	0	1	9	77	235	512	600	1,434
Other	0	1	7	13	6	19	62	108
Total	**413**	**1,114**	**2,456**	**6,507**	**7,309**	**5,071**	**7,364**	**30,234**
	MW							
EE	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
RE	2.8	23.3	22.8	60.7	64.3	46.0	52.3	272.3
RE/EE	0.0	0.1	0.6	1.8	2.2	3.7	5.5	13.9
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**2.8**	**23.4**	**23.4**	**62.5**	**66.5**	**49.8**	**57.8**	**286.3**
	Expected Lifetime Savings or Generation (MWh)							
EE	0	4,846	57,214	43,782	109,437	70,681	121,083	407,045
RE	80,989	1,471,528	918,438	1,787,435	1,906,993	1,396,662	1,490,043	9,052,087
RE/EE	0	2,875	18,394	54,522	84,729	156,968	218,966	536,456
Other	0	0	0	0	0	0	0	0
Total	**80,989**	**1,479,250**	**994,047**	**1,885,740**	**2,101,159**	**1,624,311**	**1,830,092**	**9,995,588**

Solar PV deployment makes up the largest portion of Connecticut Green Bank's projects by technology: about 97% of all clean energy projects deployed are from solar PV. When comparing deployment to clean energy production, solar PV produces the most energy (71% of all clean energy production), fuel cells also contribute a large proportion given the efficiency of the technology (14% of all clean energy production), both providing highly reliable baseload power. The Green Bank also supports additional deployment of energy efficiency not captured in the above tables by requiring an energy assessment for all residential solar PV projects incentivized through the Residential Solar Investment Program (RSIP). Energy assessments have been performed for 98% of completed RSIP projects, of which approximately 90% were performed through the utility-administered Home Energy Solutions (HES) program.

In FY 2018, The Green Bank made its first foray into electric vehicles through its partnership with Nissan. The Nissan Leaf is the world's best-selling electric vehicle (EV), in part due to Nissan's aggressive grassroots marketing partnerships and its early entry into the EV market. In May through September of 2017 the Green Bank initiated a pilot program to co-market these EVs and helped sell over 100 (see Figure 1 below) – generating nearly $200,000 in CT State tax revenue. After establishing a relationship as a Nissan co-sponsor, the Green Bank helped bring to market Nissan's consumer offer of a $10,000 manufacturer's discount off the Manufacturer Suggested Retail Price (MSRP) of a Model Year 2017 or 2016 Nissan Leaf. This customer value stacked with a state CHEAPR vehicle rebate of $3,000 in the first half of the campaign, reduced to $2,000 in the second half; and a federal investment tax credit of up to $7,500.

[27] Note that projects that are part of the Residential Solar Investment Program have an EE component not reflected in this table.

Table 18. Nissan Leaf Dealership Transactions, by Data Source

Data Source	Transaction Count	Date Range
Nissan LEAF sales data	103	May 1 – November 16
CHEAPR	133	May 1 – September 30
Implied Difference	30 leases	October 1 – September 30

Figure 1. CHEAPR Rebates Redeemed for the Nissan Leaf

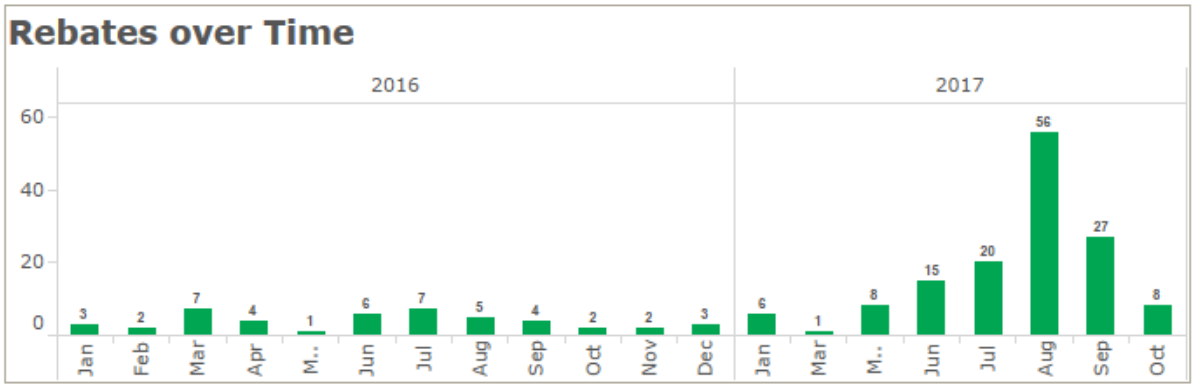


Table 19. Estimated Sales and Use Tax revenues to the General Fund

CT Sales and Use Tax for auto dealerships	6.35%
Taxable base (ranges varies by trim)	$26,622 - $32,622
Tax receipts (range varies by trim)	$1690 - $2072
Midpoint tax receipt (coinciding with SV trim, the most popular selection)	$1881
Vehicles sold	103
Estimated state tax receipts generated ($1881 x 103)	**$193,743**
Estimated proportion of participants induced to buy a car by this program	30%

Table 20. Other Key Statistics for the Nissan Leaf Program

Metric	Performance	Time Period
Sales	103	May 24 - November 16
Website registrants	323	May 24 – November 15
Website pageviews	6,161	April 1 – November 21
Website unique pageviews	5,277	April 1 – November 21
Website traffic ranking on ctgreenbank.com domain	4th	April 1 – November 21

Table 21. Comparison of Customer Groups, Marketing Methods, and Results

Customer Group	**Proof at Dealership**	**Marketing Methods**	**Leaf Sales**	**Engagement**
Solar PV customers	Show contract or statement for solar PV purchase, lease or PPA	Multiple emails (May through September) using A-B message testing; digital targeting; word of mouth	49	Green Bank email marketing; paid targeted ads
State employees	Show state employee identification badge or paystub	Physical paycheck inserts for 10,000 employees; digital inserts for all; digital targeting	42	Green Bank email marketing with State of CT support; paystub inserts
The Hartford employees	Show state employee identification badge or paystub	Ride-and-drive event at 2 of 3 campuses in July; Internal communications (HEAT website, newsfeeds, e-bulletin board)	8	The Hartford Environmental Action Team (HEAT) internal distribution
City of Hartford employees	Show state employee identification badge or paystub	Internal communications (posting on intranet)	3	City special projects staff internal distribution
RiverCOG member employees	Show municipal or COG employee identification badge or paystub	In-person pitch at regular meeting of mayors from member towns; email and follow-up to all chief elected officials	1	Green Bank distribution to “grasstops” (mayors), with RiverCOG vetting; in-person presentation to mayors

The Green Bank Model

Assets – Current and Non-Current

The Connecticut Green Bank's successful shift to a financing model from one formerly driven by grants and subsidies is evidenced by a net positive change in assets since its inception. The growth of the Green Bank's financing programs has led to a steady increase in non-current assets over time as more and more loans and leases are closed.

Table 22. Current and Non-Current Assets

	Year Ended June 30,						
	2018	2017	2016	2015	2014	2013	2012
Current Assets							
Cash and cash equivalents	$ 19,830,102	$ 37,148,283	$ 48,072,061	$ 39,893,649	$ 71,411,034	$ 68,105,014	$ 64,672,910
Receivables	5,036,838	3,682,469	4,531,258	2,867,233	8,253,318	4,545,661	3,305,301
Prepaid expenses and other assets	1,847,848	10,012,025	4,245,806	1,030,251	619,639	520,814	350,302
Contractor loans	--	--	2,272,906	3,112,663	--	--	--
Current portion of solar lease notes	908,541	869,831	845,479	803,573	766,086	704,032	670,645
Current portion of program loans	2,138,512	1,910,048	1,378,242	10,264,825	652,447	--	--
Total Current Assets	29,761,841	53,622,656	61,345,752	57,972,194	81,702,524	73,875,521	68,999,158
Noncurrent Assets							
Portfolio investments	1	1	1,000,000	1,000,000	1,000,000	1,000,000	2,155,525
Fair Value of interest rate swap	171,478	--	--	--	--	--	--
Bonds receivable	3,328,530	3,328,530	3,492,282	1,600,000	1,600,000	--	--
Solar lease notes - less current portion	6,358,184	7,242,822	8,162,635	9,015,437	9,778,315	10,536,136	11,064,879
Program loans - less current portion	43,525,021	40,296,113	31,889,275	30,253,119	12,750,457	3,788,094	--
Renewable energy certificates	547,556	654,767	812,770	933,054	1,069,390	1,217,491	1,324,614
Capital assets, net of depreciation and amortization	73,417,221	61,510,207	58,114,914	26,971,087	3,074,337	362,505	91,329
Asset retirement obligation, net	2,927,687	2,535,104	2,261,472	1,029,196	--	--	--
Restricted assets:							
Cash and cash equivalents	24,368,185	22,063,406	9,749,983	8,799,005	9,513,715	9,536,656	8,540,684
Total noncurrent assets	154,643,863	137,630,950	115,483,331	79,600,898	38,786,214	26,440,882	23,177,031
Total Assets	$184,405,704	$191,253,606	$176,829,083	$137,573,092	$120,488,738	$100,316,403	$ 92,176,189

Ratio of Public Funds Invested

As the first Green Bank in the country, the Connecticut Green Bank seeks to use limited public resources to attract private capital investment in clean energy. The Connecticut Green Bank does this by moving away from the subsidy-based model of supporting clean energy and towards a financing model. As highlighted below – see Figures 2 and 3, the Connecticut Green Bank has moved towards this model by increasing the overall ratio of financing investments from subsidies. In addition, it should be noted that funds used for subsidies through the RSIP (including administrative and financing costs) are recovered through the sale of SHRECs to the electric distribution companies (i.e., Avangrid and Eversource Energy) through 15-year Master Purchase Agreements ("MPA"), and that RSIP subsidies continue to decrease and leverage private capital at an increasing rate. This trend has developed even as total investment in clean energy has increased to $1.3 billion in total from 2012 through 2018, enabling the Connecticut Green Bank to do more at a faster pace while managing ratepayer resources more efficiently.

Figure 2. Green Bank KPI Capital Deployment Chart by FY Closed

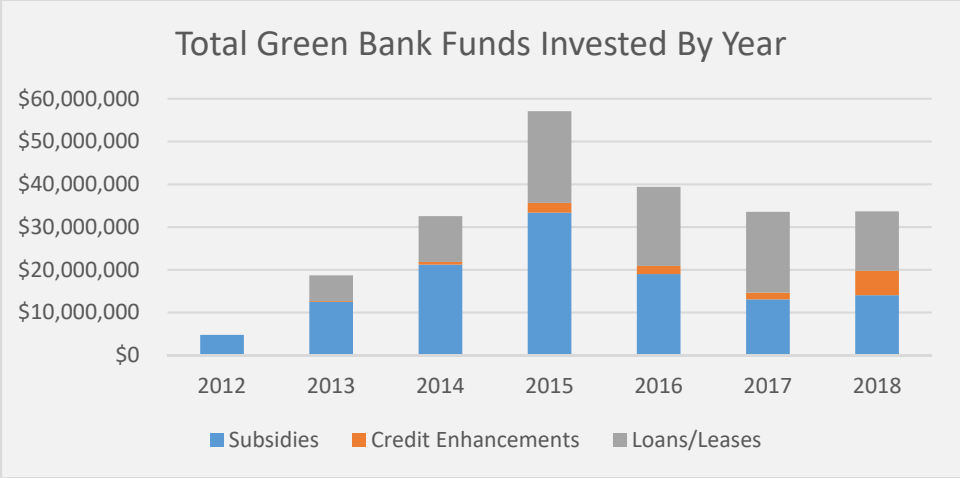


Figure 3. Green Bank Cumulative Green Bank Funds Invested by Type by FY Closed

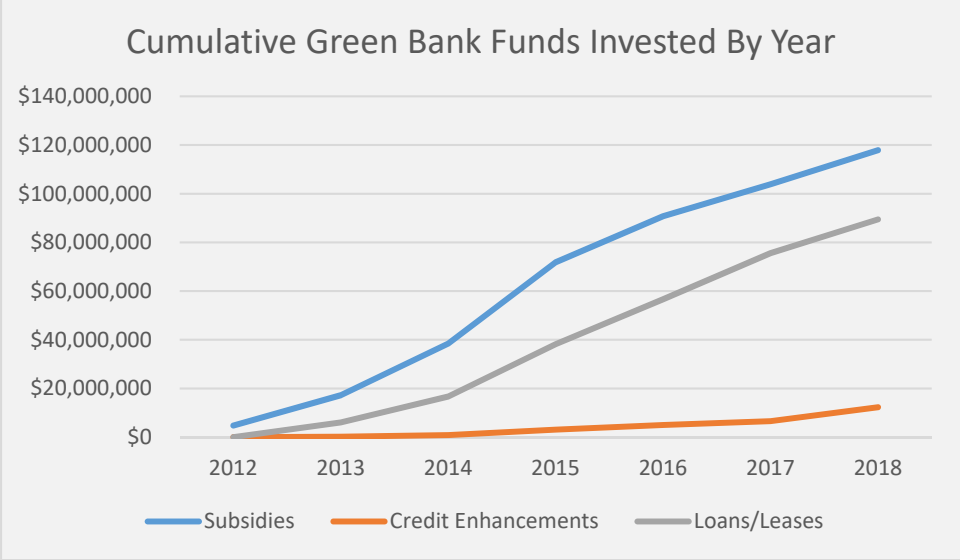


Table 23. Green Bank Ratio of Capital Invested as Subsidies, Credit Enhancements, and Loans and Leases by FY Closed

Fiscal Year	Subsidies *(Grants & Incentives)*	% Subsidies	Credit Enhancements *(LLR & IRB)*	% Credit Enhancements	Loans and Leases *(includes sell downs)*	% Loans and Leases	Total
2012	$4,759,775	100%	$0	0%	$0	0%	$4,759,775
2013	$12,470,374	67%	$187,122	1%	$6,010,302	32%	$18,667,797
2014	$21,208,083	65%	$629,983	2%	$10,692,059	33%	$32,530,125
2015	$33,363,767	58%	$2,266,588	4%	$21,464,613	38%	$57,094,968
2016	$18,976,144	48%	$1,902,677	5%	$18,512,014	47%	$39,390,835
2017	$13,076,299	39%	$1,578,539	5%	$18,887,349	56%	$33,542,187
2018	$14,032,729	42%	$5,725,567	17%	$13,880,473	41%	$33,638,768
Total	**$117,887,169**	**54%**	**$12,290,475**	**6%**	**$89,446,810**	**41%**	**$219,624,454**

Societal Benefits

Societal Benefits and the Evaluation Framework

One of the Connecticut Green Bank's evaluation activities is intended to understand how the increase in investment and deployment of clean energy supported by the Green Bank results in benefits to society. Working with internal and external subject matter experts, the Connecticut Green Bank has established an evaluation framework to guide the assessment, monitoring and reporting of the program impacts and processes, including, but not limited to energy savings and clean energy production and the resulting societal impacts or benefits arising from clean energy investment. The evaluation framework can be found here[28].

Societal Benefits: Jobs

The Connecticut Green Bank stimulates economic activity in the state through the lending and investing conducted by its programs. This economic activity can be measured by job creation. The Green Bank, in conjunction with the Connecticut Department of Economic and Community Development commissioned a study by Navigant Consulting in 2010 to quantify those jobs. This study was updated in 2016 and is the basis for how the Green Bank measures its impact on job creation. This study and calculator were reviewed by the Connecticut Department of Economic and Community Development who have deemed them a reasonable estimation and an appropriate tool for assessing this impact For more information on this study and the methodology, click here[29]. An overview of our Jobs methodology can be found here[30].

Table 24. Green Bank Job Years Supported by FY Closed[31]

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012	88	141	229
2013	579	1,164	1,743
2014	595	955	1,550
2015	1,589	2,555	4,144
2016	1,624	2,611	4,235
2017	795	1,090	1,885
2018	914	1,191	2,105
Total	**6,183**	**9,707**	**15,890**

[28] CGB Evaluation Framework: https://www.ctgreenbank.com/wp-content/uploads/2018/03/CGB_DECD_Jobs-Study_Fact-Sheet.pdf
[29] Clean Energy Jobs in Connecticut: http://ctgreenbank.com/wp-content/uploads/2017/02/CTGReenBank-Clean-Energy-Jobs-CT-August102016.pdf
[30] CGB Economic Development Factsheet: https://www.ctgreenbank.com/wp-content/uploads/2018/03/CGB_DECD_Jobs-Study_Fact-Sheet.pdf
[31] See Appendix for Job Year Factors.

Societal Benefits: Tax Revenue

The aforementioned economic stimulation by the Connecticut Green Bank also generates tax revenue for the state through personal and corporate income taxes as well as through sales and use taxes. In 2018, the Green Bank engaged Navigant Consulting to do a study on the levels of this revenue generation. The result of this study is the Navigant Tax Calculator that the Green Bank has adopted to estimate the impact of its projects to state tax revenues. This study and calculator were reviewed by the Connecticut Department of Revenue Services who have deemed them a reasonable estimation and an appropriate tool for assessing this impact. For more information on this study and the methodology, click here[32]. An overview of our Tax methodology can be found here[33].

Table 25. Green Bank Tax Revenues Generated by FY Closed[34]

Fiscal Year	Individual Income Taxes Generated	Corporate Taxes Generated	Sales Taxes Generated	Total Tax Revenue Generated
2012	$1,253,407	$743,245	$174,738	$2,171,390
2013	$3,079,681	$1,159,769	$4,144,617	$8,384,067
2014	$2,813,065	$1,756,157	$812,921	$5,382,143
2015	$8,852,594	$4,757,567	$3,897,309	$17,507,470
2016	$7,937,085	$3,666,561	$1,627,582	$13,231,228
2017	$4,295,225	$2,514,120	$1,830,747	$8,640,091
2018	$5,622,276	$3,244,090	$2,256,861	$11,123,228
Total	**$33,853,333**	**$17,841,509**	**$14,744,774**	**$66,439,616**

Green Bank Societal Benefits: Environmental Impacts and Equivalencies

The Green Bank assesses the impact of its projects in terms of the local environmental protection benefits these projects produce. These benefits are primarily in the form of cleaner air in the state and are measured in terms of tons of Carbon Dioxide (CO_2) and pounds of Nitrous Oxide (NOx), Sulfur Dioxide (SOx) and particulate matter (PM 2.5) not emitted. The Green Bank has developed its methodology for these measurements in conjunction with outside experts at the Connecticut Department of Energy and Environmental Protection and at the United States Environmental Protection Agency. These agencies have deemed the methodology to be a reasonable estimation and an appropriate tool for assessing this impact. For more information on this methodology, click here[35]. For more information on the EPA's AvERT, click here[36].

[32] Tax Report: https://www.ctgreenbank.com/wp-content/uploads/2018/09/Tax-Study_Final_Report_01-19-18.pdf
[33] Tax Methodology: https://www.ctgreenbank.com/wp-content/uploads/2018/09/CGB-Eval-Tax-Methodology-7-24-18.pdf
[34] See Appendix for Average Emission Rates.
[35] CGB Environmental Impact Factsheet: https://www.ctgreenbank.com/wp-content/uploads/2017/05/CGB-Environmental-Impact-051617.pdf
[36] Environmental Protection Agency AvERT User Manual: https://www.ctgreenbank.com/wp-content/uploads/2017/05/AVERT_fact_sheet_user_manual_03-01-17.pdf

Table 26. Green Bank Avoided Emissions by FY Closed[37]

CO2 Savings (tons)			
Fiscal Year	**Annual**	**Lifetime**	**Green Bank Investment($) / Lifetime Tons of CO2 Emissions**
2012	1,811	45,279	$105.12
2013	13,254	210,298	$88.77
2014	15,622	355,971	$91.38
2015	44,635	1,047,353	$54.51
2016	47,705	1,125,785	$34.99
2017	35,573	848,359	$39.54
2018	42,448	991,066	$33.94
Total	**201,048**	**4,624,110**	**$47.50**
NOx Savings (pounds)			
Fiscal Year	**Annual**	**Lifetime**	**Green Bank Investment($) / Lifetime Pounds of NOX Emissions**
2012	2,280	57,010	$83.49
2013	70,822	821,541	$22.72
2014	21,374	491,480	$66.19
2015	51,607	1,230,444	$46.40
2016	50,805	1,197,594	$32.89
2017	34,278	823,869	$40.71
2018	37,046	869,723	$38.68
Total	**268,213**	**5,491,661**	**$39.99**
SOx Savings (pounds)			
Fiscal Year	**Annual**	**Lifetime**	**Green Bank Investment($) / Lifetime Pounds of SOX Emissions**
2012	2,998	74,946	$63.51
2013	55,652	702,130	$26.59
2014	25,071	578,408	$56.24
2015	51,510	1,234,660	$46.24
2016	41,069	955,738	$41.22
2017	24,025	578,231	$58.01
2018	24,659	578,326	$58.17
Total	**224,984**	**4,702,439**	**$46.70**
PM 2.5 (pounds)			
Fiscal Year	**Annual**	**Lifetime**	**Green Bank Investment($) / Lifetime Pounds of PM 2.5 Emissions**
2012	163	4,065	$1,170.88
2013	473	11,590	$1,610.62
2014	1,382	31,770	$1,023.94
2015	3,680	86,690	$658.61
2016	4,138	98,167	$401.26
2017	3,040	72,767	$460.95
2018	3,609	84,714	$397.09
Total	**16,485**	**389,763**	**$563.48**

[37] See Appendix for Average Emission Rates.

Using the organization's methodology for environmental impact, the Green Bank calculates environmental equivalencies using factors from the EPA's environmental equivalency calculator, which was also reviewed and deemed to be a reasonable estimation of impact by the Connecticut Department of Energy and Environment. The lifetime numbers are based on the aggregation of projects' impact for one year multiplied by the useful life of the technology for each project. For more information on this methodology, click here[38]. The EPA environmental equivalency calculator can be found here[39].

Table 27. Green Bank Greenhouse Gas Equivalencies (based on reductions of CO_2 tons) by FY Closed

	Greenhouse gas emissions from:			
	Passenger vehicles driven for one year		**Miles driven by an average passenger vehicle**	
Fiscal Year	**Annual**	**Lifetime**	**Annual**	**Lifetime**
2012	352	8,677	4,027,056	100,676,396
2013	2,575	40,299	29,469,133	467,595,331
2014	3,035	68,214	34,736,021	791,499,082
2015	8,671	200,702	99,244,546	2,328,780,072
2016	9,267	215,732	106,072,275	2,503,173,653
2017	6,910	162,569	79,096,095	1,886,319,235
2018	8,246	189,916	94,383,039	2,203,627,878
Total	**39,055**	**886,109**	**447,028,165**	**10,281,671,646**
	CO_2 emissions from:			
	Gallons of gasoline consumed		**Homes' energy use for one year**	
Fiscal Year	**Annual**	**Lifetime**	**Annual**	**Lifetime**
2012	184,881	4,622,029	177	4,435
2013	1,352,921	21,467,188	1,298	20,600
2014	1,594,722	36,337,530	1,530	34,870
2015	4,556,293	106,913,725	4,372	102,597
2016	4,869,752	114,920,091	4,673	110,280
2017	3,631,282	86,600,456	3,485	83,104
2018	4,333,102	101,168,018	4,158	97,083
Total	**20,522,954**	**472,029,036**	**19,694**	**452,969**
	Carbon sequestered by:			
	Tree seedlings grown for 10 years		**Acres of U.S. forests in one year**	
Fiscal Year	**Annual**	**Lifetime**	**Annual**	**Lifetime**
2012	42,581	1,064,531	1,935	48,382
2013	311,600	4,944,253	14,162	224,710
2014	367,291	8,369,142	16,693	380,367
2015	1,049,391	24,624,024	47,693	1,119,131
2016	1,121,586	26,468,024	50,975	1,202,938
2017	836,345	19,945,537	38,011	906,500
2018	997,986	23,300,691	45,357	1,058,987
Total	**4,726,780**	**108,716,202**	**214,826**	**4,941,014**

[38] http://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
[39] EPA Greenhouse Gas Equivalencies Calculator: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

Societal Benefits: Public Health

With the adoption of the AvERT tool for assessing environmental impacts, the Green Bank is now able to leverage this information to gauge the impact of its activities in terms of public health. In partnership with the US Environmental Protection Agency, after a 2017 review by the Connecticut Department of Public Health and Connecticut Department of Energy & Environmental Protection, the Green Bank's board approved of using the EPA's Co-Benefit Risk Assessment Tool (CoBRA). These agencies have deemed the methodology to be a reasonable estimation and an appropriate tool for assessing this impact. For more information on this methodology, click here[40]. An overview of CoBRA can be found here[41]. The factors used to measure impact from CoBRA can be found in the appendix.

Table 28. Green Bank Economic Value of Public Health Impact by FY Closed

Fiscal Year	Annual		Lifetime		Green Bank Investment ($) / Lifetime Public Health Savings	
	Low	High	Low	High	Low	High
2012	$59,518	$134,531	$1,487,325.42	$3,361,835	$ 3.20	$ 1.42
2013	$1,034,448	$2,338,254	$13,179,049.74	$29,789,371	$ 1.42	$ 0.63
2014	$505,649	$1,142,941	$11,654,121.72	$26,342,070	$ 2.79	$ 1.23
2015	$1,112,280	$2,514,121	$26,549,917.69	$60,011,045	$ 2.15	$ 0.95
2016	$987,942	$2,233,053	$23,148,877.76	$52,323,139	$ 1.70	$ 0.75
2017	$628,745	$1,421,147	$15,105,173.02	$34,141,854	$ 2.22	$ 0.98
2018	$680,338	$1,537,756	$15,962,961.12	$36,080,526	$ 2.11	$ 0.93
Total	**$5,008,920**	**$11,321,803**	**$107,087,426.46**	**$242,049,839.43**	**$ 2.05**	**$ 0.91**

Other Societal Benefits

The Green Bank is presently working on methodologies to further measure additional societal impacts of its programs. During Fiscal Year 2019, the Green Bank will review tax revenue from individual, corporate, and sales and uses taxes produced from investments in clean energy, as well as the economic relief from the energy burden felt by participating property owners and tenants that install clean energy systems annually and over the life of the projects.

Community Impacts

Community and Market Descriptions

Communities across Connecticut are demonstrating leadership in their support of clean energy. The Connecticut Green Bank distributes reports to communities on an annual basis to provide them with a breakdown of their performance. There are many leaders of clean energy deployment across the state, and we have assembled the "Top 5" in energy, economy, and environment for both FY 2018 as well as

[40] https://www.ctgreenbank.com/wp-content/uploads/2018/03/CGB-Eval-PUBLICHEALTH-1-25-18-new.pdf
[41] https://www.epa.gov/statelocalenergy/co-benefits-risk-assessment-cobra-health-impacts-screening-and-mapping-tool

FY 2012 through FY 2018. It should be noted that in a UN report, an estimated $90 trillion must be invested to further all of these Sustainable Development Goals through 2030 in order to confront climate change.[42] This comes to an average annual investment per capita of approximately $837[43].

Table 29. The "Top 5" Energy, Economy, and Environment Metrics based on FY 2018 Closed Activity

Municipality	Watts / Capita
Union	184.1
Woodbridge	63.4
Bethlehem	57.0
Wilton	54.4
North	50.3

Municipality	Investment / Capita
Union	$611.31
Woodbridge	$251.87
Bethlehem	$248.43
Orange	$197.43
East Haven	$195.04

Municipality	Total Lifetime CO2 Emissions (Tons)
Bridgeport	40,620
Milford	36,400
West Haven	36,340
Hartford	34,355
Hamden	33,729

Table 30. The "Top 5" Energy, Economy, and Environment Metrics based on FY 2012 – 2018 Closed Activity

Municipality	Watts / Capita
Canaan	344.5
Union	288.7
Woodbridge	285.6
Durham	239.0
Hampton	224.5

Municipality	Investment / Capita
Colebrook	$15,473.21
Deep River	$1,579.90
Canaan	$1,506.41
Bridgeport	$1,085.72
Union	$1,063.20

Municipality	Total Lifetime CO2 Emissions (Tons)
Bridgeport	227,839
Hartford	118,549
Manchester	105,673
Waterbury	104,241
Stratford	100,154

Projects by Income Bands

In addition to looking at funding and clean energy deployment in distressed municipalities, the Green Bank works to ensure that low to moderate income (LMI) census tracts across the entire state are benefiting from its programs. The Green Bank defines low to moderate income as 100% or less of the Area Median Income (AMI) of a Metropolitan Statistical Area (MSA). Table 31 groups the Green Bank's residential projects based upon the average area median income (AMI) of their census tract from the American Community Survey (ACS) 5-Year Estimate data. Table 32 groups the Green Bank's residential projects based upon the average state median income (SMI) of their census tract from the American Community Survey (ACS) 5-Year Estimate data.

[42] https://www.un.org/pga/71/wp-content/uploads/sites/40/2017/02/Financing-Sustainable-Development-in-a-time-of-turmoil.pdf
[43] $90,000,000,000,000/7.6B people/14 years until 2030 = $837

Table 31. Overview of Population and Households in 2016 American Community Survey (ACS) Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands[44]

MSA AMI Band	Total Population	% Total Population Distribution	Total Households	% Total Household Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Total Owner/Rental Occupied 5+ Unit Households	% Owner/Rental Occupied 5+ Unit Household Distribution
<60%	649,617	18%	236,643	17%	60,769	7%	86,225	37%
60%-80%	509,088	14%	199,269	15%	99,220	12%	45,398	19%
80%-100%	641,084	18%	261,240	19%	165,331	19%	49,125	21%
100%-120%	653,309	18%	251,604	19%	187,463	22%	30,753	13%
>120%	1,126,543	31%	405,921	30%	345,311	40%	22,618	10%
Total	**3,579,641**	**100%**	**1,354,677**	**100%**	**858,094**	**100%**	**234,119**	**100%**

Table 32. Overview of Population and Households in 2016 American Community Survey (ACS) Metropolitan Statistical Area (MSA) State Median Income (SMI) Bands[45]

MSA SMI Band	Total Population	% Total Population Distribution	Total Households	% Total Household Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Total Owner/Rental Occupied 5+ Unit Households	% Owner/Rental Occupied 5+ Unit Household Distribution
<60%	638,876	18%	235,940	17%	62,899	7%	82,737	35%
60%-80%	596,896	17%	235,390	17%	119,483	14%	54,255	23%
80%-100%	695,550	19%	278,870	21%	181,872	21%	48,634	21%
100%-120%	636,266	18%	248,827	18%	188,451	22%	29,695	13%
>120%	1,012,053	28%	355,650	26%	305,389	36%	18,798	8%
Total	**3,579,641**	**100%**	**1,354,677**	**100%**	**858,094**	**100%**	**234,119**	**100%**

[44] The suite of products offered by the Connecticut Green Bank do not currently address rental properties of 1-4 units.
[45] The suite of products offered by the Connecticut Green Bank do not currently address rental properties of 1-4 units.

Table 33. Green Bank Residential[46] Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands by FY Closed [47]

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Households	% Total Household Distribution	Project Units / 1,000 Total Households	Total Investment / Total Household	Watts / Total Household
2012	<60%	10	2%	0.1	2%	$279,743	2%	228,062	17%	0.0	$1.23	0.2
2012	60%-80%	10	2%	0.1	2%	$242,605	2%	207,439	15%	0.0	$1.17	0.3
2012	80%-100%	48	12%	0.3	12%	$1,644,387	11%	239,356	18%	0.2	$6.87	1.4
2012	100%-120%	116	28%	0.8	28%	$4,131,570	28%	280,563	21%	0.4	$14.73	2.8
2012	>120%	229	55%	1.6	57%	$8,542,582	58%	404,748	30%	0.6	$21.11	4.0
2012	Total	413	100%	2.8	100%	$14,840,887	100%	1,360,168	100%	0.3	$10.91	2.1
2013	<60%	20	2%	0.1	1%	$415,069	1%	224,259	17%	0.1	$1.85	0.4
2013	60%-80%	56	5%	0.4	5%	$1,693,314	5%	222,791	16%	0.3	$7.60	1.7
2013	80%-100%	124	11%	0.8	10%	$3,780,230	11%	236,905	17%	0.5	$15.96	3.4
2013	100%-120%	220	20%	1.5	19%	$6,763,701	19%	264,685	20%	0.8	$25.55	5.5
2013	>120%	687	62%	5.1	65%	$22,757,564	64%	407,204	30%	1.7	$55.89	12.6
2013	Total	1,107	100%	7.9	100%	$35,409,877	100%	1,355,844	100%	0.8	$26.12	5.8
2014	<60%	84	3%	0.4	2%	$1,957,083	2%	224,369	17%	0.4	$8.72	1.9
2014	60%-80%	163	6%	0.9	5%	$4,480,089	6%	216,437	16%	0.8	$20.70	4.2
2014	80%-100%	527	21%	2.6	15%	$12,597,703	16%	231,014	17%	2.3	$54.53	11.1
2014	100%-120%	613	24%	4.3	26%	$20,874,375	27%	278,174	21%	2.2	$75.04	15.6
2014	>120%	1,161	46%	8.5	51%	$38,501,085	49%	406,185	30%	2.9	$94.79	20.9
2014	Total	2,548	100%	16.7	100%	$78,410,335	100%	1,356,179	100%	1.9	$57.82	12.3
2015	<60%	273	4%	1.5	3%	$6,837,381	3%	240,062	18%	1.1	$28.48	6.3
2015	60%-80%	654	10%	3.9	8%	$18,556,285	8%	193,188	14%	3.4	$96.05	20.4
2015	80%-100%	1,237	18%	7.9	16%	$39,310,303	17%	264,609	20%	4.7	$148.56	29.8
2015	100%-120%	1,639	24%	12.3	26%	$58,678,750	26%	240,485	18%	6.8	$244.00	51.1
2015	>120%	2,933	44%	22.2	46%	$102,930,714	45%	414,212	31%	7.1	$248.50	53.6
2015	Total	6,736	100%	47.8	100%	$226,313,433	100%	1,352,556	100%	5.0	$167.32	35.4

[46] Residential Owner-occupied properties of 1-4 units and multifamily housing greater than 4 units.
[47] Excludes projects in unknown bands.

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Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Households	% Total Household Distribution	Project Units / 1,000 Total Households	Total Investment / Total Household	Watts / Total Household
2016	<60%	863	11%	3.9	7%	$20,092,793	8%	236,643	17%	3.6	$84.91	16.7
2016	60%-80%	1,151	14%	6.5	12%	$27,695,608	11%	199,269	15%	5.8	$138.99	32.5
2016	80%-100%	1,637	20%	10.8	19%	$50,666,376	20%	261,240	19%	6.3	$193.95	41.5
2016	100%-120%	1,967	24%	13.5	24%	$60,400,915	24%	251,604	19%	7.8	$240.06	53.5
2016	>120%	2,532	31%	21.3	38%	$90,939,174	36%	405,921	30%	6.2	$224.03	52.4
2016	Total	8,150	100%	56.0	100%	$249,794,866	100%	1,354,677	100%	6.0	$184.39	41.3
2017	<60%	1,082	18%	4.2	12%	$28,562,971	19%	236,643	17%	4.6	$120.70	17.9
2017	60%-80%	1,128	19%	5.6	15%	$23,429,700	15%	199,269	15%	5.7	$117.58	27.9
2017	80%-100%	1,203	20%	6.8	19%	$25,923,286	17%	261,240	19%	4.6	$99.23	26.2
2017	100%-120%	1,059	17%	7.7	21%	$30,252,221	20%	251,604	19%	4.2	$120.24	30.5
2017	>120%	1,603	26%	12.2	34%	$45,433,601	30%	405,921	30%	3.9	$111.93	30.2
2017	Total	6,075	100%	36.5	100%	$153,601,779	100%	1,354,677	100%	4.5	$113.39	27.0
2018	<60%	2,449	27%	4.9	10%	$47,518,445	21%	236,643	17%	10.3	$200.80	20.6
2018	60%-80%	1,131	13%	6.7	14%	$28,186,609	12%	199,269	15%	5.7	$141.45	33.7
2018	80%-100%	1,474	16%	9.5	20%	$39,452,377	17%	261,240	19%	5.6	$151.02	36.4
2018	100%-120%	1,567	18%	10.9	23%	$45,918,546	20%	251,604	19%	6.2	$182.50	43.3
2018	>120%	2,316	26%	16.2	34%	$70,212,071	30%	405,921	30%	5.7	$172.97	40.0
2018	Total	8,937	100%	48.2	100%	$231,288,048	100%	1,354,677	100%	6.6	$170.73	35.6
Total	<60%	4,781	14%	15.1	7%	$105,663,483	11%	236,643	17%	20.2	$446.51	63.9
Total	60%-80%	4,293	13%	24.0	11%	$104,284,210	11%	199,269	15%	21.5	$523.33	120.6
Total	80%-100%	6,250	18%	38.8	18%	$173,374,661	18%	261,240	19%	23.9	$663.66	148.4
Total	100%-120%	7,181	21%	50.9	24%	$227,020,078	23%	251,604	19%	28.5	$902.29	202.4
Total	>120%	11,461	34%	87.2	40%	$379,316,793	38%	405,921	30%	28.2	$934.46	214.9
Total	Total	33,966	100%	216.1	100%	$989,659,226	100%	1,354,677	100%	25.1	$730.55	159.5

Table 34. Green Bank Residential[48] Activity in Metropolitan Statistical Area (MSA) State Median Income (SMI) Bands by FY Closed [49]

Fiscal Year Closed	MSA SMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Households	% Total Household Distribution	Project Units / 1,000 Total Households	Total Investment / Total Household	Watts / Total Household
2012	<60%	12	3%	0.1	2%	$247,910	2%	249,608	18%	0.0	$0.99	0.2
2012	60%-80%	8	2%	0.1	2%	$212,810	1%	204,836	15%	0.0	$1.04	0.3
2012	80%-100%	93	23%	0.6	21%	$3,213,897	22%	293,878	22%	0.3	$10.94	2.1
2012	100%-120%	120	29%	0.8	29%	$4,304,632	29%	260,689	19%	0.5	$16.51	3.1
2012	>120%	180	44%	1.3	46%	$6,861,638	46%	351,157	26%	0.5	$19.54	3.7
2012	Total	413	100%	2.8	100%	$14,840,887	100%	1,360,168	100%	0.3	$10.91	2.1
2013	<60%	30	3%	0.2	2%	$777,069	2%	251,171	19%	0.1	$3.09	0.7
2013	60%-80%	50	5%	0.3	4%	$1,448,545	4%	211,049	16%	0.2	$6.86	1.4
2013	80%-100%	194	18%	1.3	16%	$5,951,430	17%	295,748	22%	0.7	$20.12	4.3
2013	100%-120%	224	20%	1.5	19%	$7,270,906	21%	247,329	18%	0.9	$29.40	6.0
2013	>120%	609	55%	4.6	59%	$19,961,927	56%	350,547	26%	1.7	$56.95	13.2
2013	Total	1,107	100%	7.9	100%	$35,409,877	100%	1,355,844	100%	0.8	$26.12	5.8
2014	<60%	120	5%	0.6	4%	$2,958,719	4%	264,100	19%	0.5	$11.20	2.3
2014	60%-80%	163	6%	1.0	6%	$4,511,479	6%	189,153	14%	0.9	$23.85	5.0
2014	80%-100%	709	28%	3.9	23%	$19,174,861	24%	288,116	21%	2.5	$66.55	13.6
2014	100%-120%	597	23%	4.2	25%	$19,694,263	25%	242,617	18%	2.5	$81.17	17.2
2014	>120%	959	38%	7.1	42%	$32,071,013	41%	372,193	27%	2.6	$86.17	19.0
2014	Total	2,548	100%	16.7	100%	$78,410,335	100%	1,356,179	100%	1.9	$57.82	12.3
2015	<60%	429	6%	2.2	5%	$10,600,497	5%	236,756	18%	1.8	$44.77	9.4
2015	60%-80%	857	13%	5.1	11%	$23,796,919	11%	235,289	17%	3.6	$101.14	21.6
2015	80%-100%	1,458	22%	10.3	22%	$49,576,148	22%	262,503	19%	5.6	$188.86	39.3
2015	100%-120%	1,774	26%	12.2	26%	$58,559,526	26%	247,545	18%	7.2	$236.56	49.4
2015	>120%	2,218	33%	18.0	38%	$83,780,343	37%	370,463	27%	6.0	$226.15	48.5
2015	Total	6,736	100%	47.8	100%	$226,313,433	100%	1,352,556	100%	5.0	$167.32	35.4

[48] Residential Owner-occupied properties of 1-4 units and multifamily housing greater than 4 units.
[49] Excludes projects in unknown bands.

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Fiscal Year Closed	MSA SMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Households	% Total Household Distribution	Project Units / 1,000 Total Households	Total Investment / Total Household	Watts / Total Household
2016	<60%	969	12%	4.4	8%	$20,807,098	8%	235,940	17%	4.1	$88.19	18.5
2016	60%-80%	1,330	16%	8.6	15%	$36,820,736	15%	235,390	17%	5.7	$156.42	36.4
2016	80%-100%	1,934	24%	12.7	23%	$62,242,325	25%	278,870	21%	6.9	$223.19	45.6
2016	100%-120%	1,752	21%	13.1	23%	$56,359,128	23%	248,827	18%	7.0	$226.50	52.7
2016	>120%	2,165	27%	17.2	31%	$73,565,580	29%	355,650	26%	6.1	$206.85	48.5
2016	Total	8,150	100%	56.0	100%	$249,794,866	100%	1,354,677	100%	6.0	$184.39	41.3
2017	<60%	1,020	17%	3.9	11%	$26,171,120	17%	235,940	17%	4.3	$110.92	16.4
2017	60%-80%	1,450	24%	7.0	19%	$29,278,465	19%	235,390	17%	6.2	$124.38	29.6
2017	80%-100%	1,312	22%	8.1	22%	$32,317,210	21%	278,870	21%	4.7	$115.89	29.1
2017	100%-120%	1,051	17%	7.7	21%	$28,600,305	19%	248,827	18%	4.2	$114.94	31.0
2017	>120%	1,242	20%	9.8	27%	$37,234,679	24%	355,650	26%	3.5	$104.69	27.7
2017	Total	6,075	100%	36.5	100%	$153,601,779	100%	1,354,677	100%	4.5	$113.39	27.0
2018	<60%	2,359	26%	4.9	10%	$43,123,116	19%	235,940	17%	10.0	$182.77	20.7
2018	60%-80%	1,504	17%	8.3	17%	$39,035,885	17%	235,390	17%	6.4	$165.83	35.3
2018	80%-100%	1,650	18%	10.8	22%	$45,183,645	20%	278,870	21%	5.9	$162.02	38.8
2018	100%-120%	1,666	19%	11.4	24%	$48,088,273	21%	248,827	18%	6.7	$193.26	45.9
2018	>120%	1,758	20%	12.8	27%	$55,857,128	24%	355,650	26%	4.9	$157.06	36.0
2018	Total	8,937	100%	48.2	100%	$231,288,048	100%	1,354,677	100%	6.6	$170.73	35.6
Total	<60%	4,939	15%	16.2	7%	$104,685,529	11%	235,940	17%	20.9	$443.70	68.6
Total	60%-80%	5,362	16%	30.2	14%	$135,104,839	14%	235,390	17%	22.8	$573.96	128.5
Total	80%-100%	7,350	22%	47.8	22%	$217,659,516	22%	278,870	21%	26.4	$780.51	171.4
Total	100%-120%	7,184	21%	51.0	24%	$222,877,033	23%	248,827	18%	28.9	$895.71	204.9
Total	>120%	9,131	27%	70.9	33%	$309,332,309	31%	355,650	26%	25.7	$869.77	199.3
Total	Total	33,966	100%	216.1	100%	$989,659,226	100%	1,354,677	100%	25.1	$730.55	159.5

Through such products and initiatives as the LMI solar incentive, its partnership with PosiGen, ongoing education to the market about the good credit quality of low and moderate income homeowners and market research made available to industry participants for targeting (customer segmentation, demographic and geographic data), and its affordable multifamily housing energy financing products, the Green Bank has focused on increasing its penetration in the LMI market shown in Tables 35 and 36 to deliver inclusive prosperity through the green economy.

Table 35. Green Bank Residential[50] Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed [51]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below
2012	413	345	68	16%	2.8	2.4	0.4	16%	$14,840,887	$12,674,152	$2,166,735	15%
2013	1,107	907	200	18%	7.9	6.6	1.3	16%	$35,409,877	$29,521,265	$5,888,612	17%
2014	2,548	1,774	774	30%	16.7	12.8	3.9	23%	$78,410,335	$59,375,460	$19,034,875	24%
2015	6,736	4,572	2,164	32%	47.8	34.5	13.3	28%	$226,313,433	$161,609,465	$64,703,969	29%
2016	8,150	4,499	3,651	45%	56.0	34.8	21.3	38%	$249,794,866	$151,340,089	$98,454,777	39%
2017	6,075	2,662	3,413	56%	36.5	19.9	16.6	45%	$153,601,779	$75,685,823	$77,915,956	51%
2018	8,937	3,883	5,054	57%	48.2	27.1	21.1	44%	$231,288,048	$116,130,617	$115,157,431	50%
Total	**33,966**	**18,642**	**15,324**	**45%**	**216.1**	**138.1**	**77.9**	**36%**	**$989,659,226**	**$606,336,871**	**$383,322,355**	**39%**

Table 36. Green Bank Residential[52] Activity in Metropolitan Statistical Area (MSA) State Median Income (SMI) Bands Above or Below 100% by FY Closed [53]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	Total	Over 100% SMI	100% or Below SMI	% at 100% or Below	Total	Over 100% SMI	100% or Below SMI	% at 100% or Below	Total	Over 100% SMI	100% or Below SMI	% at 100% or Below
2012	413	300	113	27%	2.8	2.1	0.7	25%	$14,840,887	$11,166,270	$3,674,617	25%
2013	1,107	833	274	25%	7.9	6.1	1.7	22%	$35,409,877	$27,232,834	$8,177,044	23%
2014	2,548	1,556	992	39%	16.7	11.3	5.5	33%	$78,410,335	$51,765,276	$26,645,059	34%
2015	6,736	3,992	2,744	41%	47.8	30.2	17.6	37%	$226,313,433	$142,339,869	$83,973,564	37%

[50] Residential Owner-occupied properties of 1-4 units and multifamily housing greater than 4 units
[51] Excludes projects in unknown bands.
[52] Residential Owner-occupied properties of 1-4 units and multifamily housing greater than 4 units.
[53] Excludes projects in unknown bands.

	# Project Units				MW				Total Investment			
Fiscal Year Closed	Total	Over 100% SMI	100% or Below SMI	% at 100% or Below	Total	Over 100% SMI	100% or Below SMI	% at 100% or Below	Total	Over 100% SMI	100% or Below SMI	% at 100% or Below
2016	8,150	3,917	4,233	52%	56.0	30.4	25.7	46%	$249,794,866	$129,924,708	$119,870,158	48%
2017	6,075	2,293	3,782	62%	36.5	17.6	19.0	52%	$153,601,779	$65,834,984	$87,766,795	57%
2018	8,937	3,424	5,513	62%	48.2	24.2	24.0	50%	$231,288,048	$103,945,402	$127,342,646	55%
Total	**33,966**	**16,315**	**17,651**	**52%**	**216.1**	**121.9**	**94.2**	**44%**	**$989,659,226**	**$532,209,342**	**$457,449,883**	**46%**

Distressed Communities

Connecticut's "distressed communities[54]" are particularly affected by the state's high energy prices. On average, Connecticut's neediest households owe $2,165 more in annual energy bills than they can afford[55]. The Green Bank's financing products and marketing efforts seek to bring lower and more predictable energy costs to homes and businesses in these communities.

Table 37. Distressed and Not Distressed Municipalities, Population, and Households in Connecticut[56]

For more information on DECD Distressed Municipality criterions, click here[57]

2018[58] DECD Distressed Designation				
	Distressed	Not Distressed	Total	% Distressed
# Towns	25	144	169	15%
2010 Census Population	1,140,567	2,433,530	3,574,097	32%
2010 Census Households	435,964	935,123	1,371,087	32%

The Green Bank has steadily increased its percentage of projects deployed each year in distressed municipalities. This has led to nearly $440 million in clean energy projects in these communities, creating 4,975 jobs since 2012.

[54] Distressed Municipalities are defined by the Connecticut Department of Economic and community Development by a combination of per capita income, poverty rates, unemployment rates, growth, age of buildings, education. More information can be found here: https://www.ct.gov/ecd/cwp/view.asp?a=1105&q=251248

[55] Home Energy Affordability in Connecticut: www.operationfuel.org/wp-content/uploads/2017/12/2017-ConnecticutHEAG-11-27-17-RDC-edits.pdf $2,615 is the average energy affordability gap for Households earning less than 49% of the Federal Poverty Level. For households earning less than 200% FPL (approximately 320,000 households in CT) the average energy affordability gap is $1,404.

[56] As designated by DECD in 2018.

[57] Department of Economic and Community Development: http://www.ct.gov/ecd/cwp/view.asp?a=1105&q=251248

[58] https://www.ct.gov/ecd/cwp/view.asp?a=1105&q=251248

Table 38. Green Bank Commercial and Residential Activity in Distressed Communities by FY Closed

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2012	Yes	46	11%	0.3	9%	$1,283,753	9%	1,171,385	33%	$1.10	0.2	447,962	33%	$2.87	0.6
2012	No	367	89%	2.6	91%	$13,557,134	91%	2,400,828	67%	$5.65	1.1	912,222	67%	$14.86	2.8
2012	Total	413	100%	2.8	100%	$14,840,887	100%	3,572,213	100%	$4.15	0.8	1,360,184	100%	$10.91	2.1
2013	Yes	122	11%	15.5	66%	$75,227,791	68%	1,124,923	31%	$66.87	13.8	426,564	31%	$176.36	36.4
2013	No	992	89%	7.9	34%	$35,933,230	32%	2,458,638	69%	$14.62	3.2	929,285	69%	$38.67	8.5
2013	Total	1,114	100%	23.4	100%	$111,161,021	100%	3,583,561	100%	$31.02	6.5	1,355,849	100%	$81.99	17.3
2014	Yes	388	15%	3.9	17%	$21,508,685	20%	1,106,027	31%	$19.45	3.6	416,415	31%	$51.65	9.4
2014	No	2,187	85%	19.5	83%	$86,273,236	80%	2,486,026	69%	$34.70	7.8	939,791	69%	$91.80	20.7
2014	Total	2,575	100%	23.4	100%	$107,781,921	100%	3,592,053	100%	$30.01	6.5	1,356,206	100%	$79.47	17.3
2015	Yes	1,503	22%	13.1	21%	$94,332,618	29%	1,122,550	31%	$84.03	11.7	423,559	31%	$222.71	30.9
2015	No	5,295	78%	49.4	79%	$230,100,643	71%	2,470,672	69%	$93.13	20.0	929,024	69%	$247.68	53.2
2015	Total	6,798	100%	62.5	100%	$324,433,261	100%	3,593,222	100%	$90.29	17.4	1,352,583	100%	$239.86	46.2
2016	Yes	2,460	29%	17.1	26%	$83,668,426	27%	1,162,653	32%	$71.96	14.7	438,710	32%	$190.71	38.9
2016	No	5,953	71%	49.4	74%	$223,449,079	73%	2,425,917	68%	$92.11	20.4	916,003	68%	$243.94	54.0
2016	Total	8,413	100%	66.5	100%	$307,117,505	100%	3,588,570	100%	$85.58	18.5	1,354,713	100%	$226.70	49.1
2017	Yes	2,240	36%	15.1	30%	$70,668,755	34%	1,162,653	32%	$60.78	13.0	438,710	32%	$161.08	34.4
2017	No	4,001	64%	34.7	70%	$134,696,213	66%	2,425,917	68%	$55.52	14.3	916,003	68%	$147.05	37.9
2017	Total	6,241	100%	49.8	100%	$205,364,968	100%	3,588,570	100%	$57.23	13.9	1,354,713	100%	$151.59	36.7
2018	Yes	3,986	44%	18.4	32%	$98,666,305	37%	1,162,653	32%	$84.86	15.8	438,710	32%	$224.90	42.0
2018	No	5,030	56%	39.4	68%	$165,734,969	63%	2,425,917	68%	$68.32	16.2	916,003	68%	$180.93	43.0
2018	Total	9,016	100%	57.8	100%	$264,401,274	100%	3,588,570	100%	$73.68	16.1	1,354,713	100%	$195.17	42.7

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
Total	Yes	10,745	31%	83.4	29%	$445,356,333	33%	1,162,653	32%	$383.05	71.7	438,710	32%	$1,015.15	190.1
Total	No	23,825	69%	202.9	71%	$889,744,503	67%	2,425,917	68%	$366.77	83.6	916,003	68%	$971.33	221.5
Total	Total	34,570	100%	286.3	100%	$1,335,100,836	100%	3,588,570	100%	$372.04	79.8	1,354,713	100%	$985.52	211.3

Credit Quality of Homeowners

The credit quality of Green Bank's borrowers in Green Bank residential 1-4 programs that do FICO-based underwriting reflects the relatively high FICO scores in the state; 94% of single family households that are Green Bank borrowers in these programs have a FICO of 680 or higher. The Green Bank has begun to focus on ensuring that credit challenged customers have access to energy financing products through such initiatives as its partnership with PosiGen (which uses an alternative underwriting approach) and launching a credit-challenged version of the Smart-E program that broadens the credit eligibility and now has six lenders including Capital 4 Change (a CDFI) and all the credit unions participating (all institutions with experience serving this market).

Table 39. Credit Score Ranges of Household Borrowers Using Residential Financing Programs

Program Name	<639	640-679	680-699	700-719	720-739	740+	Unknown	Grand Total
Smart-E	65	207	261	307	305	1,750	47	2,942
Solar Lease	1	45	39	78	86	940		1,189
Solar Loan			11	15	34	219		279
Grand Total	**66**	**252**	**311**	**400**	**425**	**2,909**	**47**	**4,410**
	1%	**6%**	**7%**	**9%**	**10%**	**66%**	**1%**	**100%**

Projects by CRA Eligibility

The Community Reinvestment Act was enacted by Congress in 1977 to encourage depository institutions to lend in low-to-moderate-income communities. These lending institutions are rated as to the volume of their lending to projects in these communities by regulators. Projects are potentially compliant with CRA requirements if they are below 80% of a Metropolitan Statistical Area's (MSA) Adjusted Median Income (AMI) level. For FY 2018, an estimated 40% of projects maybe CRA compliant.

Table 40. Green Bank Commercial and Residential Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 80% by FY Closed[59] [60]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	**Total**	**Over 80% AMI**	**80% or Below AMI**	**% at 80% or Below**	**Total**	**Over 80% AMI**	**80% or Below AMI**	**% at 80% or Below**	**Total**	**Over 80% AMI**	**80% or Below AMI**	**% at 80% or Below**
2012	413	393	20	5%	2.8	2.7	0.1	4%	$14,840,887	$14,318,539	$522,348	4%
2013	1,114	1,035	79	7%	23.4	7.5	15.9	68%	$111,161,021	$34,991,762	$76,169,260	69%
2014	2,575	2,318	257	10%	23.4	20.5	2.9	12%	$107,781,921	$91,575,888	$16,206,033	15%
2015	6,798	5,846	952	14%	62.5	54.5	8.1	13%	$324,433,261	$253,577,614	$70,855,647	22%
2016	8,218	6,188	2,030	25%	65.9	53.9	12.1	18%	$305,020,338	$250,289,527	$54,730,811	18%
2017	6,135	3,908	2,227	36%	49.8	35.8	13.9	28%	$204,043,682	$133,949,681	$70,094,002	34%
2018	9,010	5,410	3,600	40%	56.7	42.7	14.0	25%	$260,899,936	$176,717,976	$84,181,959	32%
Total	**34,263**	**25,098**	**9,165**	**27%**	**284.6**	**217.6**	**67.1**	**24%**	**$1,328,181,046**	**$955,420,987**	**$372,760,059**	**28%**

[59] Excludes projects in unknown bands.

[60] This table has been adjusted to include all the Low Income Solar Lease (ESA) and Multifamily Affordable Housing projects as 80% or Below AMI regardless of which census tract the project falls into as these programs are designed to serve the LMI market.

Customer Types and Market Segments

The Connecticut Green Bank targets end users of energy in Connecticut both at work and at home. A breakdown of projects by year by customer type is seen in Table 34.

Table 41. Green Bank Activity in Residential and Commercial Markets by FY Closed

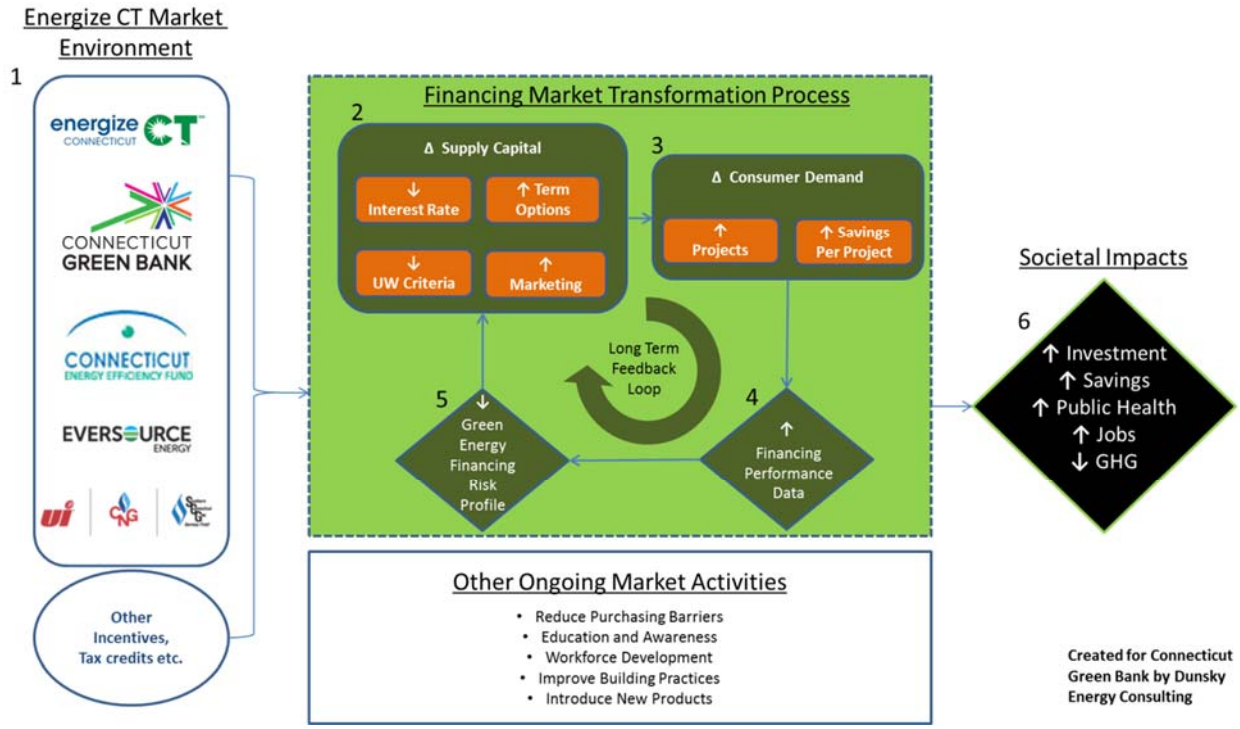
Fiscal Year Closed	Market	# of Projects	# of Project Units	Total Investment	Installed Capacity (MW)	Expected Annual Generation (MWh)	Annual Saved / Produced (MMBtu)
2012	Residential	413	413	$14,840,887	2.8	3,240	11,053
2012 Total		413	413	$14,840,887	2.8	3,240	11,053
2013	Commercial	7	7	$75,751,144	15.6	122,597	432,678
	Residential	1,107	1,107	$35,335,868	7.9	8,953	30,547
2013 Total		1,114	1,114	$111,087,012	23.4	131,550	463,225
2014	Commercial	27	27	$29,371,586	6.7	32,134	179,454
	Residential	2,428	2,428	$74,743,923	16.7	19,551	66,792
	Multifamily	1	120	$428,739	0.0	18	61
2014 Total		2,456	2,575	$104,544,248	23.4	51,702	246,307
2015	Commercial	62	62	$98,119,828	14.7	154,449	520,180
	Residential	6,442	6,442	$219,168,772	47.8	55,438	190,282
	Multifamily	3	294	$1,051,296	0.0	56	192
2015 Total		6,507	6,798	$318,339,896	62.5	209,943	710,654
2016	Commercial	71	71	$56,438,526	10.2	25,623	115,260
	Residential	7,218	7,218	$233,388,854	55.6	64,854	226,922
	Multifamily	20	1,124	415,166,476	0.7	1,175	4,009
2016 Total		7,309	8,413	$304,993,855	66.5	91,652	346,191
2017	Commercial	60	60	$50,441,903	13.2	24,632	367,648
	Residential	4,998	4,998	$130,752,475	35.7	44,785	162,870
	Multifamily	13	1,183	$21,113,118	0.8	1,125	3,839
2017 Total		5,071	6,241	$202,307,496	49.8	70,542	534,357
2018	Commercial	78	78	$33,021,901	9.5	13,160	33,806
	Residential	7,269	7,269	$201,418,868	48.2	63,896	229,240
	Multifamily	17	1,671	$26,724,701	0.1	1,409	4,809
2018 Total		7,364	9,018	$261,165,470	57.8	78,465	267,855
Total	**Commercial**	**305**	**305**	**$343,144,888**	**69.9**	**372,595**	**1,649,026**
Total	**Residential**	**29,875**	**29,875**	**$909,649,647**	**214.8**	**260,716**	**917,706**
Total	**Multifamily**	**54**	**4,392**	**$64,484,330**	**1.6**	**3,783**	**12,909**
Grand Total		**30,234**	**34,572**	**$1,317,278,866**	**286.3**	**637,095**	**2,579,642**

5. Programs

Program Logic Model and the Financing Market Transformation Strategy

The Connecticut Green Bank has published an Evaluation Framework[61] and developed a Program Logic Model (PLM) that presents the green bank model of attracting and deploying private capital through financing – see Figure 4. In addition to representing graphically how a program is structured, this PLM serves as a foundation for evaluating clean energy deployment through subsidy and financing programs of the Connecticut Green Bank.

Figure 4. Connecticut Green Bank Program Logic Model – Including Subsidies and Financing



The above figure is a generalized market transformation and impact logic model. Revealed later in this section will be how it has been adapted to develop several evaluation frameworks for specific programs of the Green Bank. Additionally, with the continued maturation of the organization's programs, more data is becoming available to quantify and present the societal impacts associated with those programs.

While the Green Bank's capital availability expands to further support clean energy deployment, even greater coordination between the Green Bank's programs and those administered by the utilities is anticipated. As such, various other key participants have been included in this overall logic model. Beginning by identifying the multitude of interactions that occur across their respective programs, the Green Bank and the utilities will be better prepared to accommodate the funding demands of clean energy projects over the short, medium, and long term. In addition, the model facilitates the

[61] Evaluation Framework – Assessing, Monitoring, and Reporting of Program Impacts and Processes by Opinion Dynamics and Dunsky Energy Consulting for the Connecticut Green Bank (July 2016)

identification and capture of known interventions in the clean energy environment that may impact the trajectory of the Green Bank's financing efforts over time.

The PLM includes three (3) components – Energize CT Market Environment (including Other Ongoing Market Activities), Green Bank Financing Market Transformation Process, and Societal Impacts.

Energize CT Market Environment

Energize CT is an initiative of the Green Bank, the Connecticut Energy Efficiency Fund, the State, and the local electric and gas utilities. It provides Connecticut consumers, businesses and communities the resources and information they need to make it easy to save energy and build a clean energy future for everyone in the state. Under this umbrella, the electric and gas investor owned utilities (IOUs) provide information, marketing, and deliver the energy efficiency programs that have been approved by the State and supported by the Connecticut Energy Efficiency Fund. Operating under a statutory mandate that all cost-effective energy efficiency be acquired, with guidance from the Connecticut Energy Efficiency Board and its consultants, the utilities offer a variety of programs and encouragements for residential, commercial, and industrial customers to make decisions to participate in these cost-reducing opportunities. A range of methods is used to encourage customers to participate in the programs, among them targeted information, low cost/no cost measures, financial incentives, discounted retail products, and product and project financing. The Connecticut Green Bank, with a statutorily established residential solar PV target of 300MW by 2022, also markets and delivers its clean energy programs to residential customers. Informed by aggregate consumer and demographic data, the Green Bank promotes its programs and market offerings with direct incentives and financing opportunities in addition to a host of marketing, communication and outreach tools. [62]

Within the Green Bank's current programs, only participants in the Residential Solar Investment Program (RSIP) are required to receive a home energy assessment through the utility-administered Home Energy Solutions (HES) program[63], the DOE Home Energy Score, or an alternate RSIP-approved energy assessment conducted by a BPI[64] or equivalently credentialed professional. Having satisfied the program's qualifying energy producing measures, RSIP participants may also receive rebates or incentives from the utilities (intended to overcome barriers to customer participation and/or encourage increased selection of energy efficient measures), or other levels of government (e.g., state incentives and Federal tax credits for several energy saving technologies), as well as opportunities to access affordable financing for some or all of the remaining portion of their clean energy project. In the context of a PLM, one may also anticipate similar links between the Green Bank programs and those of the investor owned utilities (IOU's).

The impetus behind increased coordination among the utility administered energy efficiency programs and the Green Bank's programs is threefold: 1) more energy savings, and resulting emissions reductions, are expected to be acquired more economically both to the programs and to the project participants, 2) delivery efficiencies and greater savings could be found in coordinating financing that each entity offers to common customer segments within the sphere of program activities that they offer, and 3) coordination through a Joint Committee of the Energy Efficiency Board and the Connecticut

[62] Per Public Act 15-194 "An Act Concerning the Encouragement of Local Economic Development and Access to Residential Renewable Energy," the Connecticut Green Bank administers a rebate and performance-based incentive program to support solar PV.
[63] https://www.energizect.com/your-home/solutions-list/home-energy-solutions-core-services
[64] http://www.bpi.org/about-us

Green Bank is required by statute.[65] It is important to note that a number of other ongoing market activities are occurring through Energize CT or outside of the Green Bank's market transformation process. From introducing new products, reducing purchasing barriers, education and awareness programs to workforce development, and improving building practices – there are a variety of activities that help move the market towards more clean energy deployment.

Finance Market Transformation Process

The efforts of the Green Bank are exemplified through the financing market transformation process which focuses on accelerating the deployment of clean energy – more customers and "deeper" more comprehensive measures being undertaken – by securing increasingly affordable and attractive private capital. The Green Bank can enter the process at several points (i.e., from numbers 2 through 4 in the above PLM figure), such as supplying capital through financing offers, marketing clean energy financing, or offsetting clean energy financing risk by backstopping loans, or sharing loan performance data.

Below is a breakdown of each component of the financing market transformation process of the Green Bank:

- **Supply of Capital –** financing programs aim to increase the supply of affordable and attractive capital available to support energy savings and clean energy production in the market place. This is done at the Green Bank by:

    a. Providing financing (loans or leases) to customers using Green Bank capital; and/or
    b. Establishing structures, programs, and public-private partnerships that connect third-party capital to support energy savings projects.

Beyond ensuring that financing is available for clean energy projects, the Green Bank's Supply of Capital interventions can lead to, but are not limited to benefits such as:

a. Reduced interest rates, which lower the cost of capital for clean energy projects;
b. More loan term options to better match savings cash flows (e.g., longer terms for longer payback projects, early repayment, or deferred first year payments);
c. Less restrictive underwriting criteria, resulting in increased eligibility and access to financing; and
d. Increased marketing efforts by lenders to leverage clean energy investment opportunities.

Each of these features is intended to increase uptake of clean energy projects, leading to increased energy savings, clean energy production, and other positive societal impacts. The long-term goal of the Green Bank's efforts is to achieve these attractive features in the market with a reduced need for Green Bank intervention, through the provision of performance data that convinces private capital providers to offer such features on their own.

[65] Pursuant to Section 15-245m(d)(2) of Connecticut General Statutes, the Joint Committee shall examine opportunities to coordinate the programs and activities contained in the plan developed under Section 16-245n(c) of the General Statutes [Comprehensive Plan of the Connecticut Green Bank] with the programs and activities contained in the plan developed under section 16-245m(d)(1) of the General Statutes [Energy Conservation and Load Management Plan] and to provide financing to increase the benefits of programs funded by the plan developed under section 16-245m(d)(1) of the General Statutes so as to reduce the long-term cost, environmental impacts, and security risks of energy in the state.

- **Consumer Demand –** in combination with a comprehensive set of clean energy programs under the Energize CT initiative, offered by the utilities, the Green Bank drives consumer demand for clean energy by marketing financing programs and increasing awareness of the potential benefits stemming from clean energy projects through the range of programs it offers. It should also be noted that through channel marketing strategies (e.g., contractor channels to the customer) success will be determined by an increase in demand for financing. The results of the increased demand are expected to, but are not limited to:

    a. Increase in the number of clean energy projects; and
    b. Increase in the associated average savings and/or clean energy production per project.

  Increasing affordable and attractive financing offerings in the marketplace is an important component of unlocking consumer demand and driving greater energy savings and clean energy production, and is central to the Green Bank's market transformation efforts.

- **Financing Performance Data –** Green Bank gathers and communicates the performance of clean energy financing either through its own programs or for other financing options in the market place. This increases access to valuable information that can help lenders and customers identify promising clean energy investments. Enabling access to this information (i.e., data transparency) is important to encouraging market competition.

  Ultimately, data on the performance of Green Bank sponsored financial products is expected to continue to play a pivotal role in the attraction of private capital directed toward more affordable and accessible financing offerings. As the Green Bank increases the access to affordable and attractive capital, and more customers use this financing for their clean energy projects, data demonstrating strong and reliable performance of these projects is also expected to enable lower interest rates due to a better-informed assumption of risk.

- **Financing Risk Profile –** Green Bank can help reduce clean energy financing risk profiles in many ways. For example, it can absorb a portion or all the credit risk by providing loan loss reserve (LLR) funds and guarantees or taking the first-loss position on investments (i.e., subordinated debt). It can also channel or attract rebates and incentives to finance energy saving projects thus improving their economic performance and lowering the associated performance risk. In the long run, by making clean energy financing performance data available to the market, Green Bank programs increase lenders' and borrowers' understanding of clean energy investment risk profiles, which is expected to enable them to (1) design more affordable and attractive financing products and (2) select projects for financing to reduce risks.

  This element of the PLM plays the key linking role in the Market Transformation feedback loop, leading to longer term impacts, as the market (1) recognizes the expected advantageous risk/return profile associated with clean energy investments and (2) takes further steps to increase the supply of affordable and attractive capital with less Green Bank credit enhancement needed to support demand for clean energy investments.

Ensuring that financing performance and risk profile data are available to the market is important from various perspectives. For a deeper examination and presentation, please see the report by the State Energy Efficiency Action Network.[66]

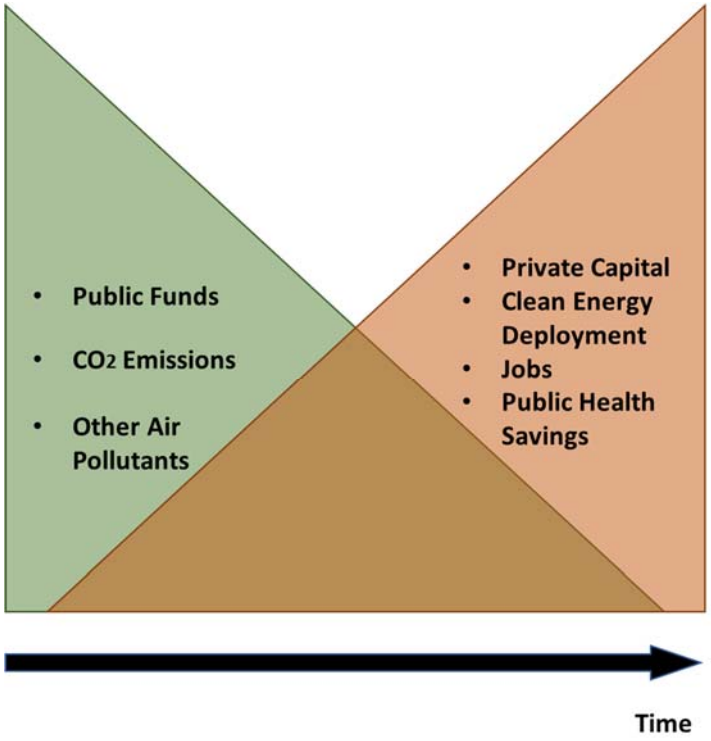
Societal Impact

The efforts to accelerate and scale-up investment in clean energy deployment by the Green Bank, lead to a myriad of societal impacts and benefits.

All the PLM elements ultimately aim to contribute to Green Bank program impacts and benefits. These include the direct increase in energy savings and improvement of public health (e.g., asbestos remediation, lead abatement, etc.) to the customer, increase in the creation of local in-state jobs, and the reduction of greenhouse gas emissions for society. The impacts may also include consideration of secondary or indirect benefits such as GDP growth and energy savings supported by lenders who have leveraged Green Bank data or marketing efforts. Figure 5 below represents the transition over time of the Green Bank's clean energy impacts and associated creation of societal benefits.

[66] State and Local Energy Efficiency Action Network. (2014). *Energy Efficiency Finance Programs: Use Case Analysis to Define Data Needs and Guidelines.* Prepared by: Peter Thompson, Peter Larsen, Chris Kramer, and Charles Goldman of Lawrence Berkeley National Laboratory. Click here (http://www4.eere.energy.gov/seeaction/publication/energy-efficiency-finance-programs-use-case-analysis-define-data-needs-and-guidelines)

Figure 5. Societal Benefits – Environmental Protection and Economic Development – from Greater Private Capital Investment



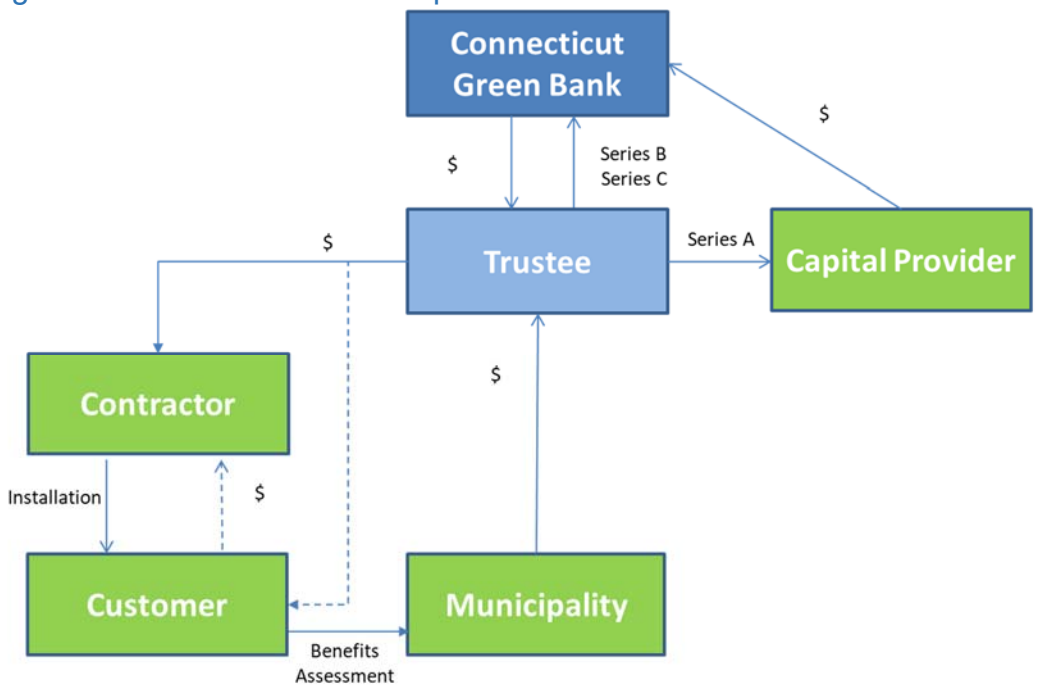
As the Green Bank continues to attract more private investment in Connecticut's clean energy economy through the issuance of green bonds, the deployment of clean energy will be accelerated. The more clean energy that is being deployed, the greater the societal benefits.

Case 1 – C-PACE

Description

Commercial Property Assessed Clean Energy (C-PACE) enables building owners to pay for clean energy improvements or clean energy production projects over time through a voluntary benefit assessment on their property tax bills. This process makes it easier for building owners to secure low-interest capital to fund energy improvements and is structured so that energy savings more than offset the benefit assessment.

Figure 6. Legal Structure and Flows of Capital for C-PACE



For a municipality to participate in the C-PACE program, its legislative body must pass a resolution enabling it to enter into an agreement with the Connecticut Green Bank to assess, collect, remit, and assign benefit assessments against C-PACE borrowers' liabilities. As of June 30, 2018, there are 130 cities and towns signed up for C-PACE representing more than 90% of commercial and industrial building space in Connecticut. Additionally, as of June 30, 2018, over $125 million in C-PACE benefit assessment advances have been closed.

A portfolio of $17.5 million in benefit assessment liens comprised of 30 energy efficiency and clean energy projects across 22 municipalities was sold in two tranches to the Public Finance Authority (WI) ("PFA") under a bond conduit structure financed by Clean Fund. Using an auction process, bids for the portfolio were competitively solicited across the Connecticut Green Bank's capital providers. Bidders were encouraged to offer various structures and pricing, with or without credit enhancement, and to bid for one or more projects. The selected structure (See Figure 6) has the PFA use proceeds from Clean Fund (in return for a single class of Senior "A" bonds) to fund 80 percent of the portfolio purchase price. To credit enhance the transaction, the Connecticut Green Bank has taken back, in equal measure, Subordinated "B" and "C" bonds. The structure is, in effect, a "private securitization" of the underlying portfolio.

Building on this experience and the growth of the Connecticut C-PACE market, the Green Bank again solicited proposals from several financial institutions in 2015. As a result of the competitive solicitation, the Green Bank established a strategic financing partnership with Hannon Armstrong Sustainable Infrastructure (Hannon Armstrong), publicly listed on the NYSE. The Green Bank and Hannon Armstrong structure uses a special purpose entity (SPE) established by Hannon Armstrong specifically for the Green Bank C-PACE portfolio. The SPE purchases the benefit assessment liens in tranches that are financed from between 80% and 90% by Hannon Armstrong between $50 to $100 million with the residual capital provided by the Green Bank. The Green Bank's C-PACE leadership and innovation was recognized by the Clean Energy States Alliance "State Leadership in Clean Energy" award in 2014.

Key Performance Indicators

The Key Performance Indicators for C-PACE closed activity are reflected in Tables 42 through 45. These illustrate the volume of projects by year, investment, generation capacity installed, and the amount of energy saved and/or produced. It also breaks down the volume of projects by energy efficiency, renewable generation, or both.

Table 42. C-PACE Project Types and Investment by FY Closed

Fiscal Year Closed	EE	RE	RE/EE	Other	# Projects	# Project Units	Total Investment[67]	Green Bank Investment[68]	Private Investment	Leverage Ratio
2012	-	-	-		-	-	-	-	-	-
2013	2		1		3	2	$1,512,144	$210,302	$1,301,842	7.2
2014	6	14	3		23	6	$21,785,167	$9,550,120	$12,235,046	2.3
2015	10	30	9		49	10	$33,697,500	$12,655,495	$21,042,005	2.7
2016	10	35	8		53	10	$36,669,384	$7,624,149	$29,045,235	4.8
2017	5	27	6		38	5	$15,471,767	$4,444,369	$11,027,398	3.5
2018	10	46	9	1	66	10	$26,755,606	$5,721,604	$21,034,002	4.7
Total	**43**	**152**	**36**	**1**	**232**	**43**	**$135,891,568**	**$40,206,040**	**$95,685,528**	**3.4**

Table 43. C-PACE Project Capacity, Generation and Savings by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)	Annual Cost Savings	Lifetime Cost Savings
2012	-	-	-	-	-	-	-
2013	101.0	513,495	7,657	2,021	32,845	$132,907	$2,538,186
2014	3,631.0	8,409,814	154,673	36,264	716,930	$1,905,050	$40,635,908
2015	7,280.0	14,290,802	308,269	41,464	877,020	$2,792,189	$58,534,753
2016	6,376.0	15,325,066	278,293	59,323	1,125,290	$3,842,877	$82,458,936
2017	3,958.0	6,190,064	132,876	21,662	466,881	$813,966	$15,172,649
2018	7,321.9	10,636,250	236,031	25,194	527,881	$818,218	$21,169,313
Total	**28,667.7**	**55,365,491**	**1,117,799**	**185,928**	**3,746,846**	**$10,305,206**	**$220,509,745**

[67] Includes closing costs and capitalized interest for C-PACE and the Fair Market Value for Commercial Leases.
[68] Includes incentives, interest rate buydowns and loan loss reserves.

Table 44. C-PACE Project Averages by FY Closed

Fiscal Year Closed	Average Total Investment	Average Amount Financed	Average Installed Capacity (kW)	Average Annual Saved / Produced (MMBtu)	Average Finance Term (months)	Average Finance Rate
2012	-	-	-	-	-	-
2013	$504,048	$350,503	33.7	674	17	5.00
2014	$947,181	$883,582	157.9	1,577	18	5.57
2015	$687,704	$646,291	148.6	846	18	5.61
2016	$691,875	$638,778	120.3	1,119	18	5.66
2017	$407,152	$392,940	104.2	570	17	5.58
2018	$405,388	$383,910	110.9	382	16	5.71
Total	**$585,740**	**$548,134**	**123.6**	**801**	**17**	**5.63**

Table 45. C-PACE Project Application Yield[69] by FY Received[70]

Fiscal Year Received	Applications Received	Projects in Review/On Hold	Projects Approved	Projects Withdrawn	Applications Denied	Approved Rate	Denied Rate
2012	-	-	-	-	-	-	-
2013	55	1	25	27	2	96%	4%
2014	145	22	44	78	1	99%	1%
2015	144	29	51	60	4	97%	3%
2016	111	35	44	27	5	93%	7%
2017	110	15	58	35	2	98%	2%
2018	78	22	48	8	0	100%	0%
Total	**643**	**124**	**270**	**235**	**14**	**97%**	**3%**

[69] Applications received are complete initial applications that have been received for C-PACE financing. Applications denied are any initial applications received for C-PACE financing that do not meet programmatic requirements. Projects in review are projects that are being reviewed, either technically or financially, prior to being approved. Projects approved are projects that have gone through technical and financial underwriting and have met all the necessary programmatic requirements. These include projects that have been approved and are waiting to close, projects that have closed, and projects that have completed construction and are in repayment. Projects withdrawn are projects that have been approved at the application stage, but have since fallen out of our pipeline for numerous reasons and are no longer active. Projects in this category could have fallen out of our pipeline in the in review or the approved stage.

[70] This table represents projects whose initial applications have been approved and are proceeding through the C-PACE financing pipeline prior to loan closure.

C-PACE has been used as a financing tool across a wide variety of end-use customers in Connecticut in its 6 years of existence as illustrated by Table 46.

Table 46. Types of End-Use Customers Participating in C-PACE

Property Type	# of Properties	Square Footage
Agricultural	2	10,904
Athletic/Recreational Facility	2	25,900
Education	3	131,531
House of Worship	9	86,113
Industrial	59	2,669,312
Multi-family/apartment (> 5 units)	7	212,737
Non-profit	24	593,014
Nursing Home/Rehab Facility	1	175,680
Office	52	3,789,399
Public assembly	4	139,000
Retail	54	1,590,009
Special Purpose	3	78,380
Warehouse & storage	12	235,475
Total	**232**	**9,561,774**

To date, 130 municipalities have opted into the C-PACE program resulting in 232 closed projects – see Table 40.

Table 40. Municipalities Participating in C-PACE

Municipality	Opt In Date	# Closed Projects
Ansonia	9/27/2013	1
Avon	4/9/2013	2
Barkhamsted	7/21/2014	0
Beacon Falls	4/11/2013	0
Berlin	10/30/2013	1
Bethany	9/2/2015	1
Bethel	1/24/2014	2
Bloomfield	6/21/2013	2
Branford	9/9/2013	2
Bridgeport	12/7/2012	14
Bristol	11/19/2014	8
Brookfield	8/5/2013	4
Burlington	1/12/2016	0
Canaan	8/8/2013	1
Canterbury	11/5/2014	0
Canton	7/9/2013	1
Cheshire	10/27/2014	1
Chester	7/25/2013	0
Clinton	5/29/2013	3
Columbia	10/21/2014	0

Municipality	Opt In Date	# Closed Projects
Coventry	6/24/2013	0
Cromwell	4/9/2014	1
Danbury	10/8/2013	2
Darien	2/28/2014	4
Deep River	7/22/2014	1
Durham	4/2/2013	1
East Granby	6/27/2013	0
East Haddam	8/1/2013	2
East Hampton	7/10/2013	0
East Hartford	4/11/2013	2
East Haven	2/28/2017	1
East Lyme	9/11/2014	3
East Windsor	11/27/2013	5
Eastford	11/10/2014	0
Easton	5/14/2015	0
Ellington	8/27/2014	1
Enfield	1/3/2014	1
Essex	7/17/2014	1
Fairfield	4/30/2014	5
Farmington	12/17/2013	7
Franklin	10/6/2015	0
Glastonbury	6/14/2013	3
Granby	11/28/2013	0
Greenwich	9/23/2013	1
Griswold	3/15/2016	0
Groton	10/21/2013	2
Guilford	3/29/2016	0
Haddam	9/18/2015	0
Hamden	3/3/2014	1
Hartford	10/26/2012	20
Hebron	12/20/2016	0
Kent	9/17/2014	0
Killingly	12/9/2014	0
Killingworth	5/31/2013	1
Lebanon	5/13/2015	0
Ledyard	1/14/2016	1
Madison	9/5/2014	1
Manchester	8/1/2013	7
Mansfield	8/27/2013	0
Meriden	5/24/2013	2
Middlefield	7/21/2015	0
Middletown	3/25/2013	8
Milford	8/2/2013	2

Municipality	Opt In Date	# Closed Projects
Monroe	3/8/2017	0
Montville	12/4/2013	1
Naugatuck	6/30/2014	1
New Britain	7/17/2013	5
New Canaan	10/24/2014	0
New Hartford	2/6/2018	0
New Haven	12/6/2013	1
New London	6/18/2013	8
New Milford	6/10/2013	1
Newington	10/29/2014	1
Newtown	8/8/2013	3
Norfolk	5/13/2014	0
North Branford	5/24/2013	0
North Canaan	12/19/2013	1
North Haven	7/24/2014	1
North Stonington	2/23/2015	1
Norwalk	12/3/2012	1
Norwich	10/7/2013	1
Old Lyme	1/25/2016	0
Old Saybrook	2/20/2013	0
Orange	5/17/2016	0
Oxford	3/29/2016	2
Plainfield	6/14/2016	1
Plainville	6/28/2013	3
Portland	6/9/2016	1
Preston	1/8/2015	0
Putnam	3/5/2013	2
Redding	10/20/2015	0
Ridgefield	5/2/2018	2
Rocky Hill	10/8/2013	3
Salisbury	8/31/2016	0
Seymour	1/27/2014	0
Sharon	2/21/2014	0
Shelton	9/30/2014	1
Simsbury	12/11/2014	1
Somers	5/23/2014	2
South Windsor	8/29/2014	2
Southbury	4/11/2012	0
Southington	5/15/2013	2
Sprague	12/30/2013	0
Stafford	9/26/2013	0
Stamford	1/7/2013	11
Stonington	1/27/2014	1

Municipality	Opt In Date	# Closed Projects
Stratford	2/26/2013	3
Suffield	5/24/2013	0
Thomaston	2/23/2016	1
Tolland	4/11/2013	0
Torrington	5/8/2013	1
Trumbull	7/31/2013	2
Vernon	7/22/2013	4
Waterbury	5/10/2013	6
Waterford	8/23/2013	1
Watertown	4/11/2014	5
West Hartford	1/3/2013	2
West Haven	5/6/2014	1
Westbrook	5/21/2013	0
Weston	9/8/2014	0
Westport	2/7/2013	4
Wethersfield	5/28/2013	1
Willington	7/2/2014	1
Wilton	2/27/2012	2
Windham	5/1/2013	1
Windsor	5/16/2013	2
Windsor Locks	7/30/2015	1
Woodbridge	5/30/2014	4
Woodbury	3/18/2015	1
Woodstock	4/15/2016	0
Total	**130**	**232**

Area Median Income Band Penetration

C-PACE has been used to fund projects in economically diverse locations across the state as reflected by Table 48 for Metropolitan Statistical Area (MSA) Area Median Income (AMI). It should be noted that C-PACE is not an income targeted program.

Table 48. C-PACE Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands by FY Closed[71]

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Project Units / 1,000 People	Total Investment / Population	Watts / Population
2012	<60%	0	0%	0.0	0%	$0	0%	609,363	17%	0.0	$0.00	0.0
2012	60%-80%	0	0%	0.0	0%	$0	0%	527,217	15%	0.0	$0.00	0.0
2012	80%-100%	0	0%	0.0	0%	$0	0%	589,440	17%	0.0	$0.00	0.0
2012	100%-120%	0	0%	0.0	0%	$0	0%	722,664	20%	0.0	$0.00	0.0
2012	>120%	0	0%	0.0	0%	$0	0%	1,116,395	31%	0.0	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	3,565,079	100%	0.0	$0.00	0.0
2013	<60%	1	33%	0.0	0%	$150,877	10%	604,433	17%	0.0	$0.25	0.0
2013	60%-80%	0	0%	0.0	0%	$0	0%	568,952	16%	0.0	$0.00	0.0
2013	80%-100%	1	33%	0.1	100%	$711,251	47%	588,813	16%	0.0	$1.21	0.2
2013	100%-120%	1	33%	0.0	0%	$650,016	43%	690,591	19%	0.0	$0.94	0.0
2013	>120%	0	0%	0.0	0%	$0	0%	1,131,305	32%	0.0	$0.00	0.0
2013	Total	3	100%	0.1	100%	$1,512,144	100%	3,584,094	100%	0.0	$0.42	0.0
2014	<60%	7	30%	1.3	37%	$8,907,842	41%	614,135	17%	0.0	$14.50	2.2
2014	60%-80%	2	9%	0.2	6%	$609,883	3%	546,132	15%	0.0	$1.12	0.4
2014	80%-100%	5	22%	1.1	32%	$3,593,730	16%	577,061	16%	0.0	$6.23	2.0
2014	100%-120%	3	13%	0.3	7%	$800,605	4%	720,856	20%	0.0	$1.11	0.4
2014	>120%	6	26%	0.7	18%	$7,873,108	36%	1,125,910	31%	0.0	$6.99	0.6
2014	Total	23	100%	3.6	100%	$21,785,167	100%	3,584,094	100%	0.0	$6.08	1.0
2015	<60%	18	37%	1.8	25%	$7,737,619	23%	662,619	18%	0.0	$11.68	2.7
2015	60%-80%	5	10%	0.8	10%	$3,408,609	10%	489,826	14%	0.0	$6.96	1.6
2015	80%-100%	4	8%	0.4	6%	$3,427,052	10%	650,163	18%	0.0	$5.27	0.7

[71] Excludes projects in unknown bands.

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Project Units / 1,000 People	Total Investment / Population	Watts / Population
2015	100%-120%	9	18%	1.2	16%	$4,489,797	13%	631,741	18%	0.0	$7.11	1.9
2015	>120%	13	27%	3.1	43%	$14,634,422	43%	1,150,974	32%	0.0	$12.71	2.7
2015	Total	49	100%	7.3	100%	$33,697,500	100%	3,585,323	100%	0.0	$9.40	2.0
2016	<60%	9	18%	0.7	12%	$3,627,283	10%	649,617	18%	0.0	$5.58	1.1
2016	60%-80%	6	12%	0.8	13%	$2,828,263	8%	509,088	14%	0.0	$5.56	1.5
2016	80%-100%	9	18%	0.8	13%	$15,077,393	43%	641,084	18%	0.0	$23.52	1.2
2016	100%-120%	10	20%	1.9	31%	$5,733,163	16%	653,309	18%	0.0	$8.78	2.9
2016	>120%	16	32%	1.9	31%	$8,190,228	23%	1,126,543	31%	0.0	$7.27	1.6
2016	Total	50	100%	6.1	100%	$35,456,330	100%	3,579,641	100%	0.0	$9.90	1.7
2017	<60%	7	18%	1.7	43%	$4,623,046	30%	649,617	18%	0.0	$7.12	2.6
2017	60%-80%	3	8%	0.4	10%	$1,214,929	8%	509,088	14%	0.0	$2.39	0.8
2017	80%-100%	7	18%	0.3	8%	$1,123,060	7%	641,084	18%	0.0	$1.75	0.5
2017	100%-120%	14	37%	0.9	23%	$5,311,190	34%	653,309	18%	0.0	$8.13	1.4
2017	>120%	7	18%	0.7	17%	$3,199,542	21%	1,126,543	31%	0.0	$2.84	0.6
2017	Total	38	100%	4.0	100%	$15,471,767	100%	3,579,641	100%	0.0	$4.32	1.1
2018	<60%	8	13%	1.0	16%	$3,561,788	15%	649,617	18%	0.0	$5.48	1.5
2018	60%-80%	11	18%	1.1	18%	$3,897,478	17%	509,088	14%	0.0	$7.66	2.2
2018	80%-100%	12	20%	1.3	20%	$4,378,917	19%	641,084	18%	0.0	$6.83	2.0
2018	100%-120%	8	13%	0.8	12%	$3,758,391	16%	653,309	18%	0.0	$5.75	1.2
2018	>120%	22	36%	2.1	34%	$7,749,018	33%	1,126,543	31%	0.0	$6.88	1.9
2018	Total	61	100%	6.3	100%	$23,345,593	100%	3,579,641	100%	0.0	$6.52	1.7
Total	<60%	50	22%	6.6	24%	$28,608,455	22%	649,617	18%	0.1	$44.04	10.1
Total	60%-80%	27	12%	3.3	12%	$11,959,162	9%	509,088	14%	0.1	$23.49	6.4
Total	80%-100%	38	17%	4.0	15%	$28,311,404	22%	641,084	18%	0.1	$44.16	6.3
Total	100%-120%	45	20%	5.0	18%	$20,743,162	16%	653,309	18%	0.1	$31.75	7.6
Total	>120%	64	29%	8.4	31%	$41,646,319	32%	1,126,543	31%	0.1	$36.97	7.5
Total	Total	224	100%	27.3	100%	$131,268,501	100%	3,579,641	100%	0.1	$36.67	7.6

Table 49. C-PACE Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[72]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	**Total**	**Over 100% AMI**	**100% or Below AMI**	**% at 100% or Below**	**Total**	**Over 100% AMI**	**100% or Below AMI**	**% at 100% or Below**	**Total**	**Over 100% AMI**	**100% or Below AMI**	**% at 100% or Below**
2012	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2013	3	1	2	67%	0.1	0.0	0.1	100%	$1,512,144	$650,016	$862,128	57%
2014	23	9	14	61%	3.6	0.9	2.7	75%	$21,785,167	$8,673,712	$13,111,454	60%
2015	49	22	27	55%	7.3	4.3	3.0	41%	$33,697,500	$19,124,220	$14,573,280	43%
2016	50	26	24	48%	6.1	3.8	2.3	38%	$35,456,330	$13,923,391	$21,532,939	61%
2017	38	21	17	45%	4.0	1.6	2.4	60%	$15,471,767	$8,510,733	$6,961,035	45%
2018	61	30	31	51%	6.3	2.9	3.4	54%	$23,345,593	$11,507,409	$11,838,183	51%
Total	**224**	**109**	**115**	**51%**	**27.3**	**13.4**	**13.9**	**51%**	**$131,268,501**	**$62,389,480**	**$68,879,020**	**52%**

Distressed Community Penetration

For a breakdown of C-PACE project volume and investment by census tracts categorized by Distressed Communities – see Table 50. It should be noted that C-PACE is not an income targeted program.

Table 50. C-PACE Activity in Distressed Communities by FY Closed

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2012	Yes	0	0%	0.0	0%	$0	0%	1,171,385	33%	$0.00	0.0	447,962	33%	$0.00	0.0
2012	No	0	0%	0.0	0%	$0	0%	2,400,828	67%	$0.00	0.0	912,222	67%	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	3,572,213	100%	$0.00	0.0	1,360,184	100%	$0.00	0.0

[72] Excludes projects in unknown bands.

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Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2013	Yes	2	67%	0.0	0%	$800,893	53%	1,124,923	31%	$0.71	0.0	426,564	31%	$1.88	0.0
2013	No	1	33%	0.1	100%	$711,251	47%	2,458,638	69%	$0.29	0.0	929,285	69%	$0.77	0.1
2013	Total	3	100%	0.1	100%	$1,512,144	100%	3,583,561	100%	$0.42	0.0	1,355,849	100%	$1.12	0.1
2014	Yes	7	30%	1.4	40%	$9,047,808	42%	1,106,027	31%	$8.18	1.3	416,415	31%	$21.73	3.5
2014	No	16	70%	2.2	60%	$12,737,358	58%	2,486,026	69%	$5.12	0.9	939,791	69%	$13.55	2.3
2014	Total	23	100%	3.6	100%	$21,785,167	100%	3,592,053	100%	$6.06	1.0	1,356,206	100%	$16.06	2.7
2015	Yes	24	49%	4.0	55%	$17,102,026	51%	1,122,550	31%	$15.23	3.5	423,559	31%	$40.38	9.4
2015	No	25	51%	3.3	45%	$16,595,474	49%	2,470,672	69%	$6.72	1.3	929,024	69%	$17.86	3.6
2015	Total	49	100%	7.3	100%	$33,697,500	100%	3,593,222	100%	$9.38	2.0	1,352,583	100%	$24.91	5.4
2016	Yes	15	28%	1.5	23%	$15,128,961	41%	1,162,653	32%	$13.01	1.3	438,710	32%	$34.49	3.4
2016	No	38	72%	4.9	77%	$21,540,422	59%	2,425,917	68%	$8.88	2.0	916,003	68%	$23.52	5.3
2016	Total	53	100%	6.4	100%	$36,669,384	100%	3,588,570	100%	$10.22	1.8	1,354,713	100%	$27.07	4.7
2017	Yes	10	26%	2.0	52%	$6,515,790	42%	1,162,653	32%	$5.60	1.8	438,710	32%	$14.85	4.6
2017	No	28	74%	1.9	48%	$8,955,977	58%	2,425,917	68%	$3.69	0.8	916,003	68%	$9.78	2.1
2017	Total	38	100%	4.0	100%	$15,471,767	100%	3,588,570	100%	$4.31	1.1	1,354,713	100%	$11.42	2.9
2018	Yes	18	27%	2.4	33%	$10,232,290	38%	1,162,653	32%	$8.80	2.1	438,710	32%	$23.32	5.4
2018	No	48	73%	4.9	67%	$16,523,317	62%	2,425,917	68%	$6.81	2.0	916,003	68%	$18.04	5.4
2018	Total	66	100%	7.3	100%	$26,755,606	100%	3,588,570	100%	$7.46	2.0	1,354,713	100%	$19.75	5.4
Total	Yes	76	33%	11.3	40%	$58,827,769	43%	1,162,653	32%	$50.60	9.7	438,710	32%	$134.09	25.8
Total	No	156	67%	17.3	60%	$77,063,799	57%	2,425,917	68%	$31.77	7.1	916,003	68%	$84.13	18.9
Total	Total	232	100%	28.7	100%	$135,891,568	100%	3,588,570	100%	$37.87	8.0	1,354,713	100%	$100.31	21.2

Societal Impacts

Ratepayers in Connecticut continue to enjoy the societal benefits of C-PACE. In its 6 years of existence, the program has supported the creation of 1,463 job years, avoided the lifetime emission of 609,734 tons of carbon dioxide, 634,802 pounds of nitrous oxide, 554,824 pounds of sulfur oxide, and 47,874 pounds of particulate matter as illustrated by Tables 51 and 52. The economic value of the public health impacts of CPACE are estimated between $14.3 and $32.2 million as illustrated in table 53.

Table 51. C-PACE Job Years Supported by FY Closed

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012			
2013	9	15	24
2014	109	174	282
2015	142	227	369
2016	178	285	463
2017	55	74	129
2018	85	111	196
Total	**578**	**885**	**1,463**

Table 52. C-PACE Avoided Emissions by FY Closed

	CO_2 Savings (tons)		NOx Savings (pounds)		SOx Savings (pounds)		PM 2.5 (pounds)	
Fiscal Year	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime
2012	-	-	-	-	-	-	-	-
2013	283	4,224	386	5,811	477	7,148	24	360
2014	4,700	86,427	6,077	113,223	6,872	128,033	400	7,497
2015	7,339	161,657	7,837	170,988	7,478	161,215	454	9,619
2016	8,647	156,776	9,264	165,609	8,147	137,717	719	13,278
2017	3,379	72,837	3,050	67,184	2,084	46,072	286	6,236
2018	5,752	127,812	4,998	111,986	3,337	74,639	486	10,883
Total	**30,101**	**609,734**	**31,612**	**634,802**	**28,394**	**554,824**	**2,369**	**47,874**

Table 53. C-PACE Economic Value of Public Health by FY Closed

Fiscal Year	Annual		Lifetime	
	Low	High	Low	High
2012			-	-
2013	$9,421.22	$21,295.04	$150,740	$340,721
2014	$140,522.10	$317,624.92	$3,091,486	$6,987,748
2015	$157,644.44	$356,326.61	$3,310,533	$7,482,859
2016	$187,434.80	$423,658.56	$4,311,000	$9,744,147
2017	$6,111.67	$126,827.57	$1,290,568	$2,917,034
2018	$91,878.26	$207,669.38	$2,113,200	$4,776,396
Total	**$643,012**	**$1,453,402**	**$4,267,528**	**$32,248,904**

Financing Program

Commercial Property Assessed Clean Energy (C-PACE) is a structure through which commercial property owners can finance clean energy improvements through a voluntary benefit assessment on their property, repaid through their municipality along with real property taxes. A lien, or voluntary benefit assessment, is placed on the improved property as security for the financing, and the Connecticut Green Bank requires lender consent from existing mortgage holders prior to approving a C-PACE project. It should be noted that, to date, 42 unique banks and 14 specialized lending institutions have provided lender consent for over 160 projects – demonstrating that existing mortgage holders see that C-PACE adds adding value to properties and increases net income to the business occupying the building as a result of lower energy prices.

The Connecticut Green Bank maintains a warehouse of capital from which it finances C-PACE transactions and sells to capital markets upon completion. Through the warehouse, funds are advanced to either the customer or the contractor during construction based on the project meeting certain deliverables. Once the project is completed, the construction advances convert to long term financing whereby the property owner pays a benefit assessment over time to the municipality at the same time real property taxes are paid on the property. As the benefit assessment payments are made by the property owners, they are then remitted from the associated municipalities to the Connecticut Green Bank, or its designated servicer, to repay the capital providers for the energy improvements financed through C-PACE.

Financial Performance

To date there have been no defaults and as of June 30, 2018, there are three (3) delinquencies.

Marketing

To accelerate the adoption of C-PACE to finance clean energy and energy efficiency projects, the Connecticut Green Bank has implemented marketing efforts that target specific industry verticals. The Green Bank used a group purchase model, in which it aggregated several C-PACE projects at auto retailers and offered interest rate reductions on the portfolio of projects. Connecticut Green Bank also worked with the State of Connecticut's Department of Economic and Community Development (DECD) to target manufacturing facilities through its Manufacturing Innovation Fund (MIF). Promoted via its multi touch "Energy on the Line" marketing campaign, the Green Bank was able to access $800,000 through MIF to provide manufacturers an incentive in the form of a grant equal to a 1% interest rate reduction, applied to the total project amount of a closed C-PACE project.

Connecticut Green Bank has also established relationships with contractors, and provided them with materials and resources to support their use of C-PACE. Green Bank provides co-brandable materials and other physical sales tools, as well as the Project Accelerator Service (PAS). PAS assists contractors in navigating the C-PACE process and developing projects, serving as both a means of originating projects for the Green Bank and a way of creating more skilled and active C-PACE contractors.

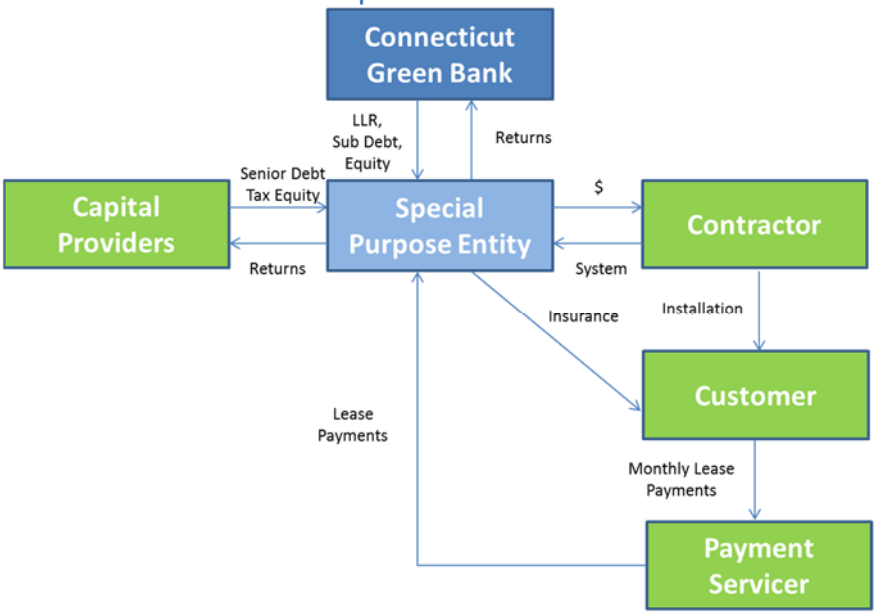
Case 2 – Solar Lease

Description

The Green Bank has used third-party ownership structures to deploy distributed solar generation in Connecticut in both the Residential and Commercial sectors. These funds are a unique combination of a tax equity investor and a syndicate of debt providers and the Green Bank to support solar PV installations (i.e., rooftop residential lease financing for solar PV and commercial leases and PPAs for rooftop, carport, and ground mount solar PV).

Residential leases were one of the first products to graduate from Green Bank funding, but the organization still actively pursues new projects in the Commercial, Industrial, and Institutional sector for its funds and performs asset management functions for the entire portfolio including the now closed Residential portion of the program.

Figure 7. Legal Structure and Flows of Capital for the CT Solar Lease[73]



The CT Solar Lease 2 fund was the second "solar PV fund" established using a combination of ratepayer funds and private capital. In developing this fund, which was fully utilized in 2017, the Green Bank sought to innovate both in the types of credits that would be underwritten and via broadening the sources of capital in the fund. Before these innovations by the Green Bank, a fund had not been established that would underwrite residential solar PV installations as well as installations on a "commercial scale" such as for municipal and school buildings, community oriented not-for-profit structures (all of which can't take advantage of Federal tax incentives due to their tax-exempt status) as well as a vast array of for profit enterprises. These commercial-scale projects were historically the most difficult to finance: too small to attract investment funds, and similarly if aggregated to a size worthy of investment, comprised of off-takers that for the most part are non-investment grade or "unrated" credits that are difficult to underwrite in a manner that would permit deploying solar PV at scale. By prudently assessing these risks and operational issues, the Green Bank was able to obtain the support of the tax

[73] It should be noted that the Special Purpose Entity structure includes several entities – CT Solar Lease II, LLC and CEFIA Holdings, LLC that provide different functions.

equity investor and lenders from Main Street – not Wall Street – in the fund. CT Solar Lease 2 was the first fund to secure solar leases and power purchase agreements using a PACE lien – an innovation that has prompted California to introduce legislation to enable the same security arrangement for its businesses and not for profit organizations. The Green Bank's leadership and innovation was recognized by the Clean Energy States Alliance "State Leadership in Clean Energy" award in 2016, and the Green Bank has continued its work on this front – solely with respect to commercial-scale projects – via a CT Solar Lease 3 fund, as well as through a sourcing arrangement to deliver a number of these projects to Onyx Renewables (a Blackstone portfolio company) so as to accelerate market adoption of financing strategies for this sector.

Key Performance Indicators

The Key Performance Indicators for Solar Lease closed activity are reflected in Tables 54 through 60 for Residential and Commercial projects, respectively. These illustrate the volume of projects by year, investment, generation capacity installed, and the amount of energy saved and/or produced.

Table 54. Commercial Solar Lease Project Types and Investment by FY Closed

Fiscal Year Closed	EE	RE	RE/EE	# Projects	# Project Units	Total Investment	Green Bank Investment[74]	Private Investment	Leverage Ratio
2012	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-
2015	-	16		16	16	$11,547,562	$3,002,366	$8,545,196	3.8
2016	-	27		27	27	$16,711,392	$4,344,962	$12,366,430	3.8
2017	-	27	2	29	29	$30,760,366	$6,148,089	$24,612,277	5.0
2018		21	1	22	22	$10,271,335	$4,659,026	$5,612,309	2.2
Total	**-**	**91**	**3**	**94**	**94**	**$69,290,655**	**$18,154,443**	**$51,136,212**	**3.8**

Table 55. Residential Solar Lease Project Investment by FY Closed

Fiscal Year Closed	EE[75]	RE	RE/EE	# Projects	# Project Units	Total Investment[76]	Green Bank Investment[77]	Private Investment	Leverage Ratio
2012	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-
2014	-	107	-	107	107	$4,324,454	$888,178	$3,436,276	4.9
2015	-	610	-	610	610	$23,672,592	$4,861,995	$18,810,598	4.9
2016	-	472	-	472	472	$18,325,440	$3,763,770	$14,561,670	4.9
2017	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-
Total	**-**	**1,189**	**-**	**1,189**	**1,189**	**$46,322,487**	**$9,513,943**	**$36,808,544**	**4.9**

[74] Includes incentives, interest rate buydowns and loan loss reserves.
[75] All projects that receive an RSIP incentive are required to do an energy audit/assessment.
[76] Includes closing costs and capitalized interest for C-PACE and the Fair Market Value for Commercial/Residential Leases.
[77] Includes incentives, interest rate buydowns and loan loss reserves.

Table 56. Commercial Solar Lease Project Capacity, Generation and Savings[78] by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)
2012	-	-	-	-	-
2013	-	-	-	-	-
2014	-	-	-	-	-
2015	3,533.7	4,024,143	100,604	12,975	324,370
2016	5,471.3	6,230,671	155,767	20,888	522,209
2017	10,171.0	11,582,723	289,568	39,235	980,863
2018	3,523.8	4,012,869	100,322	9,081	227,026
Total	22,699.7	25,850,407	646,260	82,179	2,054,469

Table 57. Residential Solar Lease Project Capacity, Generation and Savings[79] by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)
2012	-	-	-	-	-
2013	-	-	-	-	-
2014	817.1	930,503	23,263	3,175	79,372
2015	4,894.7	5,574,098	139,352	19,019	475,471
2016	3,841.9	4,375,207	109,380	14,928	373,205
2017	-	-	-	-	-
2018	-	-	-	-	-
Total	**9,553.7**	**10,879,808**	**271,995**	**37,122**	**928,048**

Table 58. Commercial Solar Lease Project Averages by FY Closed

Fiscal Year Closed	Average Total Investment	Average Amount Financed	Average Installed Capacity (kW)	Average Annual Saved / Produced (MMBtu)	Average Finance Term (years)	Average PPA Lease Price
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	$721,723	$721,723	220.9	811	20	$0.10
2016	$618,940	$618,940	202.6	774	20	$0.10
2017	$1,060,702	$1,060,702	350.7	1,353	20	$0.09
2018	$466,879	$466,879	160.2	413	20	$0.08
Total	**$737,135**	**$737,135**	**241.5**	**874**	**20**	**$0.09**

[78] The Green Bank currently estimates annual savings and is in the process or reviewing and updating this methodology to include actual savings where possible.

[79] The Green Bank currently estimates annual savings and is in the process or reviewing and updating this methodology to include actual savings where possible.

Table 59. Residential Solar Lease Project Averages by FY Closed

Fiscal Year Closed	Average Total Investment	Average Amount Financed	Average Installed Capacity (kW)	Average Annual Saved / Produced (MMBtu)	Average Finance Term (months)	Average DTI	Average FICO Score
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	$40,415	$38,182	7.6	30	240	30	785
2015	$38,808	$36,663	8.0	31	240	31	777
2016	$38,825	$36,679	8.1	32	240	35	776
2017	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-
Total	**$38,959**	**$36,806**	**8.0**	**31**	**240**	**33**	**777**

Table 60. Residential Solar Lease Project Application Yield[80] by FY Received

Fiscal Year Received	Applications Received	Applications Approved	Applications Withdrawn	Applications Denied	Approved Rate	Denied Rate
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	669	196	256	217	68%	32%
2015	1,813	847	619	347	81%	19%
2016	351	146	154	51	85%	15%
2017	-	-	-	-	-	-
2018	-	-	-	-	-	-
Total	**2,833**	**1,189**	**1,029**	**615**	**78%**	**22%**

[80] Applications received are applications submitted to Renew Financial (servicer of the CT Solar Lease) for credit approval. Applications approved are applications that have met the credit requirements for the program and can move to lease signing, pending formal technical approval of the solar equipment by the Residential Solar Investment Program. Applications withdrawn are applications that have been cancelled by the submitter due to the project not moving forward. Applications denied are applications that are not approved because the customer does not meet underwriting requirements.

The types of Commercial end-use customers participating in the Solar Lease program are shown in Table 61.

Table 61. Types of End-Use Customers Participating in Commercial Solar Lease

Property Type	# of Properties
Agricultural	1
Athletic/Recreational Facility	2
Education	7
House of Worship	9
Industrial	2
Multi-family/apartment (> 5 units)	9
Municipal building	32
Non-profit	9
Nursing Home/Rehab Facility	1
Office	18
Public assembly	2
Retail	1
Warehouse & storage	1
Grand Total	**94**

Area Median Income Band Penetration

The CT Solar Lease program has been used to fund projects in economically diverse locations across the state as reflected by Table 62 and 63 for Metropolitan Statistical Area (MSA) Area Median Income (AMI). It should be noted that these Solar Lease funds are not part of an income targeted program.

Table 62. Commercial Solar Lease Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands by FY Closed[81]

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Project Units / 1,000 People	Total Investment / Population	Watts / Population
2012	<60%	0	0%	0.0	0%	$0	0%	609,363	17%	0.0	$0.00	0.0
2012	60%-80%	0	0%	0.0	0%	$0	0%	527,217	15%	0.0	$0.00	0.0
2012	80%-100%	0	0%	0.0	0%	$0	0%	589,440	17%	0.0	$0.00	0.0
2012	100%-120%	0	0%	0.0	0%	$0	0%	722,664	20%	0.0	$0.00	0.0
2012	>120%	0	0%	0.0	0%	$0	0%	1,116,395	31%	0.0	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	3,565,079	100%	0.0	$0.00	0.0
2013	<60%	0	0%	0.0	0%	$0	0%	604,433	17%	0.0	$0.00	0.0
2013	60%-80%	0	0%	0.0	0%	$0	0%	568,952	16%	0.0	$0.00	0.0
2013	80%-100%	0	0%	0.0	0%	$0	0%	588,813	16%	0.0	$0.00	0.0
2013	100%-120%	0	0%	0.0	0%	$0	0%	690,591	19%	0.0	$0.00	0.0
2013	>120%	0	0%	0.0	0%	$0	0%	1,131,305	32%	0.0	$0.00	0.0
2013	Total	0	0%	0.0	0%	$0	0%	3,584,094	100%	0.0	$0.00	0.0
2014	<60%	0	0%	0.0	0%	$0	0%	614,135	17%	0.0	$0.00	0.0
2014	60%-80%	0	0%	0.0	0%	$0	0%	546,132	15%	0.0	$0.00	0.0
2014	80%-100%	0	0%	0.0	0%	$0	0%	577,061	16%	0.0	$0.00	0.0
2014	100%-120%	0	0%	0.0	0%	$0	0%	720,856	20%	0.0	$0.00	0.0
2014	>120%	0	0%	0.0	0%	$0	0%	1,125,910	31%	0.0	$0.00	0.0
2014	Total	0	0%	0.0	0%	$0	0%	3,584,094	100%	0.0	$0.00	0.0

[81] Excludes projects in unknown bands.

CONNECTICUT GREEN BANK
5. PROGRAMS – CT SOLAR LEASE

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Project Units / 1,000 People	Total Investment / Population	Watts / Population
2015	<60%	2	13%	0.1	4%	$416,000	4%	662,619	18%	0.0	$0.63	0.2
2015	60%-80%	1	6%	0.1	2%	$300,000	3%	489,826	14%	0.0	$0.61	0.2
2015	80%-100%	2	13%	0.6	18%	$1,904,000	16%	650,163	18%	0.0	$2.93	1.0
2015	100%-120%	3	19%	0.4	10%	$1,238,000	11%	631,741	18%	0.0	$1.96	0.6
2015	>120%	8	50%	2.3	65%	$7,689,562	67%	1,150,974	32%	0.0	$6.68	2.0
2015	Total	16	100%	3.5	100%	$11,547,562	100%	3,585,323	100%	0.0	$3.22	1.0
2016	<60%	0	0%	0.0	0%	$0	0%	649,617	18%	0.0	$0.00	0.0
2016	60%-80%	1	4%	0.1	2%	$486,864	3%	509,088	14%	0.0	$0.96	0.3
2016	80%-100%	4	15%	0.6	11%	$1,921,416	11%	641,084	18%	0.0	$3.00	1.0
2016	100%-120%	10	37%	2.1	38%	$6,365,606	38%	653,309	18%	0.0	$9.74	3.2
2016	>120%	12	44%	2.6	48%	$7,937,506	47%	1,126,543	31%	0.0	$7.05	2.3
2016	Total	27	100%	5.5	100%	$16,711,392	100%	3,579,641	100%	0.0	$4.67	1.5
2017	<60%	4	14%	1.5	15%	$3,564,532	12%	649,617	18%	0.0	$5.49	2.3
2017	60%-80%	3	10%	1.0	10%	$2,499,054	8%	509,088	14%	0.0	$4.91	2.0
2017	80%-100%	6	21%	1.9	19%	$5,763,127	19%	641,084	18%	0.0	$8.99	3.0
2017	100%-120%	10	34%	2.8	28%	$9,166,200	30%	653,309	18%	0.0	$14.03	4.4
2017	>120%	6	21%	2.9	28%	$9,767,453	32%	1,126,543	31%	0.0	$8.67	2.5
2017	Total	29	100%	10.2	100%	$30,760,366	100%	3,579,641	100%	0.0	$8.59	2.8
2018	<60%	1	5%	0.0	1%	$122,000	1%	649,617	18%	0.0	$0.19	0.1
2018	60%-80%	2	9%	0.4	11%	$1,292,640	13%	509,088	14%	0.0	$2.54	0.8
2018	80%-100%	3	14%	0.5	15%	$1,491,850	15%	641,084	18%	0.0	$2.33	0.8
2018	100%-120%	3	14%	0.6	17%	$1,594,000	16%	653,309	18%	0.0	$2.44	0.9
2018	>120%	13	59%	2.0	56%	$5,770,845	56%	1,126,543	31%	0.0	$5.12	1.7
2018	Total	22	100%	3.5	100%	$10,271,335	100%	3,579,641	100%	0.0	$2.87	1.0
Total	<60%	7	7%	1.7	7%	$4,102,532	6%	649,617	18%	0.0	$6.32	2.6
Total	60%-80%	7	7%	1.6	7%	$4,578,558	7%	509,088	14%	0.0	$8.99	3.2

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Project Units / 1,000 People	Total Investment / Population	Watts / Population
Total	80%-100%	15	16%	3.7	16%	$11,080,393	16%	641,084	18%	0.0	$17.28	5.8
Total	100%-120%	26	28%	5.9	26%	$18,363,806	27%	653,309	18%	0.0	$28.11	9.0
Total	>120%	39	41%	9.8	43%	$31,165,366	45%	1,126,543	31%	0.0	$27.66	8.7
Total	Total	94	100%	22.7	100%	$69,290,655	100%	3,579,641	100%	0.0	$19.36	6.3

Table 63. Residential Solar Lease Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands by FY Closed[82]

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2012	<60%	0	0%	0.0	0%	$0	0%	61,168	7%	0.0	$0.00	0.0
2012	60%-80%	0	0%	0.0	0%	$0	0%	101,640	12%	0.0	$0.00	0.0
2012	80%-100%	0	0%	0.0	0%	$0	0%	151,346	17%	0.0	$0.00	0.0
2012	100%-120%	0	0%	0.0	0%	$0	0%	216,988	25%	0.0	$0.00	0.0
2012	>120%	0	0%	0.0	0%	$0	0%	350,196	40%	0.0	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	881,338	100%	0.0	$0.00	0.0
2013	<60%	0	0%	0.0	0%	$0	0%	59,494	7%	0.0	$0.00	0.0
2013	60%-80%	0	0%	0.0	0%	$0	0%	109,189	12%	0.0	$0.00	0.0
2013	80%-100%	0	0%	0.0	0%	$0	0%	150,603	17%	0.0	$0.00	0.0
2013	100%-120%	0	0%	0.0	0%	$0	0%	203,157	23%	0.0	$0.00	0.0
2013	>120%	0	0%	0.0	0%	$0	0%	351,633	40%	0.0	$0.00	0.0
2013	Total	0	0%	0.0	0%	$0	0%	874,076	100%	0.0	$0.00	0.0
2014	<60%	0	0%	0.0	0%	$0	0%	57,673	7%	0.0	$0.00	0.0
2014	60%-80%	6	6%	0.0	5%	$212,213	5%	103,934	12%	0.1	$2.04	0.4
2014	80%-100%	13	12%	0.1	11%	$483,999	11%	149,038	17%	0.1	$3.25	0.6
2014	100%-120%	43	40%	0.3	42%	$1,799,656	42%	209,561	24%	0.2	$8.59	1.6
2014	>120%	45	42%	0.3	42%	$1,828,585	42%	348,270	40%	0.1	$5.25	1.0

[82] Excludes projects in unknown bands.

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Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2014	Total	107	100%	0.8	100%	$4,324,454	100%	868,476	100%	0.1	$4.98	0.9
2015	<60%	5	1%	0.0	1%	$163,570	1%	64,361	7%	0.1	$2.54	0.5
2015	60%-80%	43	7%	0.3	6%	$1,430,822	6%	96,305	11%	0.4	$14.86	3.0
2015	80%-100%	120	20%	0.9	19%	$4,384,447	19%	164,873	19%	0.7	$26.59	5.5
2015	100%-120%	165	27%	1.3	27%	$6,309,374	27%	184,613	21%	0.9	$34.18	7.1
2015	>120%	277	45%	2.4	48%	$11,384,379	48%	352,621	41%	0.8	$32.29	6.7
2015	Total	610	100%	4.9	100%	$23,672,592	100%	862,773	100%	0.7	$27.44	5.7
2016	<60%	20	4%	0.1	4%	$655,757	4%	60,769	7%	0.3	$10.79	2.3
2016	60%-80%	35	7%	0.2	6%	$1,171,212	6%	99,220	12%	0.4	$11.80	2.5
2016	80%-100%	84	18%	0.6	17%	$3,079,698	17%	165,331	19%	0.5	$18.63	3.9
2016	100%-120%	129	27%	1.0	27%	$4,999,536	27%	187,463	22%	0.7	$26.67	5.6
2016	>120%	204	43%	1.8	46%	$8,419,238	46%	345,311	40%	0.6	$24.38	5.1
2016	Total	472	100%	3.8	100%	$18,325,440	100%	858,094	100%	0.6	$21.36	4.5
2017	<60%	0	0%	0.0	0%	$0	0%	60,769	7%	0.0	$0.00	0.0
2017	60%-80%	0	0%	0.0	0%	$0	0%	99,220	12%	0.0	$0.00	0.0
2017	80%-100%	0	0%	0.0	0%	$0	0%	165,331	19%	0.0	$0.00	0.0
2017	100%-120%	0	0%	0.0	0%	$0	0%	187,463	22%	0.0	$0.00	0.0
2017	>120%	0	0%	0.0	0%	$0	0%	345,311	40%	0.0	$0.00	0.0
2017	Total	0	0%	0.0	0%	$0	0%	858,094	100%	0.0	$0.00	0.0
2018	<60%	0	0%	0.0	0%	$0	0%	60,769	7%	0.0	$0.00	0.0
2018	60%-80%	0	0%	0.0	0%	$0	0%	99,220	12%	0.0	$0.00	0.0
2018	80%-100%	0	0%	0.0	0%	$0	0%	165,331	19%	0.0	$0.00	0.0
2018	100%-120%	0	0%	0.0	0%	$0	0%	187,463	22%	0.0	$0.00	0.0
2018	>120%	0	0%	0.0	0%	$0	0%	345,311	40%	0.0	$0.00	0.0
2018	Total	0	0%	0.0	0%	$0	0%	858,094	100%	0.0	$0.00	0.0

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
Total	<60%	25	2%	0.2	2%	$819,327	2%	60,769	7%	0.4	$13.48	2.8
Total	60%-80%	84	7%	0.6	6%	$2,814,247	6%	99,220	12%	0.8	$28.36	5.8
Total	80%-100%	217	18%	1.6	17%	$7,948,145	17%	165,331	19%	1.3	$48.07	9.9
Total	100%-120%	337	28%	2.7	28%	$13,108,566	28%	187,463	22%	1.8	$69.93	14.4
Total	>120%	526	44%	4.5	47%	$21,632,202	47%	345,311	40%	1.5	$62.65	12.9
Total	Total	1,189	100%	9.6	100%	$46,322,487	100%	858,094	100%	1.4	$53.98	11.1

Table 64. Commercial Solar Lease Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[83]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below
2012	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2013	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2014	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2015	16	11	5	31%	3.5	2.7	0.9	24%	$11,547,562	$8,927,562	$2,620,000	23%
2016	27	22	5	19%	5.5	4.7	0.7	14%	$16,711,392	$14,303,112	$2,408,280	14%
2017	29	16	13	45%	10.2	5.7	4.5	44%	$30,760,366	$18,933,653	$11,826,713	38%
2018	22	16	6	27%	3.5	2.5	1.0	28%	$10,271,335	$7,364,845	$2,906,490	28%
Total	**94**	**65**	**29**	**31%**	**22.7**	**15.7**	**7.0**	**31%**	**$69,290,655**	**$49,529,172**	**$19,761,483**	**29%**

[83] Excludes projects in unknown bands.

Table 65. Residential Solar Lease Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[84]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below
2012	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2013	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2014	107	88	19	18%	0.8	0.7	0.1	16%	$4,324,454	$3,628,242	$696,212	16%
2015	610	442	168	28%	4.9	3.7	1.2	25%	$23,672,592	$17,693,753	$5,978,839	25%
2016	472	333	139	29%	3.8	2.8	1.0	27%	$18,325,440	$13,418,773	$4,906,667	27%
2017	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2018	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
Total	**1,189**	**863**	**326**	**27%**	**9.6**	**7.2**	**2.4**	**25%**	**$46,322,487**	**$34,740,768**	**$11,581,719**	**25%**

Distressed Community Penetration

For a breakdown of Solar Lease project volume and investment by census tracts categorized by Distressed Communities – see Tables 66 and 67. It should be noted that Solar Lease is not an income targeted program.

Table 66. Commercial Solar Lease Activity in Distressed Communities by FY Closed

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2012	Yes	0	0%	0.0	0%	$0	0%	1,171,385	33%	$0.00	0.0	447,962	33%	$0.00	0.0
2012	No	0	0%	0.0	0%	$0	0%	2,400,828	67%	$0.00	0.0	912,222	67%	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	3,572,213	100%	$0.00	0.0	1,360,184	100%	$0.00	0.0
2013	Yes	0	0%	0.0	0%	$0	0%	1,124,923	31%	$0.00	0.0	426,564	31%	$0.00	0.0
2013	No	0	0%	0.0	0%	$0	0%	2,458,638	69%	$0.00	0.0	929,285	69%	$0.00	0.0
2013	Total	0	0%	0.0	0%	$0	0%	3,583,561	100%	$0.00	0.0	1,355,849	100%	$0.00	0.0

[84] Excludes projects in unknown bands.

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Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2014	Yes	0	0%	0.0	0%	$0	0%	1,106,027	31%	$0.00	0.0	416,415	31%	$0.00	0.0
2014	No	0	0%	0.0	0%	$0	0%	2,486,026	69%	$0.00	0.0	939,791	69%	$0.00	0.0
2014	Total	0	0%	0.0	0%	$0	0%	3,592,053	100%	$0.00	0.0	1,356,206	100%	$0.00	0.0
2015	Yes	2	13%	0.1	4%	$416,000	4%	1,122,550	31%	$0.37	0.1	423,559	31%	$0.98	0.3
2015	No	14	88%	3.4	96%	$11,131,562	96%	2,470,672	69%	$4.51	1.4	929,024	69%	$11.98	3.7
2015	Total	16	100%	3.5	100%	$11,547,562	100%	3,593,222	100%	$3.21	1.0	1,352,583	100%	$8.54	2.6
2016	Yes	1	4%	0.1	2%	$486,864	3%	1,162,653	32%	$0.42	0.1	438,710	32%	$1.11	0.3
2016	No	26	96%	5.3	98%	$16,224,528	97%	2,425,917	68%	$6.69	2.2	916,003	68%	$17.71	5.8
2016	Total	27	100%	5.5	100%	$16,711,392	100%	3,588,570	100%	$4.66	1.5	1,354,713	100%	$12.34	4.0
2017	Yes	2	7%	1.3	13%	$2,982,132	10%	1,162,653	32%	$2.56	1.1	438,710	32%	$6.80	2.9
2017	No	27	93%	8.9	87%	$27,778,234	90%	2,425,917	68%	$11.45	3.7	916,003	68%	$30.33	9.7
2017	Total	29	100%	10.2	100%	$30,760,366	100%	3,588,570	100%	$8.57	2.8	1,354,713	100%	$22.71	7.5
2018	Yes	5	23%	0.7	21%	$2,356,490	23%	1,162,653	32%	$2.03	0.6	438,710	32%	$5.37	1.7
2018	No	17	77%	2.8	79%	$7,914,845	77%	2,425,917	68%	$3.26	1.1	916,003	68%	$8.64	3.0
2018	Total	22	100%	3.5	100%	$10,271,335	100%	3,588,570	100%	$2.86	1.0	1,354,713	100%	$7.58	2.6
Total	Yes	10	11%	2.3	10%	$6,241,486	9%	1,162,653	32%	$5.37	2.0	438,710	32%	$14.23	5.2
Total	No	84	89%	20.4	90%	$63,049,169	91%	2,425,917	68%	$25.99	8.4	916,003	68%	$68.83	22.3
Total	Total	94	100%	22.7	100%	$69,290,655	100%	3,588,570	100%	$19.31	6.3	1,354,713	100%	$51.15	16.8

Table 67. Residential Solar Lease Activity in Distressed Communities by FY Closed

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2012	Yes	0	0%	0.0	0%	$0	0%	1,171,385	33%	$0.00	0.0	447,962	33%	$0.00	0.0
2012	No	0	0%	0.0	0%	$0	0%	2,400,828	67%	$0.00	0.0	912,222	67%	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	3,572,213	100%	$0.00	0.0	1,360,184	100%	$0.00	0.0
2013	Yes	0	0%	0.0	0%	$0	0%	1,124,923	31%	$0.00	0.0	426,564	31%	$0.00	0.0
2013	No	0	0%	0.0	0%	$0	0%	2,458,638	69%	$0.00	0.0	929,285	69%	$0.00	0.0
2013	Total	0	0%	0.0	0%	$0	0%	3,583,561	100%	$0.00	0.0	1,355,849	100%	$0.00	0.0
2014	Yes	15	14%	0.1	12%	$533,309	12%	1,106,027	31%	$0.48	0.1	416,415	31%	$1.28	0.2
2014	No	92	86%	0.7	88%	$3,791,145	88%	2,486,026	69%	$1.52	0.3	939,791	69%	$4.03	0.8
2014	Total	107	100%	0.8	100%	$4,324,454	100%	3,592,053	100%	$1.20	0.2	1,356,206	100%	$3.19	0.6
2015	Yes	95	16%	0.7	15%	$3,504,032	15%	1,122,550	31%	$3.12	0.6	423,559	31%	$8.27	1.7
2015	No	515	84%	4.2	85%	$20,168,561	85%	2,470,672	69%	$8.16	1.7	929,024	69%	$21.71	4.5
2015	Total	610	100%	4.9	100%	$23,672,592	100%	3,593,222	100%	$6.59	1.4	1,352,583	100%	$17.50	3.6
2016	Yes	97	21%	0.8	20%	$3,601,098	20%	1,162,653	32%	$3.10	0.6	438,710	32%	$8.21	1.7
2016	No	375	79%	3.1	80%	$14,724,342	80%	2,425,917	68%	$6.07	1.3	916,003	68%	$16.07	3.4
2016	Total	472	100%	3.8	100%	$18,325,440	100%	3,588,570	100%	$5.11	1.1	1,354,713	100%	$13.53	2.8
2017	Yes	0	0%	0.0	0%	$0	0%	1,162,653	32%	$0.00	0.0	438,710	32%	$0.00	0.0
2017	No	0	0%	0.0	0%	$0	0%	2,425,917	68%	$0.00	0.0	916,003	68%	$0.00	0.0
2017	Total	0	0%	0.0	0%	$0	0%	3,588,570	100%	$0.00	0.0	1,354,713	100%	$0.00	0.0
2018	Yes	0	0%	0.0	0%	$0	0%	1,162,653	32%	$0.00	0.0	438,710	32%	$0.00	0.0
2018	No	0	0%	0.0	0%	$0	0%	2,425,917	68%	$0.00	0.0	916,003	68%	$0.00	0.0
2018	Total	0	0%	0.0	0%	$0	0%	3,588,570	100%	$0.00	0.0	1,354,713	100%	$0.00	0.0

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Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
Total	Yes	207	17%	1.6	16%	$7,638,439	16%	1,162,653	32%	$6.57	1.4	438,710	32%	$17.41	3.6
Total	No	982	83%	8.0	84%	$38,684,047	84%	2,425,917	68%	$15.95	3.3	916,003	68%	$42.23	8.7
Total	Total	1,189	100%	9.6	100%	$46,322,487	100%	3,588,570	100%	$12.91	2.7	1,354,713	100%	$34.19	7.1

Societal Impacts

Ratepayers in Connecticut receive the societal benefits of the CT Solar Lease. Over the course of its existence, the program has supported the creation of 1,056 job years and avoided the lifetime emission of 510,936 tons of carbon dioxide, 530,909 pounds of nitrous oxide, 439,357 pounds of sulfur oxide, and 44,480 pounds of particulate matter as illustrated by Tables 68 and 69. The value of the public health impacts of the Solar Lease programs estimated to be between $10.5 and $23.8 million as seen in table 70.

Table 68. Commercial and Residential Solar Lease Job Years Supported by FY Closed

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012	-	-	-
2013	-	-	-
2014	19	31	50
2015	149	240	389
2016	142	228	370
2017	86	113	199
2018	21	26	47
Total	**418**	**638**	**1,056**

Table 69. Commercial and Residential Solar Lease Avoided Emissions by FY Closed

	CO_2 Savings (tons)		NOx Savings (pounds)		SOx Savings (pounds)		PM 2.5 (pounds)	
Fiscal Year	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime
2012	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-
2014	514	12,859	728	18,207	871	21,778	47	1,168
2015	5,484	137,098	6,680	166,989	6,716	167,896	481	12,028
2016	5,993	149,827	6,402	160,056	5,065	126,629	526	13,144
2017	6,284	157,103	5,570	139,245	3,708	92,693	540	13,512
2018	2,162	54,050	1,856	46,412	1,214	30,360	185	4,629
Total	**20,437**	**510,936**	**21,236**	**530,909**	**17,574**	**439,357**	**1,779**	**44,480**

Table 70. Commercial and Residential Solar Lease Value of Public Health by FY Closed

Fiscal Year	Annual		Lifetime	
	Low	High	Low	High
2012	-	-	-	-
2013	-	-	-	-
2014	$17,463.06	$ 39,472.17	$436,577	$986,804
2015	$144,951.70	$327,635.73	$3,623,792	$8,190,893
2016	$123,189.25	$278,443.28	$3,079,731	$6,961,082
2017	$102,139.14	$230,861.73	$2,553,479	$5,771,543
2018	$34,031.10	$76,919.27	$850,778	$1,922,982
Total	**$421,774**	**$953,332**	**$10,544,356**	**$23,833,304**

Financing Program

The CT Solar Lease 2 fund was a financing structure developed in partnership with a tax equity investor (i.e., US Bank) and a syndicate of local lenders (i.e. Key Bank and Webster Bank) that used a credit enhancement (i.e., $3,500,000 loan loss reserve),[85] in combination with $2.3 million in subordinated debt and $11.5 million in sponsor equity from the Connecticut Green Bank as the "member manager" to provide approximately $80 million in lease financing for residential and commercial solar PV projects. Through the product, the Connecticut Green Bank lowered the barriers to Connecticut residential and commercial customers seeking to install solar PV with no up-front investment, thus increasing demand, while at the same time reducing the market's reliance on subsidies through the RSIP or being more competitive in a reverse auction through the Zero Emission Renewable Energy Credit (ZREC) program. As a lease (or PPA for certain commercial customers), capital provided to consumers through the CT Solar Lease is now being returned to the Connecticut Green Bank, the tax equity investor and the lenders – it is not a subsidy. The financial structure of the CT Solar Lease product, both historically and on an ongoing basis through the CT Solar Lease 3 fund, includes origination by contractors, servicing of lease and PPA payments,[86] insurance and "one call" system performance and insurance resolution,[87] and financing features in combination with the support of the Connecticut Green Bank, whereas under the partnership with Onyx Renewables, the Connecticut Green Bank originates projects together with local contractors, but Onyx Renewables then provides the long-term financing and holds the ongoing asset management responsibilities.

Financial Performance

To date there are no defaults and as of June 30, 2018 there are 15 delinquencies totaling $54,970 or 0.1% of the Commercial Solar Lease portfolio. To date there are 5 defaults with an original principal balance of $138,056 or 0.34% of the Residential Solar Lease portfolio and as of June 30, 2018 there are 14 delinquencies.

The household customers that accessed the CT Solar Lease since its launch in 2014 had varying credit scores – see Table 71.

Table 71. Credit Score Ranges of Household Customers Using the CT Solar Lease by FY Closed

	-639		640-679		680-699		700-719		720-739		740+		
Fiscal Year Closed	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**Total # Projects**
2012	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	0.0%	4	3.7%	-	0.0%	5	4.7%	6	5.6%	92	86.0%	107
2015	-	0.0%	26	4.3%	23	3.8%	39	6.4%	38	6.2%	484	79.3%	610
2016	1	0.2%	15	3.2%	16	3.4%	34	7.2%	42	8.9%	364	77.1%	472
2017	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**1**	**0.1%**	**45**	**3.8%**	**39**	**3.3%**	**78**	**6.6%**	**86**	**7.2%**	**940**	**79.1%**	**1,189**

[85] From repurposed American Recovery and Reinvestment Act funds
[86] AFC First Financial
[87] Assurant

Marketing

To accelerate the deployment of residential solar PV through the RSIP and the uptake of the CT Solar Lease financing product, the Connecticut Green Bank implemented Solarize Connecticut. The Green Bank sponsored Solarize programs are designed to use a combination of group purchasing, time-limited offers, and grassroots outreach, while local clean energy advocates volunteer and coordinate with their towns to help speed the process – see Table 72. The Green Bank also implemented channel marketing through the solar installer channel to support residential and commercial installers and their ability to grow their businesses by providing the CT Solar Lease product to their customers.

Table 72. Number of Projects, Investment, and Installed Capacity through Green Bank Solarize Connecticut for the CT Solar Lease Financing Product

Solarize	# of Projects	Total Investment	Installed Capacity (MW)
Solarize	325	$12,418,840	2.5
Not Solarize	864	$33,903,647	7.0
Total	1,189	$46,322,487	9.6
% Solarize	**27%**	**27%**	**27%**

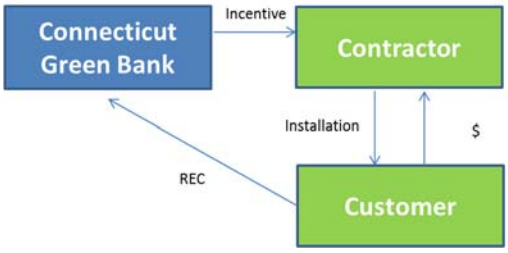
The Green Bank Solarize Connecticut program provided a marketing channel and origination catalyst for the CT Solar Lease comprising 27 percent of the total projects, investment, and installed capacity.

Case 3 – Residential Solar Investment Program

Description

The RSIP is a subsidy program that provides incentives to reduce the cost for homeowners to own solar photovoltaic (PV) systems or for third party owners (TPOs) to provide clean electricity from solar PV systems through leases or power purchase agreements (PPAs) with homeowners. Incentives are provided either upfront (i.e., through an expected performance-based buy-down or EPBB) for homeowner-owned systems or are paid out over time[88] based on system production (i.e., through a performance-based incentive or PBI) for third-party owned projects. With either incentive type, the Renewable Energy Credits (RECs) are owned by the Connecticut Green Bank.

Figure 8. RSIP Legal Structure and Flows of Capital[89]



The subsidy under the RSIP has decreased over time – see Table 73, supporting the goal of reducing market reliance on rebates and incentives while moving it towards innovative low-cost financing and sustained orderly development.

Table 73. RSIP Subsidy by Step and Incentive Type

RSIP Subsidy by Step	Start Date	EPBB ($/W)			PBI ($/kWh)		LMI ($/kWh)	
		≤5 kW	5 to 10 kW	>10 kW, ≤ 20 kW	≤10 kW	>10 kW, ≤ 20 kW	≤10 kW	>10 kW, ≤ 20 kW
Step 1	3/2/2012	$2.450	$1.250	$0.000	$0.300	$0.000	N/A	N/A
Step 2	5/8/2012	$2.275	$1.075	$0.000	$0.300	$0.000	N/A	N/A
Step 3	1/4/2013 EPBB, 4/1/2013 PBI	$1.750	$0.550	$0.000	$0.225	$0.000	N/A	N/A
Step 4	1/6/2014	$1.250	$0.750	$0.000	$0.180	$0.000	N/A	N/A
Step 5	9/1/2014	$0.800		$0.400	$0.125	$0.060	N/A	N/A
Step 6	1/1/2015	$0.675		$0.400	$0.080	$0.060	N/A	N/A
Step 7	4/11/2015	$0.540		$0.400	$0.064	$0.060	N/A	N/A
Step 8	8/8/2015	$0.540		$0.400	$0.054		$0.110	$0.055
Step 9	2/1/2016	$0.513		$0.400	$0.046		$0.110	$0.055
Step 10	9/1/2016	$0.487		$0.400	$0.039		$0.110	$0.055
Step 11	8/1/2017	$0.487		$0.400	$0.039		$0.110	$0.055
Step 12	1/15/2018	$0.463		$0.400	$0.0350		$0.110	$0.055
Step 13	6/1/2018	$0.463		$0.400	$0.0350		$0.090	$0.045

[88] The PBI is paid out quarterly over a period of six years.

[89] The Green Bank incentive is issued to the Contractor on behalf of the Customer. In the case of Third-Party Owned systems, RECs flow from the Contractor to the Connecticut Green Bank.

Key Performance Indicators

The Key Performance Indicators for RSIP closed activity are reflected in Tables 74 through 79. These illustrate the volume of projects by year, investment, generation capacity installed, and the amount of energy saved and/or produced. It also breaks down the volume of projects by energy efficiency, renewable generation, or both. It should be noted that for all residential solar PV projects supported through the RSIP that an energy efficiency assessment is required through the utility-administered Home Energy Solutions (HES) program, the DOE Home Energy Score, or RSIP-approved alternatives such as audits performed by BPI-certified professionals. Therefore, each RE project from solar PV also includes EE. The benefits from the EE measures (e.g., investment, savings, etc.) have not been calculated, as approximately 90% of energy efficiency assessments are conducted through the HES program for which benefits are tracked by the Connecticut Energy Efficiency Fund.

Table 74. RSIP Project Types and Investment by FY Closed

Fiscal Year Closed	RE	# Projects	# Project Units	Total Investment	Green Bank Investment[90]	Private Investment	Leverage Ratio
2012	413	413	413	$14,840,887	$4,759,775	$10,081,113	3.1
2013	1,109	1,109	1,109	$35,426,043	$11,915,874	$23,510,169	3.0
2014	2,385	2,385	2,385	$73,954,579	$20,078,083	$53,876,496	3.7
2015	6,414	6,414	6,414	$215,375,545	$33,303,017	$182,072,528	6.5
2016	6,845	6,845	6,845	$219,588,433	$18,976,144	$200,612,289	11.6
2017	4,653	4,653	4,653	$126,352,527	$12,076,299	$114,276,228	10.5
2018	5,971	5,971	5,971	$181,734,456	$14,032,729	$167,701,727	13.0
Total	**27,790**	**27,790**	**27,790**	**$867,272,469**	**$115,141,919**	**$752,130,550**	**7.5**

Table 75. RSIP Project Capacity, Generation and Savings by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)	Annual Cost Savings	Lifetime Cost Savings
2012	2,844.7	3,239,548	80,989	11,053	276,333	$495,104	$12,377,610
2013	7,889.3	8,984,289	224,607	30,654	766,360	$1,329,469	$33,236,730
2014	17,148.5	19,528,656	488,216	66,632	1,665,794	$2,859,138	$71,478,450
2015	48,875.4	55,659,276	1,391,482	189,909	4,747,736	$7,689,103	$192,227,580
2016	53,693.3	61,145,878	1,528,647	208,630	5,215,743	$8,205,786	$205,144,650
2017	36,211.0	41,237,036	1,030,926	140,701	3,517,519	$5,578,016	$139,450,410
2018	48,812.8	55,588,050	1,389,701	189,666	4,741,661	$7,158,035	$178,950,870
Total	**215,474.8**	**245,382,732**	**6,134,568**	**837,246**	**20,931,147**	**$33,314,652**	**$832,866,300**

[90] Includes incentives, interest rate buydowns and loan loss reserves.

Table 76. RSIP Project Averages by FY Closed

Fiscal Year Closed	Average Installed Capacity (kW)	Average Annual Saved / Produced (MMBtu)	Average Incentive Amount	Total Average Investment	Incentive ($/W)	Installed Cost ($/W)	Incentive % of Cost	Net Cost to Customer
2012	6.9	27	$11,525	$35,934	$1.67	$5.22	32%	$24,409.47
2013	7.1	28	$10,745	$31,944	$1.51	$4.49	34%	$21,199.43
2014	7.2	28	$8,418	$31,008	$1.17	$4.31	27%	$22,589.73
2015	7.6	30	$5,192	$33,579	$0.68	$4.41	15%	$28,386.74
2016	7.8	30	$2,772	$32,080	$0.35	$4.09	9%	$29,307.86
2017	7.8	30	$2,595	$27,155	$0.33	$3.49	10%	$24,559.69
2018	8.2	32	$2,350	$30,436	$0.29	$3.72	8%	$28,086.04
Total	**7.8**	**30**	**$4,143**	**$31,208**	**$0.53**	**$4.02**	**13%**	**$27,064.79**

Table 77. RSIP Project Application Yield[91] by FY Received

Fiscal Year Received	Applications Received	Applications in Review	Applications Approved	Applications Withdrawn	Applications Denied	Approved Rate	Denied Rate
2012	330		291		39	88%	12%
2013	1,154		1,137		17	99%	1%
2014	2,533		2,518		15	99%	1%
2015	6,444		6,424		20	100%	0%
2016	6,778		6,748		30	100%	0%
2017	4,471		4,436		35	99%	1%
2018	5,850	14	5,737	61	38	99%	1%
Total	**27,560**	**14**	**27,291**	**61**	**194**	**99%**	**1%**

Table 78. RSIP Systems Closed through the Subsidy by Step

RSIP Subsidy by Step	Installed Capacity (kW)	Incentive Amount	Total Investment	Incentive ($/W)	Installed Cost ($/W)	Incentive % of Cost	Net Cost to Customer
None	904.6	$1,358,133	$4,939,376	$1.50	$5.46	27%	$3,581,243
Step 1	1,380.7	$2,470,307	$7,222,670	$1.79	$5.23	34%	$4,752,363
Step 2	5,992.1	$9,762,682	$26,992,954	$1.63	$4.50	36%	$17,230,272
Step 3	13,114.5	$16,114,427	$55,939,681	$1.23	$4.27	29%	$39,825,254
Step 4	19,338.4	$19,970,389	$85,152,324	$1.03	$4.40	23%	$65,181,936
Step 5	13,429.9	$10,014,377	$59,957,882	$0.75	$4.46	17%	$49,943,505
Step 6	12,246.9	$6,281,324	$54,238,676	$0.51	$4.43	12%	$47,957,353
Step 7	19,131.6	$7,650,169	$83,263,959	$0.40	$4.35	9%	$75,613,790
Step 8	27,254.2	$9,717,733	$112,467,815	$0.36	$4.13	9%	$102,750,083
Step 9	26,442.7	$8,777,634	$100,643,212	$0.33	$3.81	9%	$91,865,577
Step 10	31,712.6	$10,296,405	$109,633,743	$0.32	$3.46	9%	$99,337,339

[91] Applications Received are applications for incentives submitted to RSIP for review. Applications in Review are submitted applications yet to be reviewed, approved or rejected. Applications Withdrawn are those that have been cancelled by the submitter due to the project not moving forward (e.g., customer cancellation) or due to the incentive expiring before the project is installed (incentives are reserved for 270 days). Applications Denied are those that are not approved for an incentive because the project does not meet RSIP requirements. The Approved Rate reflects the number of Applications Approved relative to the number of Applications Received.

RSIP Subsidy by Step	Installed Capacity (kW)	Incentive Amount	Total Investment	Incentive ($/W)	Installed Cost ($/W)	Incentive % of Cost	Net Cost to Customer
Step 11	19,984.5	$6,211,828	$71,633,617	$0.31	$3.58	9%	$65,421,789
Step 12	19,077.8	$5,102,231	$73,293,661	$0.27	$3.84	7%	$68,191,430
Step 13	5,464.5	$1,414,282	$21,892,898	$0.26	$4.01	6%	$20,478,616
Total	**215,474.8**	**$115,141,919**	**$867,272,469**	**$0.53**	**$4.02**	**13%**	**$752,130,550**

Table 79. RSIP Third Party Owned (PBI) vs Homeowner-owned Systems (EPBB)

Fiscal Year Closed	# of PBI Projects	% PBI Projects	# of EPBB Projects	% EPBB Projects	Total
2012	90	22%	323	78%	413
2013	346	31%	763	69%	1109
2014	1,169	49%	1,216	51%	2,385
2015	4,635	72%	1,779	28%	6,414
2016	5,860	86%	985	14%	5,860
2017	3,526	76%	1,127	24%	4,653
2018	4,532	76%	1,439	24%	5,971
Total	**20,158**	**73%**	**7,632**	**27%**	**27,790**

There are 20,158 PBI systems (owned by a third party) representing 73% of FY18 closed RSIP projects, and 7,632 EPBB or homeowner-owned projects, representing 27% of closed RSIP volume.

Area Median Income Band Penetration

For a breakdown of RSIP project volume and investment by census tracts categorized by Area Median Income (AMI) bands – see Table 80. It should be noted that RSIP is not an income targeted program. However, following the UCONN study[92] in December of 2014, the Green Bank Board of Directors approved the Income-Targeted incentive to better penetrate these tracts and to create inclusive prosperity. This special incentive is one of the methods through which the Green Bank has expanded its reach of previously underserved communities.

Table 80. RSIP Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands by FY Closed[93]

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2012	<60%	10	2%	0.1	2%	$279,743	2%	61,168	7%	0.2	$4.57	0.9
2012	60%-80%	10	2%	0.1	2%	$242,605	2%	101,640	12%	0.1	$2.39	0.5
2012	80%-100%	48	12%	0.3	12%	$1,644,387	11%	151,346	17%	0.3	$10.87	2.2
2012	100%-120%	116	28%	0.8	28%	$4,131,570	28%	216,988	25%	0.5	$19.04	3.6
2012	>120%	229	55%	1.6	57%	$8,542,582	58%	350,196	40%	0.7	$24.39	4.6
2012	Total	413	100%	2.8	100%	$14,840,887	100%	881,338	100%	0.5	$16.84	3.2
2013	<60%	20	2%	0.1	1%	$415,069	1%	59,494	7%	0.3	$6.98	1.5
2013	60%-80%	56	5%	0.4	5%	$1,683,198	5%	109,189	12%	0.5	$15.42	3.4
2013	80%-100%	124	11%	0.8	10%	$3,786,908	11%	150,603	17%	0.8	$25.14	5.3
2013	100%-120%	220	20%	1.5	19%	$6,735,980	19%	203,157	23%	1.1	$33.16	7.2
2013	>120%	689	62%	5.2	65%	$22,804,887	64%	351,633	40%	2.0	$64.85	14.7
2013	Total	1,109	100%	7.9	100%	$35,426,043	100%	874,076	100%	1.3	$40.53	9.0
2014	<60%	73	3%	0.4	2%	$1,824,959	2%	57,673	7%	1.3	$31.64	7.1
2014	60%-80%	159	7%	1.0	6%	$4,362,397	6%	103,934	12%	1.5	$41.97	9.5
2014	80%-100%	392	16%	2.6	15%	$11,474,019	16%	149,038	17%	2.6	$76.99	17.5
2014	100%-120%	610	26%	4.5	26%	$19,476,924	26%	209,561	24%	2.9	$92.94	21.3

[92]The memo, titled 7cii_Role of a Green Bank_Market Analysis_Low Income Solar and Housing_Memo_121214, can be found amongst board meeting materials here: https://www.ctgreenbank.com/wp-content/uploads/2017/07/CGB_BOD_Online-Meeting-Materials_121914_redacted.pdf

[93] Excludes projects in unknown bands.

CONNECTICUT GREEN BANK
5. PROGRAMS – RESIDENTIAL SOLAR INVESTMENT PROGRAM

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2014	>120%	1,151	48%	8.7	51%	$36,816,280	50%	348,270	40%	3.3	$105.71	24.9
2014	Total	2,385	100%	17.1	100%	$73,954,579	100%	868,476	100%	2.7	$85.15	19.7
2015	<60%	260	4%	1.5	3%	$6,616,082	3%	64,361	7%	4.0	$102.80	23.6
2015	60%-80%	594	9%	4.0	8%	$17,385,072	8%	96,305	11%	6.2	$180.52	41.1
2015	80%-100%	1,106	17%	8.0	16%	$36,261,420	17%	164,873	19%	6.7	$219.94	48.8
2015	100%-120%	1,672	26%	12.7	26%	$57,155,779	27%	184,613	21%	9.1	$309.60	69.0
2015	>120%	2,782	43%	22.6	46%	$97,957,191	45%	352,621	41%	7.9	$277.80	64.1
2015	Total	6,414	100%	48.9	100%	$215,375,545	100%	862,773	100%	7.4	$249.63	56.6
2016	<60%	574	8%	3.6	7%	$14,848,171	7%	60,769	7%	9.4	$244.34	59.4
2016	60%-80%	895	13%	6.3	12%	$25,031,608	11%	99,220	12%	9.0	$252.28	63.9
2016	80%-100%	1,332	19%	10.3	19%	$42,274,924	19%	165,331	19%	8.1	$255.70	62.1
2016	100%-120%	1,655	24%	12.8	24%	$52,739,645	24%	187,463	22%	8.8	$281.33	68.5
2016	>120%	2,389	35%	20.6	38%	$84,694,084	39%	345,311	40%	6.9	$245.27	59.7
2016	Total	6,845	100%	53.7	100%	$219,588,433	100%	858,094	100%	8.0	$255.90	62.6
2017	<60%	627	13%	4.1	11%	$15,593,759	12%	60,769	7%	10.3	$256.61	67.0
2017	60%-80%	781	17%	5.4	15%	$19,003,566	15%	99,220	12%	7.9	$191.53	54.7
2017	80%-100%	891	19%	6.9	19%	$24,190,280	19%	165,331	19%	5.4	$146.31	41.5
2017	100%-120%	932	20%	7.6	21%	$25,648,311	20%	187,463	22%	5.0	$136.82	40.4
2017	>120%	1,422	31%	12.3	34%	$41,916,611	33%	345,311	40%	4.1	$121.39	35.5
2017	Total	4,653	100%	36.2	100%	$126,352,527	100%	858,094	100%	5.4	$147.25	42.2
2018	<60%	775	13%	5.1	10%	$19,674,414	11%	60,769	7%	12.8	$323.76	84.0
2018	60%-80%	958	16%	6.9	14%	$25,888,004	14%	99,220	12%	9.7	$260.92	69.4
2018	80%-100%	1,198	20%	9.6	20%	$35,652,123	20%	165,331	19%	7.2	$215.64	58.3
2018	100%-120%	1,280	21%	11.0	23%	$40,885,570	23%	187,463	22%	6.8	$218.10	58.6

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2018	>120%	1,759	29%	16.2	33%	$59,593,331	33%	345,311	40%	5.1	$172.58	46.9
2018	Total	5,970	100%	48.8	100%	$181,693,442	100%	858,094	100%	7.0	$211.74	56.9
Total	<60%	2,339	8%	14.9	7%	$59,252,197	7%	60,769	7%	38.5	$975.04	244.6
Total	60%-80%	3,453	12%	24.0	11%	$93,596,450	11%	99,220	12%	34.8	$943.32	242.1
Total	80%-100%	5,091	18%	38.6	18%	$155,284,061	18%	165,331	19%	30.8	$939.23	233.2
Total	100%-120%	6,485	23%	50.9	24%	$206,773,779	24%	187,463	22%	34.6	$1,103.01	271.4
Total	>120%	10,421	38%	87.2	40%	$352,324,968	41%	345,311	40%	30.2	$1,020.31	252.4
Total	Total	27,789	100%	215.5	100%	$867,231,455	100%	858,094	100%	32.4	$1,010.65	251.1

Table 81. RSIP Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[94]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	**Total**	**Over 100% AMI**	**100% or Below AMI**	**% at 100% or Below**	**Total**	**Over 100% AMI**	**100% or Below AMI**	**% at 100% or Below**	**Total**	**Over 100% AMI**	**100% or Below AMI**	**% at 100% or Below**
2012	413	345	68	16%	2.8	2.4	0.4	16%	$14,840,887	$12,674,152	$2,166,735	15%
2013	1,109	909	200	18%	7.9	6.6	1.3	16%	$35,426,043	$29,540,867	$5,885,175	17%
2014	2,385	1,761	624	26%	17.1	13.1	4.0	23%	$73,954,579	$56,293,204	$17,661,375	24%
2015	6,414	4,454	1,960	31%	48.9	35.3	13.5	28%	$215,375,545	$155,112,970	$60,262,575	28%
2016	6,845	4,044	2,801	41%	53.7	33.5	20.2	38%	$219,588,433	$137,433,730	$82,154,704	37%
2017	4,653	2,354	2,299	49%	36.2	19.8	16.4	45%	$126,352,527	$67,564,923	$58,787,604	47%
2018	5,970	3,039	2,931	49%	48.8	27.2	21.6	44%	$181,693,442	$100,478,901	$81,214,541	45%
Total	**27,789**	**16,906**	**10,883**	**39%**	**215.5**	**138.0**	**77.4**	**36%**	**$867,231,455**	**$559,098,747**	**$308,132,708**	**36%**

[94] Excludes projects in unknown bands.

Distressed Community Penetration

For a breakdown of RSIP project volume and investment by census tracts categorized by Distressed Communities – see Table 82. It should be noted that RSIP is not an income targeted program.

Table 82. RSIP Activity in Distressed Communities by FY Closed

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2012	Yes	46	11%	0.3	9%	$1,283,753	9%	1,171,385	33%	$1.10	0.2	447,962	33%	$2.87	0.6
2012	No	367	89%	2.6	91%	$13,557,134	91%	2,400,828	67%	$5.65	1.1	912,222	67%	$14.86	2.8
2012	Total	413	100%	2.8	100%	$14,840,887	100%	3,572,213	100%	$4.15	0.8	1,360,184	100%	$10.91	2.1
2013	Yes	116	10%	0.7	9%	$3,299,803	9%	1,124,923	31%	$2.93	0.6	426,564	31%	$7.74	1.7
2013	No	993	90%	7.2	91%	$32,126,240	91%	2,458,638	69%	$13.07	2.9	929,285	69%	$34.57	7.7
2013	Total	1,109	100%	7.9	100%	$35,426,043	100%	3,583,561	100%	$9.89	2.2	1,355,849	100%	$26.13	5.8
2014	Yes	379	16%	2.5	15%	$11,085,042	15%	1,106,027	31%	$10.02	2.3	416,415	31%	$26.62	6.0
2014	No	2,006	84%	14.7	85%	$62,869,536	85%	2,486,026	69%	$25.29	5.9	939,791	69%	$66.90	15.6
2014	Total	2,385	100%	17.1	100%	$73,954,579	100%	3,592,053	100%	$20.59	4.8	1,356,206	100%	$54.53	12.6
2015	Yes	1,369	21%	9.3	19%	$41,404,718	19%	1,122,550	31%	$36.88	8.3	423,559	31%	$97.75	22.1
2015	No	5,045	79%	39.5	81%	$173,970,827	81%	2,470,672	69%	$70.41	16.0	929,024	69%	$187.26	42.6
2015	Total	6,414	100%	48.9	100%	$215,375,545	100%	3,593,222	100%	$59.94	13.6	1,352,583	100%	$159.23	36.1
2016	Yes	2,035	30%	14.5	27%	$59,358,103	27%	1,162,653	32%	$51.05	12.5	438,710	32%	$135.30	33.1
2016	No	4,810	70%	39.2	73%	$160,230,330	73%	2,425,917	68%	$66.05	16.1	916,003	68%	$174.92	42.7
2016	Total	6,845	100%	53.7	100%	$219,588,433	100%	3,588,570	100%	$61.19	15.0	1,354,713	100%	$162.09	39.6
2017	Yes	1,696	36%	11.9	33%	$41,700,609	33%	1,162,653	32%	$35.87	10.2	438,710	32%	$95.05	27.0
2017	No	2,957	64%	24.4	67%	$84,651,918	67%	2,425,917	68%	$34.89	10.0	916,003	68%	$92.41	26.6
2017	Total	4,653	100%	36.2	100%	$126,352,527	100%	3,588,570	100%	$35.21	10.1	1,354,713	100%	$93.27	26.7

CONNECTICUT GREEN BANK
5. PROGRAMS – RESIDENTIAL SOLAR INVESTMENT PROGRAM

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2018	Yes	2,219	37%	16.2	33%	$61,007,290	34%	1,162,653	32%	$52.47	13.9	438,710	32%	$139.06	36.9
2018	No	3,752	63%	32.6	67%	$120,727,166	66%	2,425,917	68%	$49.77	13.4	916,003	68%	$131.80	35.6
2018	Total	5,971	100%	48.8	100%	$181,734,456	100%	3,588,570	100%	$50.64	13.6	1,354,713	100%	$134.15	36.0
Total	Yes	7,860	28%	55.4	26%	$219,139,319	25%	1,162,653	32%	$188.48	47.7	438,710	32%	$499.51	126.3
Total	No	19,930	72%	160.1	74%	$648,133,151	75%	2,425,917	68%	$267.17	66.0	916,003	68%	$707.57	174.7
Total	Total	27,790	100%	215.5	100%	$867,272,469	100%	3,588,570	100%	$241.68	60.0	1,354,713	100%	$640.19	159.1

Societal Impacts

RSIP is a driver of job creation and cleaner air in the state of Connecticut. Over the course of its existence, the program has supported the creation of 9,894 job years and avoided the lifetime emission of 3,433,135 tons of carbon dioxide, 3,778,285 pounds of nitrous oxide, 3,368,638 pounds of sulfur oxide, and 300,706 pounds of particulate matter as illustrated by Tables 83 and 84. The value of the public health impacts of the RSIP is estimated to be between $77.5 and $175.3 million as seen in table 85.

Table 83. RSIP Job Years Supported by FY Closed

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012	88	141	229
2013	208	334	542
2014	374	603	977
2015	1,077	1,733	2,810
2016	1,175	1,892	3,068
2017	397	519	916
2018	586	767	1,353
Total	**3,905**	**5,990**	**9,894**

Table 84. RSIP Avoided Emissions by FY Closed

	CO_2 Savings (tons)		NOx Savings (pounds)		SOx Savings (pounds)		PM 2.5 (pounds)	
Fiscal Year	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime
2012	1,811	45,279	2,280	57,010	2,998	74,946	163	4,065
2013	5,112	127,803	7,455	186,382	9,588	239,706	451	11,274
2014	10,865	271,623	15,338	383,442	18,344	458,605	980	24,505
2015	31,768	794,205	39,201	980,027	40,160	1,003,991	2,791	69,782
2016	34,550	863,749	36,977	924,431	29,473	736,815	3,030	75,743
2017	23,079	576,986	23,242	581,052	16,478	411,950	2,022	50,558
2018	30,140	753,490	26,638	665,941	17,705	442,625	2,591	64,780
Total	**137,325**	**3,433,135**	**151,131**	**3,778,285**	**134,746**	**3,368,638**	**12,028**	**300,706**

Table 85. RSIP Public Health Impact by FY Closed

Fiscal Year	Annual		Lifetime	
	Low	High	Low	High
2012	$59,518	$134,531	$1,487,957	$3,363,263
2013	$186,582	$421,736	$4,664,539	$10,543,395
2014	$367,208	$830,009	$9,180,203	$20,750,235
2015	$859,438	$1,942,598	$21,485,958	$48,564,954
2016	$714,163	$1,614,214	$17,854,067	$40,355,356
2017	$426,642	$964,329	$10,666,038	$24,108,216
2018	$488,581	$1,104,323	$12,214,517	$27,608,064
Total	**$3,102,131**	**$7,011,739**	**$77,553,278**	**$175,293,482**

Marketing

To provide perspective on program growth, cost and incentive trends, Table 86 illustrates the increase in RSIP project volume, which grew 1446% from fiscal year 2012 to 2018, while installed costs and incentives decreased during this same time period.

RSIP volume in fiscal year 2018 increased 28% compared to the prior fiscal year due to a strong recovery of the residential solar PV market from the exit of SolarCity from RSIP in fiscal year 2017 (when their market share dropped to less than 1% from 56% market share in FY15 and 43% in FY16). The ramp up by other large national companies in FY17 and even more so in FY18 included Sunnova, Vivint Solar, PosiGen, Sunrun and SunPower Capital, as well as steady volume from local and regional installers. The large national players participating in the Connecticut market primarily deployed third-party owned (PBI) projects (though Vivint sells both PPAs and homeowner owned projects). Local and regional contractors primarily sold homeowner-owned projects and also partnered with TPOs to perform installation and/or sales. Leading contractors in terms of market share for homeowner owned projects in fiscal year 2018 included Trinity Solar, Vivint Solar, Ross Solar, RGS Energy, C-TEC Solar, Sunlight Solar, Earthlight Technologies, EcoSmart Home Services, and Aegis Electrical Systems. ,The RSIP incentive decreased in fiscal year 2018 to 8% of installed project cost, having decreased 83% from 2012 through 2018. Installed costs decreased nearly 30% overall from fiscal year 2012 to 2018 but increased in fiscal year 2018 by over 6% from $3.49/W in fiscal year 2017 to $3.72/W in fiscal year 2018. Contractors indicated that the cost of doing business is going up, including increased customer acquisition costs, privatizing of Solarize, increased financing costs, rising commodity prices due to trade tariffs, uncertainty in availability of equipment, increased competition, increased labor and insurance costs, and increased municipal permitting and interconnection costs including more frequent, costly utility requests for infrastructure (e.g., transformer) upgrades. Solar companies have been absorbing costs and reducing margins to keep prices stable, but these costs began adding up and necessitating price increases.

The Green Bank anticipates RSIP continuing a path of relatively flat growth in fiscal year 2019, though volume could pick up in the latter part of 2019 as RSIP approaches its 300MW limit. In the context of broader market trends and the state of Connecticut's fiscal status and climate change mitigation efforts, the strategy for supporting RSIP going forward will focus on:

- Sustained orderly development of a stable, resilient, residential solar PV market not dependent on incentives
- Maintaining a stable installer base including strong local company presence
- Continuing to support access to affordable financing through loans and third-party providers
- Continuing to increase adoption of solar among LMI households through a tiered incentive and additional research and analysis to understand underserved market segment opportunities in the Connecticut solar market
- Training the market for the long term by supporting consumer education and protection, as well as installation technology diversity (e.g., energy efficiency)
- Continuing to reduce barriers to PV adoption
- Unlocking battery storage incentive and financing opportunities
- Supporting a "Solar Plus" model of adoption of solar PV in combination with complementary technologies such as energy storage, electric vehicles, renewable thermal technologies, energy

efficiency, demand response, and home energy management systems to increase the value of solar to the grid and to customers.

- Supporting the stakeholder process conducted by PURA to develop tariff compensation structures for residential solar PV and other technologies.

Table 86. RSIP Green Bank Volume, Capacity and Cost Data by FY Closed[95]

Fiscal Year Closed	CGB Solarize Type	# Projects	Installed Capacity (kW)	Incentive Amount	Total Investment	Incentive ($/W)	Installed Cost ($/W)	Incentive % of Gross Cost	Net Cost to Customer
2012	No	413	2,844.7	$4,759,775	$14,840,887	$1.67	$5.22	32%	$10,081,113
2012 Total		413	2,844.7	$4,759,775	$14,840,887	$1.67	$5.22	32%	$10,081,113
2013	No	785	5,465.3	$8,399,366	$26,127,846	$1.54	$4.78	32%	$17,728,480
	Yes	324	2,424.0	$3,516,508	$9,298,197	$1.45	$3.84	38%	$5,781,689
2013 Total		1,109	7,889.3	$11,915,874	$35,426,043	$1.51	$4.49	34%	$23,510,169
2014	No	1,675	12,111.8	$14,269,700	$54,799,394	$1.18	$4.52	26%	$40,529,694
	Yes	710	5,036.7	$5,808,383	$19,155,185	$1.15	$3.80	30%	$13,346,802
2014 Total		2,385	17,148.5	$20,078,083	$73,954,579	$1.17	$4.31	27%	$53,876,496
2015	No	5,512	41,345.2	$27,697,849	$186,051,602	$0.67	$4.50	15%	$158,353,754
	Yes	902	7,530.2	$5,605,168	$29,323,942	$0.74	$3.89	19%	$23,718,774
2015 Total		6,414	48,875.4	$33,303,017	$215,375,545	$0.68	$4.41	15%	$182,072,528
2016	No	6,748	52,837.7	$18,613,082	$216,295,743	$0.35	$4.09	9%	$197,682,661
	Yes	97	855.6	$363,062	$3,292,690	$0.42	$3.85	11%	$2,929,629
2016 Total		6,845	53,693.3	$18,976,144	$219,588,433	$0.35	$4.09	9%	$200,612,289
2017	No	4,609	35,833.4	$11,922,530	$125,027,184	$0.33	$3.49	10%	$113,104,654
	Yes	44	377.6	$153,769	$1,325,343	$0.41	$3.51	12%	$1,171,574
2017 Total		4,653	36,211.0	$12,076,299	$126,352,527	$0.33	$3.49	10%	$114,276,228
2018	No	5,963	48,756.4	$14,010,371	$181,535,396	$0.29	$3.72	8%	$167,525,025
	Yes	8	56.4	$22,358	$199,060	$0.40	$3.53	11%	$176,702
2018 Total		5,971	48,812.8	$14,032,729	$181,734,456	$0.29	$3.72	8%	$167,701,727
Total	**No**	**25,705**	**199,194.4**	**$99,672,672**	**$804,678,052**	**$0.50**	**$4.04**	**12%**	**$705,005,380**
Total	**Yes**	**2,085**	**16,280.4**	**$15,469,247**	**$62,594,417**	**$0.95**	**$3.84**	**25%**	**$47,125,170**
Grand Total		**27,790**	**215,474.8**	**$115,141,919**	**$867,272,469**	**$0.53**	**$4.02**	**13%**	**$752,130,550**

SHREC Program

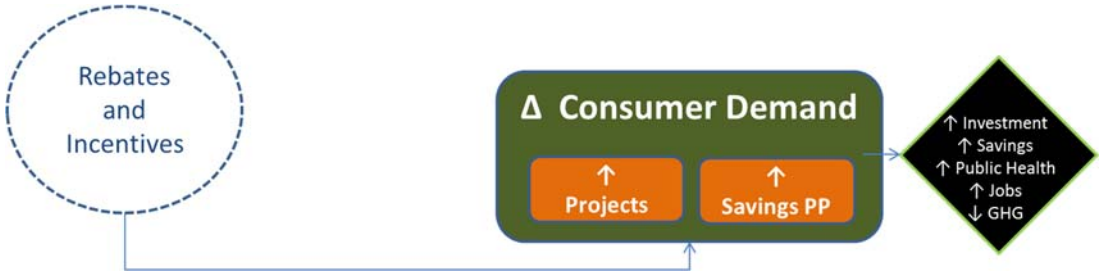
Legislation enacted by the General Assembly enables the Connecticut Green Bank to recover the costs of the RSIP by aggregating and monetizing the Solar Home Renewable Energy Credits (SHRECs) earned for solar energy generated by systems whose owners received RSIP incentives. The SHRECs are sold through long-term contracts to the state's two investor-owned utilities, as mandated by the law. Through the SHREC Master Purchase Agreement , the Green Bank sold its Tranche 1 and Tranche 2 SHRECs to the utilities – for a total of over 100 MW of residential solar PV projects supported through the RSIP.

[95] Public supported Solarize ended in 2015. Projects are attributed to years based on the year their application was approved. Solarize projects assigned to years later than 2017 are the result of solarize efforts supported by the green bank in 2015 or before. We will have private supported Solarize in FY 2018 CAFR looking back at 2016-2018.

Market Transformation

The Connecticut Green Bank contracted with Cadmus Group, Inc., to conduct a cost-effectiveness analysis of its Residential Solar Investment Program (RSIP), completed in March 2016. The findings of the study were: (1) RSIP is cost-effective from the perspective of program participants, the Connecticut Green Bank, from a total resource perspective, and for society as a whole. (2) RSIP has increasingly made efficient use of program funds by reducing incentives while supporting market growth through financing, marketing, outreach and education. (3) RSIP benefits sufficiently outweigh costs to allow for bundling of residential solar PV with emerging technologies such as energy storage, while maintaining cost-effectiveness. The study included data from RSIP steps 1 through 7, for which cost-effectiveness was found to increase with progressive steps as incentives were reduced. Cadmus noted that incentives represented the large majority of program costs. Therefore, the general pattern of increasing cost-effectiveness would be expected to continue as incentives were reduced further from steps 7-13 and beyond. As the Connecticut Green Bank's only subsidy program, we are applying the Program Logic Model that focuses on rebates and incentives as the financial driver for customer action rather than financing.

Figure 9. Program Logic Model for the Residential Solar Investment Program (RSIP)



Case 4 – Smart-E Loan

Description

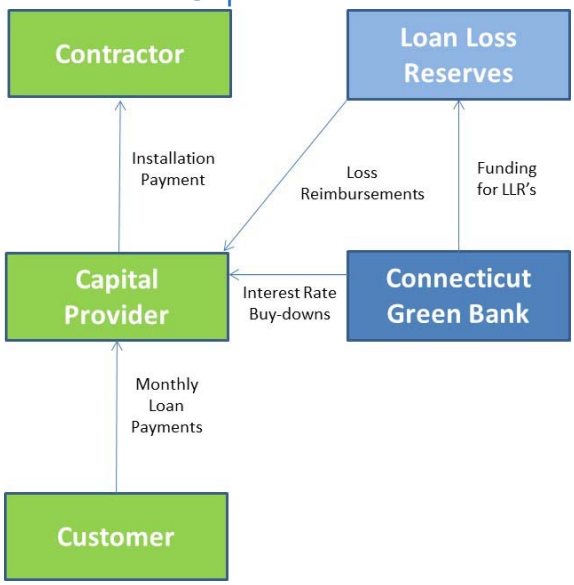
The Smart-E residential loan program is a financing program developed in partnership with Energize CT and local lenders that uses a credit enhancement (i.e., $2,600,000 loan loss reserve)[96] and interest rate buy-downs ($6,200,000 directly to programs)[97] to stimulate the market for residential energy efficiency and solar loans in Connecticut. Through the product, the Connecticut Green Bank lowers the cost of capital for Connecticut residential customers seeking to install solar PV, high efficiency heating and cooling equipment, insulation or other home energy upgrades and reduces the loan performance risks to lenders. The $2.6 million loan loss reserve is used to encourage lenders to offer below market interest rates and longer terms for unsecured loans, mitigates their losses, and encourages customers to undertake measures that would prove uneconomical at higher interest rates. The interest rate buy-downs further encourage additional energy savings as they are reserved primarily for customers coupling multiple retrofits (e.g. solar and efficiency) or installing high priority policy measures (heat pump technologies, natural gas conversions).

The Smart-E Loan was designed to make it easy and affordable for homeowners to make energy efficiency and clean energy improvements to their homes with no out-of-pocket cash and at interest rates low enough and repayment terms long enough to make the improvements “cash flow positive.” At the same time, the Green Bank was intentional in opening conversations with local lenders to demonstrate the value of loans that would help their existing customers with burdensome energy costs, and serve as an effective marketing tool to attract new relationships. In return for a “second loss” reserve which would be available beyond an agreed “normal” level of loan losses, lenders agreed to lengthen their terms and lower their rates. The end result is a successful loan product that has enabled thousands of homeowners throughout the state to lower energy costs and make their homes more comfortable in the summer heat or the depths of winter.

The financial structure of the Smart-E Loan product includes origination,[98] servicing,[99] and financing features in combination with the support of the Connecticut Green Bank.

[96] During FY2017, the Green Bank, in an effort to optimize its resources, now holds the Loan Loss Reserve on its balance sheet.
[97] From repurposed American Recovery and Reinvestment Act funds.
[98] Network of participating community banks and credit unions with local contractors.
[99] Network of participating community banks and credit unions.

Figure 10. Legal Structure and Flows of Capital for the Smart-E Loan



Key Performance Indicators

The Key Performance Indicators for Smart-E closed activity are reflected in Tables 87 through 90. These illustrate the volume of projects by year, investment, generation capacity installed, and the amount of energy saved and/or produced. It also breaks down the volume of projects by energy efficiency, renewable generation, or both.

Table 87. Smart-E Loan Project Types and Investment by FY Closed

Fiscal Year Closed	EE	RE	RE/E E	Other	# Projects	# Project Units	Amount Financed	Total Investment	Green Bank Investment [100]	Private Investment	Leverage Ratio
2012	-	-	-	-	-	-		-	-	-	-
2013	1	1		1	3	3	$52,400	$64,987	$847	$64,140	1.4
2014	91	39	6	7	143	143	$1,781,207	$2,498,925	$46,261	$2,452,663	17.3
2015	121	81	68	12	282	282	$5,379,409	$8,397,379	$443,005	$7,954,374	11.8
2016	105	49	67	6	227	227	$4,632,678	$6,238,958	$377,688	$5,861,271	9.0
2017	360	69	77	19	525	525	$8,605,680	$10,766,969	$1,055,143	$9,711,826	8.0
2018	1,312	252	145	53	1,762	1,762	$27,933,997	$34,472,678	$4,288,258	$30,184,420	6.3
Total	**1,990**	**491**	**363**	**98**	**2,942**	**2,942**	**$48,385,370**	**$62,439,896**	**$6,211,202**	**$56,228,695**	**7.3**

Table 88. Smart-E Loan Project Capacity, Generation and Savings by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)	Annual Cost Savings	Lifetime Cost Savings
2012	--		-	-	-	-	-
2013	6.0	12,218	235	42	803	$1,636	$38,715
2014	348.9	887,929	16,083	3,115	56,997	$94,043	$2,143,693

[100] Includes incentives and interest rate buydowns. It does not include the loan loss reserves for Smart-E of $2,667,806

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)	Annual Cost Savings	Lifetime Cost Savings
2015	1,336.9	2,469,241	53,427	9,499	209,130	$281,309	$6,598,945
2016	955.2	2,017,829	42,806	8,045	175,048	$218,982	$5,088,122
2017	1,299.3	3,933,011	71,062	14,646	273,095	$408,242	$9,139,137
2018	3,754.4	11,350,651	199,643	40,776	732,282	$1,229,848	$26,998,119
Total	**7,700.7**	**20,670,880**	**383,256**	**76,122**	**1,447,355**	**$2,234,061**	**$50,006,732**

Table 89. Smart-E Loan Project Averages by FY Closed

Fiscal Year Closed	Average Total Investment	Average Amount Financed	Average Installed Capacity (kW)	Average Number of Measures	Average Annual Saved / Produced (MMBtu)	Average Finance Term (months)	Average Finance Rate	Average DTI	Average FICO Score
2012	-	-	-	-	-	-	-	-	-
2013	$21,662	$17,467	2.0	1	14	100	5.49	54	711
2014	$17,475	$12,456	2.4	1	22	90	5.22	32	751
2015	$29,778	$19,076	4.7	2	34	100	4.18	30	754
2016	$27,484	$20,408	4.2	2	35	100	4.10	32	756
2017	$20,509	$16,392	2.5	2	28	102	2.74	20	746
2018	$19,565	$15,854	2.1	2	23	103	1.99	16	731
Total	**$21,224**	**$16,446**	**2.6**	**2**	**26**	**102**	**2.66**	**20**	**739**

Table 90. Smart-E Loan Project Application Yield[101] by FY Received

Fiscal Year Received	Applications Received	Applications in Review	Applications Approved	Applications Withdrawn	Applications Denied	Approved Rate	Denied Rate
2012	1		1			100%	0%
2013	21		15	1	5	76%	24%
2014	304		179	43	82	73%	27%
2015	550		307	99	144	74%	26%
2016	418		221	64	133	68%	32%
2017	1,117		677	193	247	78%	22%
2018	2,912	29	1,839	385	659	77%	23%
Total	**5,323**	**29**	**3,239**	**785**	**1,270**	**76%**	**24%**

[101] Applications received are applications submitted by the homeowner to a participating lending institution for credit approval. Applications in review are submitted applications yet to be reviewed, approved or rejected. Applications withdrawn are applications that have been cancelled by the submitter due to the project not moving forward. Applications denied are applications that are not approved because the customer does not meet underwriting requirements.

Area Median Income Band Penetration

For a breakdown of Smart-E loan volume and investment by census tracts categorized by Area Median Income (AMI) bands – see Table 91. It should be noted that Smart-E is not an income targeted program and only in the second half of FY17 began offering the expanded credit-challenged version of the program, opening new opportunities to partner with mission-oriented lenders focused on reaching consumers in underserved lower income markets.

Table 91. Smart-E Loan Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands by FY Closed[102]

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2012	<60%	0	0%	0.0	0%	$0	0%	61,168	7%	0.0	$0.00	0.0
2012	60%-80%	0	0%	0.0	0%	$0	0%	101,640	12%	0.0	$0.00	0.0
2012	80%-100%	0	0%	0.0	0%	$0	0%	151,346	17%	0.0	$0.00	0.0
2012	100%-120%	0	0%	0.0	0%	$0	0%	216,988	25%	0.0	$0.00	0.0
2012	>120%	0	0%	0.0	0%	$0	0%	350,196	40%	0.0	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	881,338	100%	0.0	$0.00	0.0
2013	<60%	0	0%	0.0	0%	$0	0%	59,494	7%	0.0	$0.00	0.0
2013	60%-80%	0	0%	0.0	0%	$0	0%	109,189	12%	0.0	$0.00	0.0
2013	80%-100%	1	33%	0.0	0%	$8,598	13%	150,603	17%	0.0	$0.06	0.0
2013	100%-120%	2	67%	0.0	100%	$56,389	87%	203,157	23%	0.0	$0.28	0.0
2013	>120%	0	0%	0.0	0%	$0	0%	351,633	40%	0.0	$0.00	0.0
2013	Total	3	100%	0.0	100%	$64,987	100%	874,076	100%	0.0	$0.07	0.0
2014	<60%	13	9%	0.0	5%	$161,627	6%	57,673	7%	0.2	$2.80	0.3
2014	60%-80%	16	11%	0.0	6%	$215,540	9%	103,934	12%	0.2	$2.07	0.2
2014	80%-100%	32	22%	0.1	25%	$583,540	23%	149,038	17%	0.2	$3.92	0.6
2014	100%-120%	26	18%	0.1	16%	$500,557	20%	209,561	24%	0.1	$2.39	0.3
2014	>120%	56	39%	0.2	48%	$1,037,661	42%	348,270	40%	0.2	$2.98	0.5
2014	Total	143	100%	0.3	100%	$2,498,925	100%	868,476	100%	0.2	$2.88	0.4

[102] Excludes projects in unknown bands.

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Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2015	<60%	12	4%	0.0	0%	$128,175	2%	64,361	7%	0.2	$1.99	0.0
2015	60%-80%	24	9%	0.0	3%	$366,239	4%	96,305	11%	0.2	$3.80	0.4
2015	80%-100%	56	20%	0.2	13%	$1,942,737	23%	164,873	19%	0.3	$11.78	1.0
2015	100%-120%	58	21%	0.4	26%	$1,798,663	21%	184,613	21%	0.3	$9.74	1.9
2015	>120%	132	47%	0.8	58%	$4,161,564	50%	352,621	41%	0.4	$11.80	2.2
2015	Total	282	100%	1.3	100%	$8,397,379	100%	862,773	100%	0.3	$9.73	1.5
2016	<60%	14	6%	0.0	1%	$187,938	3%	60,769	7%	0.2	$3.09	0.1
2016	60%-80%	22	10%	0.0	1%	$306,482	5%	99,220	12%	0.2	$3.09	0.1
2016	80%-100%	39	17%	0.1	15%	$1,011,089	16%	165,331	19%	0.2	$6.12	0.8
2016	100%-120%	49	22%	0.2	23%	$1,370,954	22%	187,463	22%	0.3	$7.31	1.2
2016	>120%	103	45%	0.6	61%	$3,362,494	54%	345,311	40%	0.3	$9.74	1.7
2016	Total	227	100%	1.0	100%	$6,238,958	100%	858,094	100%	0.3	$7.27	1.1
2017	<60%	35	7%	0.1	5%	$643,810	6%	60,769	7%	0.6	$10.59	1.0
2017	60%-80%	56	11%	0.1	9%	$928,138	9%	99,220	12%	0.6	$9.35	1.2
2017	80%-100%	89	17%	0.2	16%	$1,623,524	15%	165,331	19%	0.5	$9.82	1.3
2017	100%-120%	117	22%	0.3	24%	$2,492,233	23%	187,463	22%	0.6	$13.29	1.7
2017	>120%	228	43%	0.6	46%	$5,079,264	47%	345,311	40%	0.7	$14.71	1.7
2017	Total	525	100%	1.3	100%	$10,766,969	100%	858,094	100%	0.6	$12.55	1.5
2018	<60%	111	6%	0.1	2%	$1,681,564	5%	60,769	7%	1.8	$27.67	1.0
2018	60%-80%	195	11%	0.2	7%	$3,064,100	9%	99,220	12%	2.0	$30.88	2.5
2018	80%-100%	312	18%	0.5	14%	$5,436,195	16%	165,331	19%	1.9	$32.88	3.2
2018	100%-120%	397	23%	1.0	26%	$8,034,421	23%	187,463	22%	2.1	$42.86	5.2
2018	>120%	744	42%	1.9	51%	$16,094,477	47%	345,311	40%	2.2	$46.61	5.5
2018	Total	1,759	100%	3.7	100%	$34,310,757	100%	858,094	100%	2.0	$39.98	4.3

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
Total	<60%	185	6%	0.1	2%	$2,803,114	5%	60,769	7%	3.0	$46.13	2.4
Total	60%-80%	313	11%	0.4	6%	$4,880,500	8%	99,220	12%	3.2	$49.19	4.3
Total	80%-100%	529	18%	1.1	15%	$10,605,684	17%	165,331	19%	3.2	$64.15	6.9
Total	100%-120%	649	22%	1.9	25%	$14,253,218	23%	187,463	22%	3.5	$76.03	10.2
Total	>120%	1,263	43%	4.0	53%	$29,735,460	48%	345,311	40%	3.7	$86.11	11.7
Total	Total	2,939	100%	7.7	100%	$62,277,975	100%	858,094	100%	3.4	$72.58	8.9

Table 92. Smart-E Loan Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[103]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below
2012	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2013	3	2	1	33%	0.0	0.0	0.0	0%	$64,987	$56,389	$8,598	13%
2014	143	82	61	43%	0.3	0.2	0.1	36%	$2,498,925	$1,538,218	$960,707	38%
2015	282	190	92	33%	1.3	1.1	0.2	15%	$8,397,379	$5,960,227	$2,437,152	29%
2016	227	152	75	33%	1.0	0.8	0.2	16%	$6,238,958	$4,733,449	$1,505,510	24%
2017	525	345	180	34%	1.3	0.9	0.4	30%	$10,766,969	$7,571,498	$3,195,472	30%
2018	1,759	1,141	618	35%	3.7	2.9	0.8	23%	$34,310,757	$24,128,898	$10,181,859	30%
Total	**2,939**	**1,912**	**1,027**	**35%**	**7.7**	**6.0**	**1.7**	**22%**	**$62,277,975**	**$43,988,678**	**$18,289,297**	**29%**

Distressed Community Penetration

For a breakdown of Smart-E project volume and investment by census tracts categorized by Distressed Communities – see Table 93. It should be noted that Smart-E is not an income targeted program.

[103] Excludes projects in unknown bands.

Table 93. Smart-E Loan Activity in Distressed Communities by FY Closed

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2012	Yes	0	0%	0.0	0%	$0	0%	1,171,385	33%	$0.00	0.0	447,962	33%		
2012	No	0	0%	0.0	0%	$0	0%	2,400,828	67%	$0.00	0.0	912,222	67%		
2012	Total	0	0%	0.0	0%	$0	0%	3,572,213	100%	$0.00	0.0	1,360,184	100%		
2013	Yes	2	67%	0.0	100%	$56,389	87%	1,124,923	31%	$0.05	0.0	426,564	31%		
2013	No	1	33%	0.0	0%	$8,598	13%	2,458,638	69%	$0.00	0.0	929,285	69%		
2013	Total	3	100%	0.0	100%	$64,987	100%	3,583,561	100%	$0.02	0.0	1,355,849	100%		
2014	Yes	22	15%	0.1	22%	$457,902	18%	1,106,027	31%	$0.41	0.1	416,415	31%		
2014	No	121	85%	0.3	78%	$2,041,023	82%	2,486,026	69%	$0.82	0.1	939,791	69%		
2014	Total	143	100%	0.3	100%	$2,498,925	100%	3,592,053	100%	$0.70	0.1	1,356,206	100%		
2015	Yes	35	12%	0.1	7%	$681,149	8%	1,122,550	31%	$0.61	0.1	423,559	31%		
2015	No	247	88%	1.2	93%	$7,716,230	92%	2,470,672	69%	$3.12	0.5	929,024	69%		
2015	Total	282	100%	1.3	100%	$8,397,379	100%	3,593,222	100%	$2.34	0.4	1,352,583	100%		
2016	Yes	67	30%	0.1	13%	$1,372,345	22%	1,162,653	32%	$1.18	0.1	438,710	32%		
2016	No	160	70%	0.8	87%	$4,866,613	78%	2,425,917	68%	$2.01	0.3	916,003	68%		
2016	Total	227	100%	1.0	100%	$6,238,958	100%	3,588,570	100%	$1.74	0.3	1,354,713	100%		
2017	Yes	118	22%	0.3	19%	$1,975,812	18%	1,162,653	32%	$1.70	0.2	438,710	32%		
2017	No	407	78%	1.0	81%	$8,791,158	82%	2,425,917	68%	$3.62	0.4	916,003	68%		
2017	Total	525	100%	1.3	100%	$10,766,969	100%	3,588,570	100%	$3.00	0.4	1,354,713	100%		
2018	Yes	376	21%	0.4	12%	$5,871,485	17%	1,162,653	32%	$5.05	0.4	438,710	32%		
2018	No	1,384	79%	3.3	88%	$28,525,007	83%	2,425,917	68%	$11.76	1.4	916,003	68%		
2018	Total	1,760	100%	3.7	100%	$34,396,492	100%	3,588,570	100%	$9.59	1.0	1,354,713	100%		

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Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
Total	Yes	620	21%	1.0	13%	$10,415,082	17%	1,162,653	32%	$8.96	0.9	438,710	32%		
Total	No	2,320	79%	6.7	87%	$51,948,628	83%	2,425,917	68%	$21.41	2.8	916,003	68%		
Total	Total	2,940	100%	7.7	100%	$62,363,710	100%	3,588,570	100%	$17.38	2.1	1,354,713	100%		

Societal Impacts

Ratepayers in Connecticut enjoy the societal benefits of the Smart-E Loan. Over the course of its existence, the program has supported the creation of 770 job years, avoided the lifetime emission of 210,903 tons of carbon dioxide, 204,426 pounds of nitrous oxide, 158,376 pounds of sulfur oxide, and 17,782 pounds of particulate matter as illustrated by Tables 94 and 95. The value of the public health impacts of the Smart-E programs estimated to be between $3.3 and $7.4 million as seen in table 96.

Table 94. Smart-E Loan Job Years Supported by FY Closed

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012	-	-	-
2013	0	0	1
2014	18	28	46
2015	58	93	152
2016	47	76	123
2017	48	64	113
2018	146	190	336
Total	**317**	**452**	**770**

Table 95. Smart-E Loan Avoided Emissions by FY Closed

	CO_2 Savings (tons)		NOx Savings (pounds)		SOx Savings (pounds)		PM 2.5 (pounds)	
Fiscal Year	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime
2012	-	-	-	-	-	-	-	-
2013	7	134	10	195	13	251	1	11
2014	492	8,935	591	10,749	621	11,035	42	766
2015	1,402	30,410	1,662	35,961	1,650	35,152	120	2,630
2016	1,134	24,126	1,206	26,035	1,016	21,953	96	2,070
2017	2,166	39,358	2,046	38,126	1,451	27,085	179	3,320
2018	6,120	107,941	5,199	93,361	3,511	62,901	501	8,985
Total	**11,320**	**210,903**	**10,713**	**204,426**	**8,262**	**158,376**	**939**	**17,782**

Table 96. Smart-E Loan Public Health Impact by FY Closed

Fiscal Year	Annual		Lifetime	
	Low	High	Low	High
2012	-	-	-	-
2013	$276	$624	$3,314	$7,490
2014	$13,175	$29,780	$210,801	$476,477
2015	$35,784	$80,882	$644,106	$1,455,878
2016	$23,906	$54,036	$430,315	$972,639
2017	$37,624	$85,041	$564,363	$1,275,617
2018	$95,869	$216,690	$1,438,037	$3,250,350
Total	**$206,635**	**$467,053**	**$3,290,936**	**$7,438,451**

Financial Performance

To date there have been 5 defaults, 2 of which have been charged off by the lenders, with original principal balances totaling $ 83,698 or 0.17% of the portfolio and as of 6/30/2018 there are 27 delinquencies with original principle balances totaling $ 410,078 or 0.92% of the portfolio. To date the secondary loan loss reserve has been used to reimburse one participating lender for one defaulted loan totaling $20,277 or 0.03% of the portfolio.

The household customers that accessed the Smart-E Loan since its launch in 2013 had varying credit scores – see Table 97.

Table 97. Credit Score Ranges of Household Customers Using the Smart-E Loan by FY Closed

	-639		640-679		680-699		700-719		720-739		740+		Unknown		
Fiscal Year Closed	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**Total # Projects**
2012	-	-	-	-	-	-	-	-	-	-			-	-	-
2013		0.0%		0.0%	2	66.7%		0.0%		0.0%	1	33.3%		0.0%	3
2014		0.0%	15	10.5%	10	7.0%	12	8.4%	17	11.9%	89	62.2%		0.0%	143
2015	1	0.4%	22	7.8%	15	5.3%	19	6.7%	26	9.2%	198	70.2%	1	0.4%	282
2016	3	1.3%	14	6.2%	15	6.6%	29	12.8%	19	8.4%	147	64.8%		0.0%	227
2017	14	2.7%	42	8.0%	53	10.1%	49	9.3%	50	9.5%	315	60.0%	2	0.4%	525
2018	47	2.7%	114	6.5%	166	9.4%	198	11.2%	193	11.0%	1,000	56.8%	44	2.5%	1,762
Total	**65**	**2.2%**	**207**	**7.0%**	**261**	**8.9%**	**307**	**10.4%**	**305**	**10.4%**	**1,750**	**59.5%**	**47**	**1.6%**	**2,942**

Of the Smart-E Loans approved and closed with household customers, Table 98 presents the lenders offering the financing products in this program with accompanying data.

Table 98. Smart-E Loan Lenders

Lender	# of Loans	Total Amount Financed	% of Loans	Min Loan Amount	Max Loan Amount	Average Loan Amount	Average Interest Rate	Average Term (months)	Decline Rate
Capital For Change	1,126	$15,240,777	29.41%	$1,319	$42,851	$13,535	2.24	100	23%
CorePlus Federal Credit Union	289	$4,181,252	8.07%	$1,993	$170,707	$14,468	3.93	88	10%
Eastern Savings Bank	313	$7,556,502	14.58%	$1,800	$50,000	$24,142	3.06	111	33%
First National Bank of Suffield	71	$1,341,987	2.59%	$3,778	$45,000	$18,901	2.48	109	7%
Ion Bank	87	$1,058,618	2.04%	$4,000	$25,000	$12,168	3.69	96	20%
Liberty Bank	23	$307,434	0.59%	$4,550	$25,000	$13,367	5.10	85	26%
Mutual Security Credit Union	322	$6,984,349	13.48%	$0	$45,000	$21,691	1.86	113	12%
Nutmeg State Financial Credit Union	527	$9,037,690	18.68%	$2,005	$40,000	$17,149	2.61	102	30%
Patriot Bank	69	$971,897	1.88%	$5,000	$25,000	$14,085	3.60	91	18%
Quinnipiac Bank & Trust	7	$84,056	0.16%	$8,550	$16,556	$12,008	4.85	98	59%
Thomaston Savings Bank	41	$528,531	1.02%	$2,500	$25,000	$12,891	3.24	97	28%
Union Savings Bank	50	$772,819	1.49%	$4,100	$25,000	$15,456	3.15	98	41%
Workers Federal Credit Union	17	$319,459	0.62%	$7,000	$40,000	$18,792	3.08	88	0%
Total	**2,942**	**$48,385,370**	**100.00%**	**$0**	**$170,707**	**$16,446**	**2.66**	**2,942**	**24%**

Marketing

To accelerate the deployment of natural gas conversions in the state, the Smart-E program was launched in 2014 with an Energize Norwich campaign in partnership with Norwich Public Utilities and 2 local lenders. Building on that success, and to accelerate the deployment of residential solar PV through the RSIP and the uptake of the Smart-E Loan financing product, the Connecticut Green Bank implemented “Solarize Connecticut” through the end of 2015. Green Bank Solarize Connecticut programs are town based and designed to use a combination of group purchasing, time-limited offers, and grassroots outreach. Solarize campaign efforts are augmented by local clean energy advocates and volunteers that effectively expedite the process of *going solar* – see Table 88. The Green Bank has also partnered with EnergizeCT and the utility companies and select municipalities to run Energize campaigns focused on insulation, natural gas conversions and high efficiency heating and cooling equipment. The Green Bank launched a co-op marketing program for contractors and lenders in 2015 that helps fulfill its channel partners’ need for high quality co-branded marketing materials, strategic and tactical planning resources, as well as advertising cost-sharing opportunities. The co-op marketing program and the Green Bank’s own digital marketing and earned media initiatives constitute a key driver of volume in FY16 and FY17.

In FY18, the Green Bank launched an aggressive 7-month special offer of 0.99% (an interest rate buy-down) to drive uptake of the Smart-E loan for bundled projects, heat pump technologies and natural gas conversions. This drove significant volume in the first half of the fiscal year and since the offer expired at the end of December 2017 the team has seen sustained volume at level four times greater than when the special offer was launched.

Table 99. Number of Projects, Investment, and Installed Capacity through Solarize Connecticut for the Smart-E Loan

	# of Projects	Total Investment	Installed Capacity (MW)
Solarize	128	$4,929,357	1.1
Not Solarize	702	$25,027,412	6.6
Not Solar	2,019	$30,687,730	0.0
Unknown	93	$1,795,398	0.0
Total	**2,942**	**$62,439,896**	**7.7**
% Solarize	**15%**	**16%**	**15%**

The Green Bank Solarize Connecticut program provided a significant marketing channel and origination catalyst for the Smart-E Loan comprising nearly 10 to 20 percent of the total projects and investment and 27% of the installed capacity.[104]

Table 100. Smart-E Loan Project Channels

Channel	# of Projects	Total Investment	Installed Capacity (MW)
EV	2	$7,757	0.0
Home Performance	354	$5,830,320	0.0
HVAC	1,653	$24,599,133	0.0
Solar	827	$29,885,054	7.7
Unknown	106	$2,117,632	0.0
Total	**2,942**	**$62,439,896**	**7.7**

Table 101. Smart-E Loan Measures

# of Measures	# of Projects
Unknown	97
1	1,572
2	813
3	285
4	85
5	51
6	24
7	10
8	2
9	2
10	1
Total	**2,942**

[104] It should also be noted that Solarize was adapted to support a transition from propane and heating oil to natural gas through a pilot community-based marketing partnership with Norwich Public Utilities and SmartPower through Energize Norwich. Over 100 Smart-E Loans were originated through this pilot demonstrating that community-based marketing approaches could be adapted to support loan origination strategies.

Building on the success of the traditional Smart-E Loan program, the Green Bank gained experience in the automotive lending market by initiating a pilot program to extend the Smart-E Loan brand to cover new and used electric vehicles. Working with three regional credit union lenders, the Green Bank used an interest rate buydown to 0.99% and then 1.99% to save customers an average of $900 on used EVs and $2000 on new EVs. This allowed the Green Bank to test the effectiveness of a vehicle financing offer with an IRB and inform the design of future scalable programs, with an aim of also keeping more pre-owned EVs in operation in the state.

Table 102. Smart-EV Key Metrics

# of IRBs funded	32
Average IRB Cost	$1,916
Average Vehicle Cost	$42,716
Average Loan Amount	$31,282
Average Term (months)	67
Average Year	2017
Total IRB amount paid	$61,317
Total Principal Amount	$1,366,922

Case 5 – Low Income Solar Lease and Energy-Efficiency Energy Savings Agreement (ESA)

Description

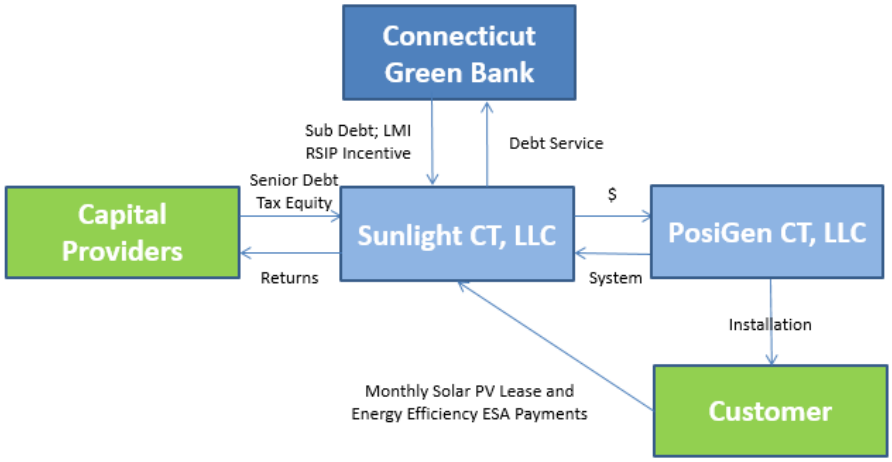
Through the solar developer PosiGen, a respondent to the Connecticut Green Bank's 2015 RFP soliciting solar financing solutions to address underserved markets, the Green Bank supports solar and energy efficiency deployment targeted at the state's low- to moderate-income (LMI) population. In Connecticut, PosiGen develops and originates these solar projects as project sponsor, utilizing tax equity from multiple investors, senior debt capital from two Connecticut lenders (Enhanced Capital and Stonehenge Capital), and subordinated debt from the Green Bank. The Green Bank supplied an initial debt advance of $5,000,000 (and recently another $3.5 million), which has since been subordinated to an additional $8,500,000 advanced by Enhanced and Stonehenge to leverage over $46 million in value for solar projects targeting LMI homeowners. The RSIP program's tiered LMI performance-based incentive (PBI) provides PosiGen a higher incentive for customers demonstrating these income requirements.

Through the partnership with PosiGen, the Connecticut Green Bank lowers the financial barriers to Connecticut LMI residential customers seeking to install solar PV with no up-front investment and energy efficiency measures. PosiGen's model also includes an alternative underwriting approach that does not rely on credit scores and a community-based marketing approach – two key ingredients for targeting this underserved market segment. Capital provided to PosiGen to be able to offer consumers a solar PV lease and energy efficiency "Energy Savings Agreement" is repaid to the Connecticut Green Bank, the tax equity investor and the lenders through consumer lease repayments. This contrasts with traditional energy program subsidies targeted to LMI homeowners, which are typically in the form of grants only.

The financial structure of the Low Income Solar Lease product includes origination, servicing, and financing features[105] in combination with the support of the Connecticut Green Bank.

[105] Origination, servicing and financing managed by PosiGen.

Figure 10. Low Income Solar Lease Legal Structure and Flows of Capital



Connecticut represented the first expansion for PosiGen outside of its initial market in Louisiana, where starting in 2011, it paired solar leasing and energy efficiency services to maximize savings for LMI customers. Given the strategic emphasis the Green Bank has placed on driving investment for lower income homeowners, the organization developed a flexible funding structure to rapidly bring PosiGen to market. The concept started with the Green Bank providing "anchor capital" for PosiGen in the form of low-cost debt, together with PosiGen's own resources and tax equity from U.S. Bank (U.S. Bank was already an investor in the Connecticut market through the Green Bank's CT Solar Lease). Documentation was structured to facilitate funding by a senior lender, providing for the subordination of the Green Bank's loans once this senior lender could be secured. With initial capital requirements underwritten by the Green Bank, PosiGen had the financial backing and capital flexibility it needed to confidently secure its base of operation in Bridgeport, hire management and local staff, pursue local partnerships with existing energy efficiency and solar PV contractors, and resolve supply chain issues. By using its balance sheet as an initial source of low-cost debt capital, the Green Bank made it possible for a developer that had proven its business model in another market to bring its innovative approach to Connecticut to build investment in solar and energy efficiency for homeowners of more modest means. The investment had the intended impact: PosiGen could establish operations and get a market started, and its rapid success in Connecticut enabled the Green Bank and PosiGen to secure senior lenders and new sources of tax equity to enable operations to expand to several cities throughout Connecticut.

Key Performance Indicators

The Key Performance Indicators for the Low-Income Solar Lease's closed projects are reflected in Tables 103 through 105. These illustrate the volume of projects by year, investment, generation capacity installed, and the amount of energy saved and/or produced.

Table 103. Low Income Solar Lease Project Types and Investment by FY Closed

Fiscal Year Closed	EE[106]	RE	RE/EE	# Projects	# Project Units	Total Investment	Green Bank Investment[107]	Private Investment	Leverage Ratio
2012	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-
2015	-	4		4	4	$109,380	$36,000	$73,380	3.0
2016	-	177	159	336	336	$9,617,700	$3,024,000	$6,593,700	3.2
2017	-	235	428	663	663	$18,173,372	$5,967,000	$12,206,372	3.0
2018		167	445	612	612	$16,634,184	$5,508,000	$11,126,184	3.0
Total	**-**	**583**	**1,032**	**1,615**	**1,615**	**$44,534,636**	**$14,535,000**	**$29,999,636**	**3.1**

Table 104. Low Income Solar Lease Project Capacity, Generation and Savings by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)[108]	Lifetime Saved / Produced (MMBtu)	Annual Cost Savings	Lifetime Cost Savings
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	25.0	28,470	712	150	3,761	$4,795	$119,880
2016	2,146.5	3,065,433	76,636	14,938	373,453	$402,797	$10,069,920
2017	4,061.6	6,296,970	157,424	30,323	758,076	$794,804	$19,870,110
2018	3,895.8	6,392,294	159,807	30,991	774,763	$733,666	$18,341,640
Total	**10,128.9**	**15,783,168**	**394,579**	**76,402**	**1,910,054**	**$1,936,062**	**$48,401,550**

[106] All projects that receive an RSIP incentive are required to do an energy audit/assessment.
[107] Includes incentives, interest rate buydowns and loan loss reserves.
[108] Includes only the MMBtus for the HES audit. MMTBtus for other ECMs are not included.

Table 105. Low Income Solar Lease Project Averages by FY Closed

FY Closed	Average Total Investment	Average Amount Financed	Average Installed Capacity (kW)	Average Annual Saved / Produced (MMBtu)	Average Finance Term (months)	Average Lease Price per Month	Average ESA Price per month[109]
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-
2015	$27,345	$27,345	6.3	38	$27,345	$79	$10
2016	$28,624	$28,624	6.4	44	$28,624	$80	$10
2017	$27,411	$27,411	6.1	46	$27,411	$80	$10
2018	$27,180	$27,180	6.4	51	$27,180	$88	$10
Total	**$27,576**	**$27,576**	**6.3**	**47**	**$27,576**	$83	**$10**

On average, 60% of all PosiGen leases sold yield an installed, energized system.

Of the low-income households that installed solar PV, 68% of them also participated in the energy efficiency ESA, resulting in more comprehensive energy efficiency measures being included in the project.

[109] Posigen's ESA provides energy efficiency measures valued at over $2000 to lessees for between $10-$15 a month.

Area Median Income Band Penetration

For a breakdown of PosiGen Solar for All volume and investment by census tracts categorized by Area Median Income bands – see Table 106. As an income-targeted program, this table illustrates the degree to which the goal of serving consumers in lower income communities is being met.

Table 106. Low Income Solar Lease Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands by FY Closed[110]

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2012	<60%	0	0%	0.0	0%	$0	0%	61,168	7%	0.0	$0.00	0.0
2012	60%-80%	0	0%	0.0	0%	$0	0%	101,640	12%	0.0	$0.00	0.0
2012	80%-100%	0	0%	0.0	0%	$0	0%	151,346	17%	0.0	$0.00	0.0
2012	100%-120%	0	0%	0.0	0%	$0	0%	216,988	25%	0.0	$0.00	0.0
2012	>120%	0	0%	0.0	0%	$0	0%	350,196	40%	0.0	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	881,338	100%	0.0	$0.00	0.0
2013	<60%	0	0%	0.0	0%	$0	0%	59,494	7%	0.0	$0.00	0.0
2013	60%-80%	0	0%	0.0	0%	$0	0%	109,189	12%	0.0	$0.00	0.0
2013	80%-100%	0	0%	0.0	0%	$0	0%	150,603	17%	0.0	$0.00	0.0
2013	100%-120%	0	0%	0.0	0%	$0	0%	203,157	23%	0.0	$0.00	0.0
2013	>120%	0	0%	0.0	0%	$0	0%	351,633	40%	0.0	$0.00	0.0
2013	Total	0	0%	0.0	0%	$0	0%	874,076	100%	0.0	$0.00	0.0
2014	<60%	0	0%	0.0	0%	$0	0%	57,673	7%	0.0	$0.00	0.0
2014	60%-80%	0	0%	0.0	0%	$0	0%	103,934	12%	0.0	$0.00	0.0
2014	80%-100%	0	0%	0.0	0%	$0	0%	149,038	17%	0.0	$0.00	0.0
2014	100%-120%	0	0%	0.0	0%	$0	0%	209,561	24%	0.0	$0.00	0.0
2014	>120%	0	0%	0.0	0%	$0	0%	348,270	40%	0.0	$0.00	0.0

[110] Excludes projects in unknown bands.

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Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2014	Total	0	0%	0.0	0%	$0	0%	868,476	100%	0.0	$0.00	0.0
2015	<60%	3	75%	0.0	76%	$82,380	75%	64,361	7%	0.0	$1.28	0.3
2015	60%-80%	0	0%	0.0	0%	$0	0%	96,305	11%	0.0	$0.00	0.0
2015	80%-100%	0	0%	0.0	0%	$0	0%	164,873	19%	0.0	$0.00	0.0
2015	100%-120%	0	0%	0.0	0%	$0	0%	184,613	21%	0.0	$0.00	0.0
2015	>120%	1	25%	0.0	24%	$27,000	25%	352,621	41%	0.0	$0.08	0.0
2015	Total	4	100%	0.0	100%	$109,380	100%	862,773	100%	0.0	$0.13	0.0
2016	<60%	131	39%	0.8	38%	$3,679,011	38%	60,769	7%	2.2	$60.54	13.4
2016	60%-80%	71	21%	0.5	21%	$2,038,834	21%	99,220	12%	0.7	$20.55	4.6
2016	80%-100%	58	17%	0.4	18%	$1,720,580	18%	165,331	19%	0.4	$10.41	2.3
2016	100%-120%	35	10%	0.2	10%	$963,442	10%	187,463	22%	0.2	$5.14	1.2
2016	>120%	41	12%	0.3	13%	$1,215,832	13%	345,311	40%	0.1	$3.52	0.8
2016	Total	336	100%	2.1	100%	$9,617,700	100%	858,094	100%	0.4	$11.21	2.5
2017	<60%	256	39%	1.5	37%	$6,779,223	37%	60,769	7%	4.2	$111.56	24.6
2017	60%-80%	144	22%	0.9	21%	$3,864,241	21%	99,220	12%	1.5	$38.95	8.7
2017	80%-100%	115	17%	0.7	18%	$3,229,883	18%	165,331	19%	0.7	$19.54	4.4
2017	100%-120%	60	9%	0.4	10%	$1,755,087	10%	187,463	22%	0.3	$9.36	2.1
2017	>120%	88	13%	0.6	14%	$2,544,938	14%	345,311	40%	0.3	$7.37	1.7
2017	Total	663	100%	4.1	100%	$18,173,372	100%	858,094	100%	0.8	$21.18	4.7
2018	<60%	225	37%	1.4	35%	$5,897,318	35%	60,769	7%	3.7	$97.04	22.6
2018	60%-80%	143	23%	0.9	23%	$3,801,900	23%	99,220	12%	1.4	$38.32	9.0
2018	80%-100%	109	18%	0.7	18%	$3,060,198	18%	165,331	19%	0.7	$18.51	4.3
2018	100%-120%	65	11%	0.4	11%	$1,853,653	11%	187,463	22%	0.3	$9.89	2.3
2018	>120%	70	11%	0.5	12%	$2,021,115	12%	345,311	40%	0.2	$5.85	1.4

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2018	Total	612	100%	3.9	100%	$16,634,184	100%	858,094	100%	0.7	$19.39	4.5
Total	<60%	615	38%	3.7	37%	$16,437,932	37%	60,769	7%	10.1	$270.50	61.0
Total	60%-80%	358	22%	2.2	22%	$9,704,975	22%	99,220	12%	3.6	$97.81	22.3
Total	80%-100%	282	17%	1.8	18%	$8,010,661	18%	165,331	19%	1.7	$48.45	11.0
Total	100%-120%	160	10%	1.0	10%	$4,572,183	10%	187,463	22%	0.9	$24.39	5.6
Total	>120%	200	12%	1.3	13%	$5,808,885	13%	345,311	40%	0.6	$16.82	3.9
Total	Total	1,615	100%	10.1	100%	$44,534,636	100%	858,094	100%	1.9	$51.90	11.8

Table 107. Low Income Solar Lease Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[111]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below
2012	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2013	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2014	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2015	4	1	3	75%	0.0	0.0	0.0	76%	$109,380	$27,000	$82,380	75%
2016	336	76	260	77%	2.1	0.5	1.7	77%	$9,617,700	$2,179,275	$7,438,425	77%
2017	663	148	515	78%	4.1	1.0	3.1	76%	$18,173,372	$4,300,025	$13,873,347	76%
2018	612	135	477	78%	3.9	0.9	3.0	77%	$16,634,184	$3,874,768	$12,759,416	77%
Total	**1,615**	**360**	**1,255**	**78%**	**10.1**	**2.4**	**7.7**	**76%**	**$44,534,636**	**$10,381,068**	**$34,153,568**	**77%**

[111] Excludes projects in unknown bands.

The Green Bank has made great progress in its penetration of underserved markets and the low-income lease and ESA through Posigen has been key to reaching these markets.

Distressed Community Penetration

For a breakdown of Low-Income Solar Lease project volume and investment by census tracts categorized by Distressed Communities – see Table 108. As an income-targeted program, this table illustrates the degree to which the goal of serving consumers in lower income communities is being met.

Table 108. Low Income Solar Lease Activity in Distressed Communities by FY Closed

Fiscal Year Closed	Distres-sed	# of Project Units	% Project Distri-bution	Installed Capacity (MW)	% MW Distri-bution	Total Investment	% Invest-ment Distri-bution	Total Population	% Population Distribution	Total Investment / Population	Watts / Popul ation	Total Households	% Total House-hold Distri-bution	Total Investment / Total Household	Watts / Total Household
2012	Yes	0	0%	0.0	0%	$0	0%	1,171,385	33%	$0.00	0.0	447,962	33%	$0.00	0.0
2012	No	0	0%	0.0	0%	$0	0%	2,400,828	67%	$0.00	0.0	912,222	67%	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	3,572,213	100%	$0.00	0.0	1,360,184	100%	$0.00	0.0
2013	Yes	0	0%	0.0	0%	$0	0%	1,124,923	31%	$0.00	0.0	426,564	31%	$0.00	0.0
2013	No	0	0%	0.0	0%	$0	0%	2,458,638	69%	$0.00	0.0	929,285	69%	$0.00	0.0
2013	Total	0	0%	0.0	0%	$0	0%	3,583,561	100%	$0.00	0.0	1,355,849	100%	$0.00	0.0
2014	Yes	0	0%	0.0	0%	$0	0%	1,106,027	31%	$0.00	0.0	416,415	31%	$0.00	0.0
2014	No	0	0%	0.0	0%	$0	0%	2,486,026	69%	$0.00	0.0	939,791	69%	$0.00	0.0
2014	Total	0	0%	0.0	0%	$0	0%	3,592,053	100%	$0.00	0.0	1,356,206	100%	$0.00	0.0
2015	Yes	2	50%	0.0	44%	$49,500	45%	1,122,550	31%	$0.04	0.0	423,559	31%	$0.12	0.0
2015	No	2	50%	0.0	56%	$59,880	55%	2,470,672	69%	$0.02	0.0	929,024	69%	$0.06	0.0
2015	Total	4	100%	0.0	100%	$109,380	100%	3,593,222	100%	$0.03	0.0	1,352,583	100%	$0.08	0.0
2016	Yes	197	59%	1.2	58%	$5,608,263	58%	1,162,653	32%	$4.82	1.1	438,710	32%	$12.78	2.8
2016	No	139	41%	0.9	42%	$4,009,437	42%	2,425,917	68%	$1.65	0.4	916,003	68%	$4.38	1.0
2016	Total	336	100%	2.1	100%	$9,617,700	100%	3,588,570	100%	$2.68	0.6	1,354,713	100%	$7.10	1.6

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Fiscal Year Closed	Distres-sed	# of Project Units	% Project Distri-bution	Installed Capacity (MW)	% MW Distri-bution	Total Investment	% Invest-ment Distri-bution	Total Population	% Population Distribution	Total Investment / Population	Watts / Popul ation	Total Households	% Total House-hold Distri-bution	Total Investment / Total Household	Watts / Total Household
2017	Yes	406	61%	2.4	60%	$10,890,774	60%	1,162,653	32%	$9.37	2.1	438,710	32%	$24.82	5.5
2017	No	257	39%	1.6	40%	$7,282,598	40%	2,425,917	68%	$3.00	0.7	916,003	68%	$7.95	1.8
2017	Total	663	100%	4.1	100%	$18,173,372	100%	3,588,570	100%	$5.06	1.1	1,354,713	100%	$13.41	3.0
2018	Yes	379	62%	2.4	61%	$10,203,475	61%	1,162,653	32%	$8.78	2.0	438,710	32%	$23.26	5.4
2018	No	233	38%	1.5	39%	$6,430,709	39%	2,425,917	68%	$2.65	0.6	916,003	68%	$7.02	1.7
2018	Total	612	100%	3.9	100%	$16,634,184	100%	3,588,570	100%	$4.64	1.1	1,354,713	100%	$12.28	2.9
Total	Yes	984	61%	6.1	60%	$26,752,011	60%	1,162,653	32%	$23.01	5.2	438,710	32%	$60.98	13.8
Total	No	631	39%	4.1	40%	$17,782,625	40%	2,425,917	68%	$7.33	1.7	916,003	68%	$19.41	4.4
Total	Total	1,615	100%	10.1	100%	$44,534,636	100%	3,588,570	100%	$12.41	2.8	1,354,713	100%	$32.87	7.5

Societal Impacts

Ratepayers in Connecticut are starting to feel the impact of the societal benefits of the Green Bank's Low-Income Solar Lease. Over the course of its existence, the program has supported the creation of 297 job years, avoided the lifetime emission of 217,087 tons of carbon dioxide, 204,293 pounds of nitrous oxide, 140,316 pounds of sulfur oxide, and 18,830 pounds of particulate matter as illustrated by Tables 109 and 110. The cleaner air stemming from the Green Bank's partnership with Posigen can be estimated between $3.7 and $8.5 million as seen in table 111.

Table 109. Low Income Solar Lease Job Years Supported by FY Closed

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012	-	-	-
2013	-	-	-
2014	-	-	-
2015	0	1	1
2016	35	57	92
2017	46	58	104
2018	44	55	100
Total	**126**	**171**	**297**

Table 110. Low Income Solar Lease Avoided Emissions by FY Closed

	CO_2 Savings (tons)		NOx Savings (pounds)		SOx Savings (pounds)		PM 2.5 (pounds)	
Fiscal Year	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime
2012	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-
2015	16	400	16	410	12	292	1	35
2016	1,718	42,958	1,741	43,519	1,238	30,952	151	3,767
2017	3,501	87,537	3,439	85,968	2,409	60,236	306	7,641
2018	3,448	86,192	2,976	74,396	1,953	48,836	295	7,386
Total	**8,683**	**217,087**	**8,172**	**204,293**	**5,613**	**140,316**	**753**	**18,830**

Table 111. Low Income Solar Lease Public Health Impact by FY Closed

Fiscal Year	Annual		Lifetime	
	Low	High	Low	High
2012	-	-	-	-
2013	-	-	-	-
2014	-	-	-	-
2015	$279	$632	$6,986	$15,790
2016	$31,983	$72,291	$799,584	$1,807,282
2017	$63,122	$142,672	$1,578,039	$3,566,805
2018	$54,560	$123,320	$1,364,003	$3,083,007
Total	**$149,944**	**$338,915**	**$3,748,612**	**$8,472,884**

Financial Performance

To date there has been one default with original principal balance of $15,600 or 0.08% of the portfolio and as of 6/30/2018[112] there are 49 delinquencies totaling $1,331,821.91 of original principal balance[113] or 4.1% of the portfolio, within expectations for a low-to-moderate income targeted product using an alternative underwriting approach.

Marketing

To build the pipeline of projects for the lease, Connecticut Green Bank supports PosiGen's community-based marketing campaigns, leveraging the institution's market analysis and local experience and connections. The Green Bank also co-brands the program so partnering community organizations and consumers know there is governmental involvement, especially critical given the targeting of underserved communities and homeowners. This includes assisting with PosiGen's outreach efforts through its Solar for All campaigns which are modeled after Green Bank Solarize campaigns.

[112] June 30, 2018 loan servicing report.

[113] Based on average lease price in 201-06-03 Residential KPI report

Case 6 – Multifamily Programs

Description

Defined as buildings with 5 or more units, the Green Bank provides a suite of financing options that support property owners to assess, design, fund, and monitor high impact green energy upgrades for multifamily properties. The Green Bank encourages owners to take a holistic approach to their buildings by implementing energy upgrades that will deliver a high return on investment over the long term through energy and operating cost savings, increased property values, and improvement of resident health, safety and living environment. The organization partners with building owners to finance a project design approach that is both technology and fuel agnostic – whereby owners identify the combination of renewable energy and energy efficiency measures/technology approaches that will deliver the most benefits and highest impact. This holistic approach and focus on deeper efficiency measures is particularly important in Connecticut due to the state's old and aging housing stock need for significant capital improvements and health and safety remediation, as well as a state budget crisis that impacts the housing sector. We are catalyzing holistic projects that reap the benefits of significant energy and operating cost savings, which can be used to finance other capital improvements like full roof replacements and remediation of mold, asbestos, lead, etc.

The Green Bank programs primarily target the low- and moderate-income market in Connecticut, for all ownership types, including private and non-profit owned apartments, condominiums, cooperatives, and state and federally funded affordable housing developments, including senior and assisted living facilities.

Pre-development resources

In a traditionally difficult sector to address, multifamily projects have a significant need for pre-development financing, trusted technical support, and streamlined access to funding programs. In 2015, the Green Bank developed pre-development energy loan programs to support property owners in identifying high-quality technical assistance providers, and fund the work needed to scope and secure financing for deeper, cost effective energy upgrades. There are two versions available – a high-touch version, the "Sherpa Loan" program, and an owner-managed version, the "Navigator Loan" program. Eligible assessment and design services funded under the pre-development loans include energy and water efficiency, efficient fuel conversion, renewable energy systems, energy storage and EV fueling stations, qualified health and safety measures, and performance benchmarking.

The Green Bank is working to change the model of pre-development and technical assistance from one that is primarily grant-funded in the low- and moderate-income housing space to one that is loan driven. Both loan programs include loan forgiveness provisions that allow owners the opportunity to have deferred and accrued costs forgiven if there are real physical and/or financial reasons a given project is unable to proceed to implementation (including, but not limited to, negative return-on-investment from improvements, prohibitive health and safety burden, etc.).

This program is supported by a revolving loan fund for loans of 0.0% to 2.99% and up to two-year terms. The affordable multifamily version of this program is housed at the Housing

Development Fund, a local CDFI, and part of a $5 million program-related investment from the MacArthur Foundation is used to support the program.

- ***Sherpa Pre-Development Energy Loan***[114] funds a low-risk, one-stop solution for owners to analyze, design, and acquire funding for energy upgrades through a process managed by the Green Bank's designated technical service provider, the non-profit New Ecology, Inc.

- ***Navigator Pre-Development Energy Loan***[115] funds pre-development costs for building owners who prefer to select and manage the energy professionals needed to scope and design their project.

- ***BenchmarkCT***[116] is a performance assessment resource that provides one year of free energy benchmarking to measure the performance of a property or portfolio of properties against comparable buildings. The program is jointly funded by Green Bank and the Connecticut Housing Finance Authority. (This pilot program ended on June 30, 2018 and will no longer be offered as a free service in FY'19.)

Term Financing Solutions

- The Green Bank offers the following term financing options for project implementation[117]. ***Low Income Multifamily Energy (LIME) Loan***[118] funds energy improvement projects for low- and moderate-income properties (where at least 60% of units serve renters at 80% or lower of Area Median Income) and is geared towards mid-cycle energy improvements. The LIME Loan program is delivered through a partnership with Capital for Change, a local CDFI (formerly known as Connecticut Housing Investment Fund) and provides unsecured loans that cover 100% of project costs, require no money down, and are repaid from energy cost savings for terms up to 20 years. Projected energy savings are used to cover the debt service of the loan. The Green Bank supports LIME with a $325,000 loan loss reserve and provided $3.5 million to capitalize the initial $5 million loan fund.

- ***Solar-only***[119] financing allows owners to go solar and lock in lower long-term electricity rates with no upfront cost and without the risk or hassle of purchasing and maintaining a system. Solar financing is available for multifamily properties through the Green Bank's solar lease facility (both leases and power purchase agreements are supported). See the Case 2 – Solar Lease for more information. Of particular note is the Multifamily Program's partnership with CHFA and their State Sponsored Housing Portfolio, a Solarize-style group

[114] Sherpa Pre-Development Loan: https://www.ctgreenbank.com/programs/multifamily/sherpa/
[115] Navigator Pre-Development Energy Loan: https://www.ctgreenbank.com/programs/multifamily/navigator/
[116] BenchmarkCT: http://www.wegowise.com/benchmarkct
[117] Owners are also encouraged to seek other sources of capital if they can be secured under more favorable terms than those offered by the Green Bank.
[118] Low Income Multifamily Energy (LIME) Loan: https://ctgreenbank.com/programs/multifamily/lime/
[119] Solar Power Purchase Agreement: https://ctgreenbank.com/programs/multifamily/solarppa/

purchasing model to increase deployment and drive down aggregate solar PV costs on housing authorities.

- ***Commercial Property Assessed Clean Energy***[120] (C-PACE) funds 100% of project costs with no money down. C-PACE loans are for a term of up to 20 years, and are secured by using a benefit assessment on the borrower's property tax bill. The program serves market rate as well as affordable multifamily properties; however, to-date, given difficulties acquiring lender consent, multifamily C-PACE financing has been limited. See Case 1 – C-PACE for more information.

- ***Catalyst Financing***[121] is available for gap and health and safety financing to help spur implementation of energy improvements if adequate funds for merited projects cannot be secured from the programs here or other sources. The program is funded primarily by the MacArthur Foundation's $5 million program-related investment housed at the Housing Development Fund.

- ***EnergizeCT Health & Safety Revolving Loan Fund***[122] funds health and safety improvements necessary to allow subsequent energy improvements in existing properties. The program is funded by $1.5 million from DEEP and is available as low-interest loans and limited grants. In FY'18 these funds were made available through an RFP process. In FY'19 they are being made available on a rolling application basis and for fixed rate financing; grants are no longer available.

Key Performance Indicators

The Key Performance Indicators for Multifamily programs closed activity are reflected in Tables 112 through 114. These illustrate the volume of projects by year, investment, generation capacity installed, and the amount of energy saved and/or produced. It also breaks down the volume of projects by energy efficiency, renewable generation, or both.

Table 112. Multifamily Project Types and Investment by FY Closed

Fiscal Year Closed	EE	RE	RE/EE	Other	# Projects	# Project Units	Amount Financed	Total Investment)	Green Bank Investment[123]	Private Investment	Leverage Ratio
2012	-	-	-		-	-	-	-	-	-	-
2013	-	-	-		-	-	-	-	-	-	-
2014	1				1	120	$250,000	$428,739	$8,739	$420,000	49.1
2015	3	3			6	408	$5,111,454	$5,843,311	$3,607,557	$2,235,755	1.6
2016	15	16	1		32	1,794	$17,135,516	$17,932,937	$1,562,317	$16,370,620	11.5
2017	8	7	1		16	1,388	$17,644,350	$21,531,118	$441,110	$21,090,008	48.8
2018	7	2	1	8	18	1,695	$26,704,713	$26,882,701	$158,914	$26,723,787	169.2
Total	**34**	**28**	**3**	**8**	**73**	**5,405**	**$66,846,034**	**$72,618,808**	**$5,778,638**	**$66,840,170**	**12.6**

[120] Commercial Property Assessed Clean Energy: http://www.CPACE.com/
[121] Catalyst Financing: http://ctgreenbank.com/programs/multifamily/catalyst-fund/
[122] https://www.ctgreenbank.com/wp-content/uploads/2018/06/RFP-EnergizeCT-Health-and-Safety-Revolving-Loan-Fund-6-8-18.pdf
[123] Includes incentives, interest rate buydowns and loan loss reserves.

Table 113. Multifamily Project Capacity, Generation and Savings by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)	Annual Cost Savings
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	0.0	17,902	215	61	733	$69,534
2015	914.0	3,996,617	98,183	13,637	335,001	$243,673
2016	1,429.8	2,290,090	47,581	7,815	162,354	$547,194
2017	972.8	1,275,521	29,708	4,352	101,366	$370,090
2018	135.2	1,475,076	19,702	5,034	67,241	$262,666
Total	**3,451.9**	**9,055,207**	**195,389**	**30,899**	**666,696**	**$1,493,157**

Table 114. Multifamily Project Averages by FY Closed

Fiscal Year Closed	Average Total Investment	Average Amount Financed	Average Amount Financed per Unit	Average Installed Capacity (kW)	Average Annual Saved / Produced (MMBtu)	Average Finance Term (months)	Average Finance Rate
2012	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-
2014	$428,739	$250,000	$2,083	0.0	61	9	6
2015	$973,885	$851,909	$12,528	152.3	2,273	25	4.70
2016	$560,404	$535,485	$9,552	44.7	244	13	2.04
2017	$1,345,695	$1,102,772	$12,712	60.8	272	11	3.38
2018	$1,493,483	$1,483,595	$15,755	7.5	280	20	2.20
Total	**$994,778**	**$915,699**	**$12,367**	**47.3**	**423**	**15**	**2.65**

As the Green Bank's Multifamily programs are partially income-targeted, Table 115 shows a breakdown of projects completed in a year by property type and reflects the number of units impacted.

Table 115. Multifamily Projects by Low to Moderate Income (LMI) or Market Rate Property by FY Closed

Fiscal Year Closed	Class	Product	# of Projects	# Units
2014	Affordable	Term	1	120
2014 Total			1	120
2015	Affordable	Term	5	326
	Market Rate	Term	1	82
2015 Total			6	408
2016	Affordable	Term	26	1,447
		Pre-Dev	5	156
	Market Rate	Term	1	191
2016 Total			32	1,794
2017	Affordable	Term	12	1,153
		Pre-Dev	3	135
	Market Rate	Pre-Dev	1	100
2017 Total			16	1,388
2018	Affordable	Term	10	515
		Pre-Dev	7	1,174
	Market Rate	Term	1	6
2018 Total			18	1,695
Total	**Affordable**	**Term**	**54**	**3,561**
Total		**Pre-Dev**	**15**	**1,465**
Total	**Market Rate**	**Term**	**3**	**279**
Total		**Pre-Dev**	**1**	**100**
Grand Total			**73**	**5,405**

Area Median Income Band Penetration

For a breakdown of Multifamily volume and investment by census tracts categorized by Area Median Income bands – see Table 116. As a program predominantly focused on properties that serve low-to-moderate income residents, this table doesn't reflect the degree to which the goal of serving lower income residents is being met. The program is equally focused on affordable housing properties located in more affluent communities and census tracts that are housing families of lower incomes as it is on affordable housing properties in lower income census tracts.

Table 116. Multifamily Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands by FY Closed[124]

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner/Rental Occupied 5+ Unit Households	% Owner/Rental Occupied 5+ Unit Household Distribution	Project Units / 1,000 Owner/Rental Occupied 5+ Unit Households	Total Investment / Owner/Rental Occupied 5+ Unit Household	Watts / Owner/Rental Occupied 5+ Unit Household
2012	<60%	0	0%	0.0	0%	$0	0%	70,561	35%	0.0	$0.00	0.0
2012	60%-80%	0	0%	0.0	0%	$0	0%	43,788	22%	0.0	$0.00	0.0
2012	80%-100%	0	0%	0.0	0%	$0	0%	39,234	20%	0.0	$0.00	0.0
2012	100%-120%	0	0%	0.0	0%	$0	0%	27,834	14%	0.0	$0.00	0.0
2012	>120%	0	0%	0.0	0%	$0	0%	19,133	10%	0.0	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	200,550	100%	0.0	$0.00	0.0
2013	<60%	0	0%	0.0	0%	$0	0%	68,381	35%	0.0	$0.00	0.0
2013	60%-80%	0	0%	0.0	0%	$0	0%	45,202	23%	0.0	$0.00	0.0
2013	80%-100%	0	0%	0.0	0%	$0	0%	39,451	20%	0.0	$0.00	0.0
2013	100%-120%	0	0%	0.0	0%	$0	0%	25,294	13%	0.0	$0.00	0.0
2013	>120%	0	0%	0.0	0%	$0	0%	19,303	10%	0.0	$0.00	0.0
2013	Total	0	0%	0.0	0%	$0	0%	197,631	100%	0.0	$0.00	0.0
2014	<60%	0	0%	0.0	0%	$0	0%	68,722	35%	0.0	$0.00	0.0
2014	60%-80%	0	0%	0.0	0%	$0	0%	44,830	23%	0.0	$0.00	0.0
2014	80%-100%	120	100%	0.0	0%	$428,739	100%	36,752	18%	3.3	$11.67	0.0
2014	100%-120%	0	0%	0.0	0%	$0	0%	28,263	14%	0.0	$0.00	0.0

[124] Excludes projects in unknown bands.

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Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner/Rental Occupied 5+ Unit Households	% Owner/Rental Occupied 5+ Unit Household Distribution	Project Units / 1,000 Owner/Rental Occupied 5+ Unit Households	Total Investment / Owner/Rental Occupied 5+ Unit Household	Watts / Owner/Rental Occupied 5+ Unit Household
2014	>120%	0	0%	0.0	0%	$0	0%	20,384	10%	0.0	$0.00	0.0
2014	Total	120	100%	0.0	0%	$428,739	100%	198,951	100%	0.6	$2.15	0.0
2015	<60%	16	4%	0.0	0%	$33,234	1%	84,158	37%	0.2	$0.39	0.0
2015	60%-80%	41	10%	0.0	0%	$445,000	8%	44,668	19%	0.9	$9.96	0.0
2015	80%-100%	113	28%	0.0	0%	$540,000	9%	53,494	23%	2.1	$10.09	0.0
2015	100%-120%	16	4%	0.0	2%	$58,782	1%	24,388	11%	0.7	$2.41	0.6
2015	>120%	222	54%	0.9	98%	$4,766,296	82%	23,491	10%	9.5	$202.90	38.3
2015	Total	408	100%	0.9	100%	$5,843,311	100%	230,199	100%	1.8	$25.38	4.0
2016	<60%	270	17%	0.1	7%	$3,640,862	21%	86,225	37%	3.1	$42.23	0.9
2016	60%-80%	258	16%	0.1	12%	$1,868,113	11%	45,398	19%	5.7	$41.15	3.0
2016	80%-100%	348	22%	0.4	33%	$6,182,098	36%	49,125	21%	7.1	$125.84	7.8
2016	100%-120%	642	40%	0.5	45%	$5,179,956	30%	30,753	13%	20.9	$168.44	16.9
2016	>120%	84	5%	0.0	4%	$177,796	1%	22,618	10%	3.7	$7.86	2.0
2016	Total	1,602	100%	1.2	100%	$17,048,825	100%	234,119	100%	6.8	$72.82	5.0
2017	<60%	489	38%	0.3	31%	$12,033,747	60%	86,225	37%	5.7	$139.56	3.5
2017	60%-80%	314	24%	0.2	20%	$3,611,545	18%	45,398	19%	6.9	$79.55	4.4
2017	80%-100%	366	29%	0.0	4%	$621,150	3%	49,125	21%	7.5	$12.64	0.9
2017	100%-120%	81	6%	0.3	26%	$3,321,208	16%	30,753	13%	2.6	$108.00	8.2
2017	>120%	32	2%	0.2	18%	$622,183	3%	22,618	10%	1.4	$27.51	7.7
2017	Total	1,282	100%	1.0	100%	$20,209,833	100%	234,119	100%	5.5	$86.32	4.2
2018	<60%	1,609	95%	0.0	27%	$26,453,007	98%	86,225	37%	18.7	$306.79	0.4
2018	60%-80%	32	2%	0.0	30%	$170,000	1%	45,398	19%	0.7	$3.74	0.9
2018	80%-100%	30	2%	0.0	0%	$101,694	0%	49,125	21%	0.6	$2.07	0.0
2018	100%-120%	0	0%	0.0	0%	$0	0%	30,753	13%	0.0	$0.00	0.0

CONNECTICUT GREEN BANK
5. PROGRAMS – MULTIFAMILY PROGRAMS

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner/Rental Occupied 5+ Unit Households	% Owner/Rental Occupied 5+ Unit Household Distribution	Project Units / 1,000 Owner/Rental Occupied 5+ Unit Households	Total Investment / Owner/Rental Occupied 5+ Unit Household	Watts / Owner/Rental Occupied 5+ Unit Household
2018	>120%	24	1%	0.1	43%	$158,000	1%	22,618	10%	1.1	$6.99	2.6
2018	Total	1,695	100%	0.1	100%	$26,882,701	100%	234,119	100%	7.2	$114.82	0.6
Total	<60%	2,384	47%	0.4	13%	$42,160,850	60%	86,225	37%	27.6	$488.96	4.9
Total	60%-80%	645	13%	0.4	12%	$6,094,657	9%	45,398	19%	14.2	$134.25	8.2
Total	80%-100%	977	19%	0.4	13%	$7,873,681	11%	49,125	21%	19.9	$160.28	8.7
Total	100%-120%	739	14%	0.8	25%	$8,559,946	12%	30,753	13%	24.0	$278.35	25.6
Total	>120%	362	7%	1.2	37%	$5,724,275	8%	22,618	10%	16.0	$253.08	52.1
Total	Total	5,107	100%	3.2	100%	$70,413,409	100%	234,119	100%	21.8	$300.76	13.6

Table 117. Multifamily Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[125]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below
2012	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2013	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2014	120	0	120	100%	0.0	0.0	0.0	0%	$428,739	$0	$428,739	100%
2015	408	238	170	42%	0.9	0.9	0.0	0%	$5,843,311	$4,825,077	$1,018,234	17%
2016	1,602	726	876	55%	1.2	0.6	0.6	51%	$17,048,825	$5,357,752	$11,691,072	69%
2017	1,282	113	1,169	91%	1.0	0.4	0.5	56%	$20,209,833	$3,943,391	$16,266,442	80%
2018	1,695	24	1,671	99%	0.1	0.1	0.1	57%	$26,882,701	$158,000	$26,724,701	99%
Total	**5,107**	**1,101**	**4,006**	**78%**	**3.2**	**2.0**	**1.2**	**38%**	**$70,413,409**	**$14,284,221**	**$56,129,189**	**80%**

[125] Excludes projects in unknown bands.

Distressed Community Penetration

For a breakdown of Multifamily project volume and investment by census tracts categorized by Distressed Communities – see Table 118. As a program predominantly focused on properties that serve low-to-moderate income residents, this table doesn't reflect the degree to which the goal of serving lower income residents is being met. The program is equally focused on affordable housing properties located in more affluent communities and census tracts that are housing families of lower incomes as it is on affordable housing properties in lower income census tracts.

Table 118. Multifamily Activity in Distressed Communities by FY Closed

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2012	Yes	0	0%	0.0	0%	$0	0%	1,171,385	33%	$0.00	0.0	447,962	33%	$0.00	0.0
2012	No	0	0%	0.0	0%	$0	0%	2,400,828	67%	$0.00	0.0	912,222	67%	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	3,572,213	100%	$0.00	0.0	1,360,184	100%	$0.00	0.0
2013	Yes	0	0%	0.0	0%	$0	0%	1,124,923	31%	$0.00	0.0	426,564	31%	$0.00	0.0
2013	No	0	0%	0.0	0%	$0	0%	2,458,638	69%	$0.00	0.0	929,285	69%	$0.00	0.0
2013	Total	0	0%	0.0	0%	$0	0%	3,583,561	100%	$0.00	0.0	1,355,849	100%	$0.00	0.0
2014	Yes	0	0%	0.0	0%	$0	0%	1,106,027	31%	$0.00	0.0	416,415	31%	$0.00	0.0
2014	No	120	100%	0.0	0%	$428,739	100%	2,486,026	69%	$0.17	0.0	939,791	69%	$0.46	0.0
2014	Total	120	100%	0.0	0%	$428,739	100%	3,592,053	100%	$0.12	0.0	1,356,206	100%	$0.32	0.0
2015	Yes	211	52%	0.9	98%	$5,273,234	90%	1,122,550	31%	$4.70	0.8	423,559	31%	$12.45	2.1
2015	No	197	48%	0.0	2%	$570,077	10%	2,470,672	69%	$0.23	0.0	929,024	69%	$0.61	0.0
2015	Total	408	100%	0.9	100%	$5,843,311	100%	3,593,222	100%	$1.63	0.3	1,352,583	100%	$4.32	0.7
2016	Yes	346	19%	0.4	28%	$4,451,116	25%	1,162,653	32%	$3.83	0.3	438,710	32%	$10.15	0.9
2016	No	1,448	81%	1.0	72%	$13,481,821	75%	2,425,917	68%	$5.56	0.4	916,003	68%	$14.72	1.1
2016	Total	1,794	100%	1.4	100%	$17,932,937	100%	3,588,570	100%	$5.00	0.4	1,354,713	100%	$13.24	1.1

CONNECTICUT GREEN BANK
5. PROGRAMS – MULTIFAMILY PROGRAMS

Fiscal Year Closed	Distres-sed	# of Project Units	% Project Distri-bution	Installed Capacity (MW)	% MW Distri-bution	Total Investment	% Invest-ment Distri-bution	Total Population	% Population Distribution	Total Investment / Population	Watts / Popu-lation	Total Households	% Total House-hold Distri-bution	Total Investment / Total Household	Watts / Total Household
2017	Yes	449	32%	0.3	26%	$12,077,611	56%	1,162,653	32%	$10.39	0.2	438,710	32%	$27.53	0.6
2017	No	939	68%	0.7	74%	$9,453,508	44%	2,425,917	68%	$3.90	0.3	916,003	68%	$10.32	0.8
2017	Total	1,388	100%	1.0	100%	$21,531,118	100%	3,588,570	100%	$6.00	0.3	1,354,713	100%	$15.89	0.7
2018	Yes	1,495	88%	0.0	27%	$22,259,191	83%	1,162,653	32%	$19.15	0.0	438,710	32%	$50.74	0.1
2018	No	200	12%	0.1	73%	$4,623,510	17%	2,425,917	68%	$1.91	0.0	916,003	68%	$5.05	0.1
2018	Total	1,695	100%	0.1	100%	$26,882,701	100%	3,588,570	100%	$7.49	0.0	1,354,713	100%	$19.84	0.1
Total	Yes	2,501	46%	1.6	46%	$44,061,152	61%	1,162,653	32%	$37.90	1.4	438,710	32%	$100.43	3.6
Total	No	2,904	54%	1.9	54%	$28,557,655	39%	2,425,917	68%	$11.77	0.8	916,003	68%	$31.18	2.0
Total	Total	5,405	100%	3.5	100%	$72,618,808	100%	3,588,570	100%	$20.24	1.0	1,354,713	100%	$53.60	2.5

Societal Impacts

Over the course of its existence, the Green Bank's Multifamily Program has supported the creation of 616 job years, avoided the lifetime emission of 103,848 tons of carbon dioxide, 89,332 pounds of nitrous oxide, 71,008 pounds of sulfur oxide, and 4,540 pounds of particulate matter as illustrated by Tables 119 and 120. These programs have had between an estimate $1.2 and $2.8 million lifetime public health impact as demonstrated in Table 121.

Table 119. Multifamily Job Years Supported by FY Closed

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012	-	-	-
2013	-	-	-
2014	3	5	8
2015	6	9	15
2016	72	115	187
2017	121	191	313
2018	40	52	92
Total	**242**	**373**	**616**

Table 120. Multifamily Avoided Emissions by FY Closed

	CO2 Savings (tons)		NOx Savings (pounds)		SOx Savings (pounds)		PM 2.5 (pounds)	
Fiscal Year	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime
2012	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-
2014	9	114	7	86	5	56	1	9
2015	2,080	51,053	1,746	42,628	1,599	38,892	7	90
2016	1,257	26,172	1,174	24,620	861	17,596	106	2,234
2017	688	16,041	590	13,876	389	9,155	58	1,369
2018	783	10,469	600	8,122	392	5,309	62	838
Total	**4,817**	**103,848**	**4,117**	**89,332**	**3,246**	**71,008**	**234**	**4,540**

Table 121. Multifamily Economic Value of Public Health Impact by FY Closed

Fiscal Year	Annual		Lifetime	
	Low	High	Low	High
2012	-	-	-	-
2013	-	-	-	-
2014	$153	$345	$1,832	$4,140
2015	$28,475	$64,363	$541,017	$1,222,899
2016	$22,195	$50,166	$421,700	$953,160
2017	$10,813	$24,441	$183,828	$415,500
2018	$11,127	$25,151	$100,147	$226,357
Total	**$72,763**	**$164,466**	**$1,248,524**	**$2,822,057**

Financial Performance

To date there have been no defaults and as of 6/30/2018 there are 4 delinquencies totaling $1,047,106 of original principal or 6.25% of the portfolio.

Marketing

The Green Bank's multifamily programs are built on partnerships with key housing organizations in Connecticut that support us in marketing, outreach, demonstration, and education programs to build awareness and customer demand by property owners. Our approach is to leverage and collaborate with these well-established organizations, building on their initiatives and programs, as we work to scale and "mainstream" holistic clean energy improvements in the multifamily sector. Key partners include the Connecticut Housing Coalition, Department of Housing, Connecticut Housing Finance Authority and the HUD Connecticut Field Office, as well as the utility companies. These organizations partner with us at conferences as well as other outreach and education activities organized by the Green Bank.

We also do direct outreach to property owners through a sales consultant who has a strong network of relationships with multifamily property owners and managers.

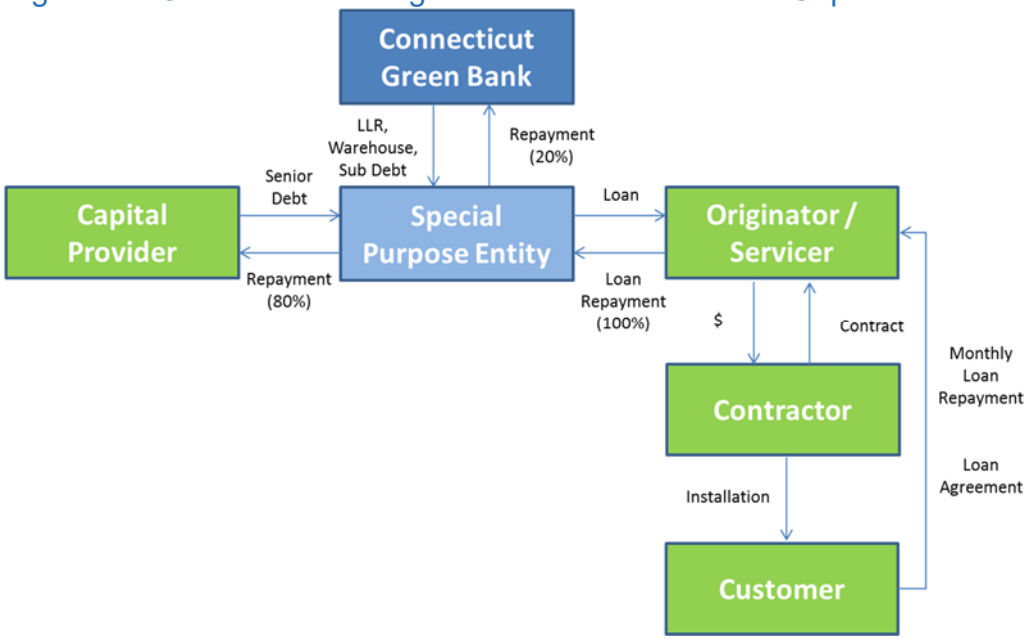
In 2017 we established a Multifamily Peer-to-Peer network where advanced practitioners, including owners, developers, architects, professional service providers and funders, gather on a monthly basis to exchange information and discuss their projects – with the goal of building greater professional capacity in the sector and awareness of Green Bank programs.

Case 7 – CT Solar Loan (Graduated)

Description

The Connecticut Solar Loan was a $5 million pilot public-private partnership between the Green Bank and Sungage Financial resulting in the first crowd-funded solar loan program in the country. It was the first of the Green Bank's ventures to be retired and graduated from the Green Bank's funding to a $100 million pool of capital from the Digital Federal Credit Union to enable citizens to own solar PV systems installed on their homes.

Figure 11. CT Solar Loan Legal Structure and Flows of Capital



The CT Solar Loan yields an appropriate rate of return to the capital providers commensurate with the risks they are taking, provided 19 contractors with an important sales tool, and gave nearly 300 customers the ability to own solar PV through low-interest and long-term financing along with access to the federal ITC and state incentives (i.e., the RSIP Expected Performance Based Buydown). Of the $6.0 million invested by the Connecticut Green Bank into the CT Solar Loan, $1.0 million has been sold to the crowd-funding platform Mosaic, $2.6 million to a Community Development Financial Institution in The Reinvestment Fund, and the remaining is on the balance sheet of the Connecticut Green Bank.

In structuring the solar loan product, the Green Bank's objective was to enable homeowners of varying financial means to own their own solar PV systems. Prior to the CT Solar Loan's creation, a homeowner would need to use their own savings or their own home equity (most often though a home equity line of credit) to pay for the system, which, at that time, often required an investment exceeding $25,000. The requirement for such a level of personal financial resources dramatically constrained the "ownership" market for solar PV. So, the Green Bank with its partner Sungage Financial, developed the CT Solar Loan which made 15-year financing available at affordable interest rates without the need to have a lien on the home or limit the purchase to certain manufacturers who offered financing solely for their panels. In

developing the CT Solar Loan, the Green Bank had to overcome the risk of being unable to sell the loans to private investors which would have tied up capital resources of the Green Bank and limited its ability to deploy investment of additional clean energy. Ultimately, the Green Bank became confident that a sufficient rate of return could be offered to enable the investments to "clear" the market without a discount (or loss) to the Green Bank. The combination of crowdsourced funding and a structured private placement enabled the Green Bank to sell the investments with recourse limited to the underlying consumer loans as well as a limited loan loss reserve using American Recovery and Reinvestment Act funds from the US Department of Energy.

The CT Solar Loan was the Connecticut Green Bank's first residential product graduation. It started off being the first crowd-funded residential solar PV transaction with Sungage Financial through Mosaic.[126] And then it graduated to a partnership between Sungage Financial and Digital Federal Credit Union – with no resources from the Connecticut Green Bank.[127] The loan offering from Sungage Financial now includes 5, 10, and 20 year maturity terms at affordable interest rates and is being offered in California, Florida, Massachusetts, New Jersey, New York, and Texas – along with solar PV contractors in Connecticut.

Key Performance Indicators

The Key Performance Indicators for the CT Solar Loan closed activity are reflected in Tables 122 through 125. These illustrate the volume of projects by year, investment, generation capacity installed, and the amount of energy saved and/or produced. It also breaks down the volume of projects by energy efficiency, renewable generation, or both.

Table 122. CT Solar Loan Project Types and Investment by FY Closed

Fiscal Year Closed	EE[128]	RE	RE/EE	# Projects	# Project Units	Total Investment	Green Bank Investment[129]	Private Investment	Leverage Ratio
2012	-	-	-	-	-	-	-	-	-
2013	-	3	-	3	3	$91,924	$5,025	$86,899	18.3
2014	-	140	-	140	140	$4,461,833	$232,100	$4,229,733	19.2
2015	-	136	-	136	136	$4,505,386	$222,549	$4,282,838	20.2
2016	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-
Total		**279**		**279**	**279**	**$9,059,143**	**$459,674**	**$8,599,469**	**19.7**

[126] http://www.businesswire.com/news/home/20140206005031/en/Sungage-Financial-CEFIA-Mosaic-Announce-5-Million#.VgRTgVIXL4Y
[127] http://www.ctgreenbank.com/ct-solar-loan-partner-graduates-connecticut-green-bank/
[128] All projects that receive an RSIP incentive are required to do an energy audit/assessment.
[129] Includes incentives, interest rate buydowns and loan loss reserves.

Table 123. CT Solar Loan Project Capacity, Generation and Savings by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)	Annual Cost Savings	Lifetime Cost Savings
2012	-	-	-	-	-	-	-
2013	17.0	19,407	485	66	1,655	$3,596	$89,910
2014	1,107.9	1,261,626	31,541	4,305	107,617	$167,832	$4,195,800
2015	1,067.2	1,215,364	30,384	4,147	103,671	$163,037	$4,075,920
2016	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-
Total	**2,192.1**	**2,496,398**	**62,410**	**8,518**	**212,943**	**$334,465**	**$8,361,630**

Table 124. CT Solar Loan Project Averages by FY Closed

Fiscal Year Closed	Total Average Investment	Average Amount Financed	Average Installed Capacity (kW)	Average Annual Saved / Produced (MMBtu)	Average Finance Term (months)	Average Finance Rate	Average DTI	Average FICO Score
2012	-	-	-	-	-	-	-	-
2013	$30,641	$19,658	5.7	22	180	5.58	0	758
2014	$31,870	$19,819	7.9	31	180	5.57	0	771
2015	$33,128	$22,942	7.8	30	180	3.34	0	771
2016	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-
Total	**$32,470**	**$21,340**	**7.9**	**31**	**180**	**4.48**	**0**	**771**

Table 125. CT Solar Loan Project Application Yield[130] by FY Received

Fiscal Year Received	Applications Received	Applications Approved	Applications Withdrawn	Applications Denied	Approved Rate	Denied Rate
2012	-	-	-	-	-	-
2013	14	7	5	2	86%	14%
2014	284	163	54	67	76%	24%
2015	164	109	37	18	89%	11%
2016	-	-	-	-	-	-
2017	-	-	-	-	-	-
2018	-	-	-	-	-	-
Total	**462**	**279**	**96**	**87**	**81%**	**19%**

[130] Applications received are applications submitted to Sungage Financial (servicer of the CT Solar Loan) for credit approval. Applications approved are applications that have met the credit requirements for the program and can move to loan closing, pending formal technical approval of the solar equipment by the Residential Solar Investment Program. Applications withdrawn are applications that have been cancelled by the submitter due to the project not moving forward. Applications denied are applications that are not approved because the customer does not meet underwriting requirements.

Area Median Income Band Penetration

For a breakdown of the CT Solar Loan volume and investment by census tracts categorized by Area Median Income bands – see Table 126. It should be noted that the CT Solar Loan is not an income-targeted program.

Table 126. CT Solar Loan Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands by FY Closed[131]

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2012	<60%	0	0%	0.0	0%	$0	0%	61,168	7%	0.0	$0.00	0.0
2012	60%-80%	0	0%	0.0	0%	$0	0%	101,640	12%	0.0	$0.00	0.0
2012	80%-100%	0	0%	0.0	0%	$0	0%	151,346	17%	0.0	$0.00	0.0
2012	100%-120%	0	0%	0.0	0%	$0	0%	216,988	25%	0.0	$0.00	0.0
2012	>120%	0	0%	0.0	0%	$0	0%	350,196	40%	0.0	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	881,338	100%	0.0	$0.00	0.0
2013	<60%	0	0%	0.0	0%	$0	0%	59,494	7%	0.0	$0.00	0.0
2013	60%-80%	1	33%	0.0	31%	$33,775	37%	109,189	12%	0.0	$0.31	0.0
2013	80%-100%	0	0%	0.0	0%	$0	0%	150,603	17%	0.0	$0.00	0.0
2013	100%-120%	1	33%	0.0	47%	$38,249	42%	203,157	23%	0.0	$0.19	0.0
2013	>120%	1	33%	0.0	22%	$19,900	22%	351,633	40%	0.0	$0.06	0.0
2013	Total	3	100%	0.0	100%	$91,924	100%	874,076	100%	0.0	$0.11	0.0
2014	<60%	1	1%	0.0	0%	$9,948	0%	57,673	7%	0.0	$0.17	0.0
2014	60%-80%	3	2%	0.0	2%	$89,796	2%	103,934	12%	0.0	$0.86	0.2
2014	80%-100%	24	17%	0.2	14%	$637,228	14%	149,038	17%	0.2	$4.28	1.1
2014	100%-120%	49	35%	0.4	37%	$1,624,516	36%	209,561	24%	0.2	$7.75	2.0
2014	>120%	63	45%	0.5	47%	$2,100,345	47%	348,270	40%	0.2	$6.03	1.5
2014	Total	140	100%	1.1	100%	$4,461,833	100%	868,476	100%	0.2	$5.14	1.3

[131] Excludes projects in unknown bands.

CONNECTICUT GREEN BANK
5. PROGRAMS – CT SOLAR LOAN

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
2015	<60%	1	1%	0.0	0%	$22,510	0%	64,361	7%	0.0	$0.35	0.1
2015	60%-80%	10	7%	0.1	6%	$286,560	6%	96,305	11%	0.1	$2.98	0.7
2015	80%-100%	18	13%	0.1	13%	$603,685	13%	164,873	19%	0.1	$3.66	0.8
2015	100%-120%	30	22%	0.2	23%	$1,008,757	22%	184,613	21%	0.2	$5.46	1.3
2015	>120%	77	57%	0.6	58%	$2,583,874	57%	352,621	41%	0.2	$7.33	1.7
2015	Total	136	100%	1.1	100%	$4,505,386	100%	862,773	100%	0.2	$5.22	1.2
2016	<60%	0	0%	0.0	0%	$0	0%	60,769	7%	0.0	$0.00	0.0
2016	60%-80%	0	0%	0.0	0%	$0	0%	99,220	12%	0.0	$0.00	0.0
2016	80%-100%	0	0%	0.0	0%	$0	0%	165,331	19%	0.0	$0.00	0.0
2016	100%-120%	0	0%	0.0	0%	$0	0%	187,463	22%	0.0	$0.00	0.0
2016	>120%	0	0%	0.0	0%	$0	0%	345,311	40%	0.0	$0.00	0.0
2016	Total	0	0%	0.0	0%	$0	0%	858,094	100%	0.0	$0.00	0.0
2017	<60%	0	0%	0.0	0%	$0	0%	60,769	7%	0.0	$0.00	0.0
2017	60%-80%	0	0%	0.0	0%	$0	0%	99,220	12%	0.0	$0.00	0.0
2017	80%-100%	0	0%	0.0	0%	$0	0%	165,331	19%	0.0	$0.00	0.0
2017	100%-120%	0	0%	0.0	0%	$0	0%	187,463	22%	0.0	$0.00	0.0
2017	>120%	0	0%	0.0	0%	$0	0%	345,311	40%	0.0	$0.00	0.0
2017	Total	0	0%	0.0	0%	$0	0%	858,094	100%	0.0	$0.00	0.0
2018	<60%	0	0%	0.0	0%	$0	0%	60,769	7%	0.0	$0.00	0.0
2018	60%-80%	0	0%	0.0	0%	$0	0%	99,220	12%	0.0	$0.00	0.0
2018	80%-100%	0	0%	0.0	0%	$0	0%	165,331	19%	0.0	$0.00	0.0
2018	100%-120%	0	0%	0.0	0%	$0	0%	187,463	22%	0.0	$0.00	0.0
2018	>120%	0	0%	0.0	0%	$0	0%	345,311	40%	0.0	$0.00	0.0
2018	Total	0	0%	0.0	0%	$0	0%	858,094	100%	0.0	$0.00	0.0

Fiscal Year Closed	MSA AMI Band	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Owner Occupied 1-4 Unit Households	% Owner Occupied 1-4 Unit Household Distribution	Project Units / 1,000 Owner Occupied 1-4 Unit Households	Total Investment / Owner Occupied 1-4 Unit Household	Watts / Owner Occupied 1-4 Unit Household
Total	<60%	2	1%	0.0	0%	$32,458	0%	60,769	7%	0.0	$0.53	0.1
Total	60%-80%	14	5%	0.1	4%	$410,131	5%	99,220	12%	0.1	$4.13	0.9
Total	80%-100%	42	15%	0.3	14%	$1,240,913	14%	165,331	19%	0.3	$7.51	1.8
Total	100%-120%	80	29%	0.7	30%	$2,671,522	29%	187,463	22%	0.4	$14.25	3.5
Total	>120%	141	51%	1.1	52%	$4,704,119	52%	345,311	40%	0.4	$13.62	3.3
Total	Total	279	100%	2.2	100%	$9,059,143	100%	858,094	100%	0.3	$10.56	2.6

Table 127. CT Solar Loan Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[132]

	# Project Units				MW				Total Investment			
Fiscal Year Closed	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below
2012	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2013	3	2	1	33%	0.0	0.0	0.0	31%	$91,924	$58,149	$33,775	37%
2014	140	112	28	20%	1.1	0.9	0.2	16%	$4,461,833	$3,724,861	$736,971	17%
2015	136	107	29	21%	1.1	0.9	0.2	20%	$4,505,386	$3,592,631	$912,755	20%
2016	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2017	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2018	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
Total	**279**	**221**	**58**	**21%**	**2.2**	**1.8**	**0.4**	**18%**	**$9,059,143**	**$7,375,641**	**$1,683,502**	**19%**

[132] Excludes projects in unknown bands.

Distressed Community Penetration

For a breakdown of the CT Solar Loan project volume and investment by census tracts categorized by Distressed Communities – see Table 128. It should be noted that the CT Solar Loan is not an income-targeted program.

Table 128. CT Solar Loan Activity in Distressed Communities by FY Closed

Fiscal Year Closed	Distressed	# of Project Units	% Project Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution	Total Population	% Population Distribution	Total Investment / Population	Watts / Population	Total Households	% Total Household Distribution	Total Investment / Total Household	Watts / Total Household
2012	Yes	0	0%	0.0	0%	$0	0%	1,171,385	33%	$0.00	0.0	447,962	33%	$0.00	0.0
2012	No	0	0%	0.0	0%	$0	0%	2,400,828	67%	$0.00	0.0	912,222	67%	$0.00	0.0
2012	Total	0	0%	0.0	0%	$0	0%	3,572,213	100%	$0.00	0.0	1,360,184	100%	$0.00	0.0
2013	Yes	2	67%	0.0	78%	$72,024	78%	1,124,923	31%	$0.06	0.0	426,564	31%	$0.17	0.0
2013	No	1	33%	0.0	22%	$19,900	22%	2,458,638	69%	$0.01	0.0	929,285	69%	$0.02	0.0
2013	Total	3	100%	0.0	100%	$91,924	100%	3,583,561	100%	$0.03	0.0	1,355,849	100%	$0.07	0.0
2014	Yes	26	19%	0.2	18%	$757,309	17%	1,106,027	31%	$0.68	0.2	416,415	31%	$1.82	0.5
2014	No	114	81%	0.9	82%	$3,704,523	83%	2,486,026	69%	$1.49	0.4	939,791	69%	$3.94	1.0
2014	Total	140	100%	1.1	100%	$4,461,833	100%	3,592,053	100%	$1.24	0.3	1,356,206	100%	$3.29	0.8
2015	Yes	18	13%	0.1	11%	$483,091	11%	1,122,550	31%	$0.43	0.1	423,559	31%	$1.14	0.3
2015	No	118	87%	1.0	89%	$4,022,296	89%	2,470,672	69%	$1.63	0.4	929,024	69%	$4.33	1.0
2015	Total	136	100%	1.1	100%	$4,505,386	100%	3,593,222	100%	$1.25	0.3	1,352,583	100%	$3.33	0.8
2016	Yes	0	0%	0.0	0%	$0	0%	1,162,653	32%	$0.00	0.0	438,710	32%	$0.00	0.0
2016	No	0	0%	0.0	0%	$0	0%	2,425,917	68%	$0.00	0.0	916,003	68%	$0.00	0.0
2016	Total	0	0%	0.0	0%	$0	0%	3,588,570	100%	$0.00	0.0	1,354,713	100%	$0.00	0.0
2017	Yes	0	0%	0.0	0%	$0	0%	1,162,653	32%	$0.00	0.0	438,710	32%	$0.00	0.0
2017	No	0	0%	0.0	0%	$0	0%	2,425,917	68%	$0.00	0.0	916,003	68%	$0.00	0.0
2017	Total	0	0%	0.0	0%	$0	0%	3,588,570	100%	$0.00	0.0	1,354,713	100%	$0.00	0.0

CONNECTICUT GREEN BANK
5. PROGRAMS – CT SOLAR LOAN

Fiscal Year Closed	Distres-sed	# of Project Units	% Project Distri-bution	Installed Capacity (MW)	% MW Distri-bution	Total Investment	% Invest-ment Distri-bution	Total Population	% Population Distribution	Total Investment / Population	Watts / Popu-lation	Total Households	% Total House-hold Distri-bution	Total Investment / Total Household	Watts / Total Household
2018	Yes	0	0%	0.0	0%	$0	0%	1,162,653	32%	$0.00	0.0	438,710	32%	$0.00	0.0
2018	No	0	0%	0.0	0%	$0	0%	2,425,917	68%	$0.00	0.0	916,003	68%	$0.00	0.0
2018	Total	0	0%	0.0	0%	$0	0%	3,588,570	100%	$0.00	0.0	1,354,713	100%	$0.00	0.0
Total	Yes	46	16%	0.3	15%	$1,312,424	14%	1,162,653	32%	$1.13	0.3	438,710	32%	$2.99	0.7
Total	No	233	84%	1.9	85%	$7,746,719	86%	2,425,917	68%	$3.19	0.8	916,003	68%	$8.46	2.0
Total	Total	279	100%	2.2	100%	$9,059,143	100%	3,588,570	100%	$2.52	0.6	1,354,713	100%	$6.69	1.6

Societal Impacts

Ratepayers in Connecticut continue to enjoy the societal benefits of the CT Solar Loan Program despite its closure. Over the course of its existence, the program has supported the creation of 132 job years, avoided the lifetime emission of 35,015 tons of carbon dioxide, 46,896 pounds of nitrous oxide, 53,064 pounds of sulfur oxide, and 3,131 pounds of particulate matter as illustrated by Tables 129 and 130. The economic impact of this improved air quality is estimated between $1.1 and 2.5 million of the projects' lifetimes as evidenced in table 131.

Table 129. CT Solar Loan Job Years Supported by FY Closed

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012	-	-	-
2013	1	1	1
2014	25	40	65
2015	25	41	66
2016	-	-	-
2017	-	-	-
2018	-	-	-
Total	**51**	**82**	**132**

Table 130. CT Solar Loan Avoided Emissions by FY Closed

	CO_2 Savings (tons)		NOx Savings (pounds)		SOx Savings (pounds)		PM 2.5 (pounds)	
Fiscal Year	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime	Annual	Lifetime
2012	-	-	-	-	-	-	-	-
2013	11	278	17	417	21	537	1	24
2014	701	17,536	981	24,521	1,160	29,008	63	1,583
2015	688	17,201	878	21,959	941	23,519	61	1,523
2016	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-
Total	**1,401**	**35,015**	**1,876**	**46,896**	**2,123**	**53,064**	**125**	**3,131**

Table 131. CT Solar Loan Public Health Impact by FY Closed

Fiscal Year	Annual		Lifetime	
	Low	High	Low	High
2012	-	-	-	-
2013	$411	$930	$10,284	$23,246
2014	$23,315	$52,701	$582,887	$1,317,514
2015	$19,753	$44,648	$493,825	$1,116,200
2016	-	-	-	-
2017	-	-	-	-
2018	-	-	-	-
Total	**$43,480**	**$98,278**	**$1,086,997**	**$2,456,960**

Financing Program

The CT Solar Loan was a financing product developed in partnership with Sungage Financial[133] that used credit enhancements (i.e., $300,000 loan loss reserve and $168,000 interest rate buy-downs)[134] in combination with a $5 million warehouse of funds and $1 million of subordinated debt from the Connecticut Green Bank. Through this product, the Connecticut Green Bank lowered the barriers to Connecticut homeowners seeking to install solar PV installations thus increasing demand while at the same time reducing the market's reliance on subsidies being offered through the RSIP. The CT Solar Loan was the first dedicated residential solar loan product not secured by a lien on the home or tied to a particular PV equipment OEM supplier. As a loan, capital provided to consumers for the CT Solar Loan is returned to the Connecticut Green Bank – it is not a subsidy. In fact, approximately 80% of the loan value was sold to retail investors through a "crowd funding" platform or to institutional investors without recourse to the Connecticut Green Bank. The financial structure of the CT Solar Loan product includes origination,[135] servicing,[136] and financing features in combination with the support of the Connecticut Green Bank.

Launched in March of 2013, the CT Solar Loan provided up to $55,000 per loan, with 15-year maturity terms and affordable 6.49% interest rates (including 0.25% ACH payment benefit) to provide homeowners with the upfront capital they needed to finance residential solar PV projects.

Financial Performance

To date there have been no defaults and as of 6/30/2018 there are 4 delinquencies with original principle balances totaling $66,203 or 1.4% of the portfolio.

The household customers that accessed the CT Solar Loan since its launch in 2013 had varying credit scores – see Table 132.

[133] Sungage Financial (http://www.sungagefinancial.com/) won a competitive RFP through the Connecticut Green Bank's Financial Innovation RFP to support a residential solar PV loan program
[134] From repurposed American Recovery and Reinvestment Act funds
[135] Sungage Financial in partnership with local contractors
[136] Concord Servicing Corporation

Table 132. Credit Score Ranges of Household Customers Using the CT Solar Loan by FY Closed

	-639		640-679		680-699		700-719		720-739		740+		
Fiscal Year Closed	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**# Projects**	**% of Total**	**Total # Projects**
2012	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	0.0%	-	0.0%		0.0%		0.0%	1	33.3%	2	66.7%	3
2014	-	0.0%	-	0.0%	5	3.6%	7	5.0%	18	12.9%	110	78.6%	140
2015	-	0.0%	-	0.0%	6	4.4%	8	5.9%	15	11.0%	107	78.7%	136
2016	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**-**	**0.0%**	**-**	**0.0%**	**11**	**3.9%**	**15**	**5.4%**	**34**	**12.2%**	**219**	**78.5%**	**279**

Marketing

To accelerate the deployment of residential solar PV through the RSIP and the uptake of the CT Solar Loan financing product, the Connecticut Green Bank implemented Solarize Connecticut. Green Bank Solarize programs are designed to use a combination of group purchasing, time-limited offers, and grassroots outreach, while local clean energy advocates volunteer and coordinate with their towns to help speed the process – see Table 133.

Table 133. Number of Projects, Investment, and Installed Capacity through Green Bank Solarize Connecticut for the CT Solar Loan Financing Product

	# of Projects	**Total Investment**	**Installed Capacity (MW)**
Solarize	168	$5,209,925	1.3
Not Solarize	111	$3,849,218	0.9
Total	279	$9,059,143	2.2
% Solarize	60%	58%	59%

The Green Bank Solarize Connecticut program provided a significant marketing channel to catalyze origination for the CT Solar Loan comprising nearly 60 percent of the total projects, investment, and installed capacity.

Anaerobic Digestion and Combined Heat and Power Pilot Programs

Per Public Act 11-80 Section 103, the Green Bank is to develop a three-year pilot program for AD and CHP by setting aside $2 million a year for each pilot for three years – for a total of $12 million. Funds to support the pilot programs can be used as grants, power purchase agreements or loans. There are to be no more than five (5) AD projects, each no more than 3 MW in size, and no more than 50 MW of CHP projects each to not exceed 5 MW in size. Both pilot programs support projects at no more than $450 per kW on a grant basis. Due to the Connecticut General Assembly's reallocation of monies from the Clean Energy Fund to the General Fund, the Green Bank has cancelled existing commitments for these pilots.

Key Performance Indicators

The Key Performance Indicators for the AD and CHP Pilot Programs closed activity are reflected in Tables 134 through 136. These illustrate the volume of projects by year, investment, generation capacity installed, and the amount of energy saved and/or produced. It also breaks down the volume of projects by energy efficiency, renewable generation, or both.

Table 134. AD and CHP Pilot Project Types and Investment by FY Closed

Fiscal Year Closed	EE	RE	RE/EE	# Projects	# Project Units	Total Investment	Green Bank Investment[137]	Private Investment	Leverage Ratio
2012	-	-	-	-	-	-	-	-	-
2013		2		2	2	$3,189,000	$304,500	$2,884,500	10.5
2014		1		1	1	$6,300,000	$630,000	$5,670,000	10.0
2015		2		2	2	$642,578	$60,750	$581,828	10.6
2016		1		1	1	$10,500,000	$1,997,403	$8,502,597	5.3
2017		1		1	1	$3,401,392	$502,860	$2,898,532	6.8
2018	-	-	-	-	-	-	-	-	
Total		**7**		**7**	**7**	**$24,032,970**	**$3,495,513**	**$20,537,457**	**6.9**

Table 135. AD and CHP Pilot Project Capacity, Generation and Savings by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)	Annual Food/Organic Waste (tons/year)
2012	-	-	-	-	-	
2013	685.0	5,400,540	81,008	32,533	488,002	
2014	3,000.0	23,652,000	354,780	142,482	2,137,234	
2015	135.0	1,064,340	15,965	4,000	60,001	
2016	1,010.0	7,078,080	106,171	44,949	674,240	40,000
2017	795.0	6,267,780	94,017	304,445	4,566,675	
2018	-	-	-	-	-	-
Total	**5,625.0**	**43,462,740**	**651,941**	**528,410**	**7,926,152**	**40,000**

[137] Includes incentives, interest rate buydowns and loan loss reserves.

Table 136. AD and CHP Pilot Project Averages by FY Closed

Fiscal Year Closed	Total Average Investment	Average Amount Financed	Average Installed Capacity (kW)	Average Annual Saved / Produced (MMBtu)
2012	-	-	-	-
2013	$1,594,500	$0	342.5	16,267
2014	$6,300,000	$0	3,000.0	142,482
2015	$321,289	$0	67.5	2,000
2016	$10,500,000	$1,997,403	1,010.0	44,949
2017	$3,401,392	$502,860	795.0	304,445
2018	-	-	-	-
Total	**$3,433,281**	**$357,180**	**803.6**	**75,487**

Societal Impacts

Ratepayers in Connecticut continue to enjoy the societal benefits of the AD and CHP Programs despite its closure. Over the course of its existence, these programs have supported the creation of 219 job years as illustrated by Table 137. We have not included environmental or public health impacts for these pilots as the Avert and CoBRA models do not take into account the technologies of these pilots.

Table 137. AD and CHP Pilot Job Years Supported by FY Closed

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012	-	-	-
2013	20	32	51
2014	39	62	101
2015	4	7	11
2016	0	0	0
2017	21	34	55
2018	-	-	-
Total	**84**	**135**	**219**

Strategic Investments

As opportunities present themselves, the Green Bank from time to time is part of the capital stack for projects that are outside any of the organization's existing programs. These projects are selected based on the opportunity to expand the organization's experience with specific technologies, advance economic development in a specific locale, or to drive adoption of clean energy that would otherwise not occur.

Key Performance Indicators

The Key Performance Indicators for the Strategic Program closed activity is reflected in Tables 138 through 140. These illustrate the volume of projects by year, investment, generation capacity installed, and the amount of energy saved and/or produced. It also breaks down the volume of projects by energy efficiency, renewable generation, or both.

Table 138. Strategic Project Types and Investment by FY Closed

Fiscal Year Closed	EE	RE	RE/EE	Other	# Projects	# Project Units	Total Investment	Green Bank Investment[138]	Private Investment	Leverage Ratio
2012	-	-	-	-	-	-	-	-	-	-
2013		1			1	1	$70,800,000	$5,800,000	$65,000,000	12.2
2014	-	-	-	-	-	-	-	-	-	-
2015		1		1	2	2	$56,500,000	$3,227,000	$53,273,000	17.5
2016	-	-	-	-	-	-	-	-	-	-
2017		1			1	1	$4,538,212	$3,900,000	$638,212	1.2
2018	-	-	-	-	-	-	-	-	-	-
Total		**3**			**4**	**4**	**$131,838,212**	**$12,927,000**	**$118,911,212**	**10.2**

Table 139. Strategic Project Capacity, Generation and Savings by FY Closed

Fiscal Year Closed	Installed Capacity (kW)	Expected Annual Generation (kWh)	Expected Lifetime Savings or Generation (MWh)	Annual Saved / Produced (MMBtu)	Lifetime Saved / Produced (MMBtu)
2012	-	-	-	-	-
2013	14,800.0	116,683,200	1,166,832	398,123	3,981,231
2014	-	-	-	-	-
2015	5,000.0	136,494,997	118,260	465,850	403,503
2016	-	-	-	-	-
2017	193.0	825,052	20,626	2,815	70,377
2018	-	-	-	-	-
Total	**19,993.0**	**254,003,249**	**1,305,718**	**866,788**	**4,455,111**

[138] Includes incentives, interest rate buydowns and loan loss reserves.

Table 140. Strategic Project Averages by FY Closed

Fiscal Year Closed	Average Total Investment	Average Amount Financed	Average Installed Capacity (kW)	Average Annual Saved / Produced (MMBtu)
2012	-	-	-	-
2013	$70,800,000	$5,800,000	14,800.0	398,123
2014	-	-	-	-
2015	$28,250,000	$1,613,500	2,500.0	232,925
2016	-	-	-	-
2017	$4,538,212	$3,900,000	193.0	2,815
2018	-	-	-	-
Total	**$32,959,553**	**$3,231,750**	**4,998.3**	**216,697**

Societal Impacts

Ratepayers in Connecticut enjoy of the societal benefits of Strategic Investments. Over the course of its existence, the program has supported the creation of 1,554 job years, avoided the emission 151,948 tons of carbon dioxide, 682,313 pounds of nitrous oxide, 495,851 pounds of sulfur oxide, and 4,749 pounds of particulate matter as illustrated by Tables 141 and 142. The economic value of the public health impacts of this cleaner air, illustrated in table 143, is estimated to be between $9.4 and $21.2 million.

Table 141. Strategic Job Years Supported by FY Closed

Fiscal Year	Direct Jobs	Indirect and Induced Jobs	Total Jobs
2012	-	-	-
2013	340	779	1,119
2014	-	-	-
2015	140	223	363
2016	-	-	-
2017	28	45	73
2018	-	-	-
Total	**507**	**1,047**	**1,554**

Table 142. Strategic Avoided Emissions by FY Closed

	CO2 Savings (tons)		NOx Savings (pounds)		SOx Savings (pounds)		PM 2.5 (pounds)	
Fiscal Year	**Annual**	**Lifetime**	**Annual**	**Lifetime**	**Annual**	**Lifetime**	**Annual**	**Lifetime**
2012	-	-	-	-	-	-	-	-
2013	7,876	78,761	63,009	630,089	45,623	456,231	0	0
2014	-	-	-	-	-	-	-	-
2015	4,165	62,471	2,890	43,354	2,105	31,575	317	4,749
2016	-	-	-	-	-	-	-	-
2017	429	10,715	355	8,869	322	8,044	0	0
2018	-	-	-	-	-	-	-	-
Total	**12,469**	**151,948**	**66,254**	**682,313**	**48,050**	**495,851**	**317**	**4,749**

Table 143. Strategic Investments Public Health Impact by FY Closed

Fiscal Year	**Annual**		**Lifetime**	
	Low	**High**	**Low**	**High**
2012	-	-	-	-
2013	$839,170	$1,896,838	$8,391,696	$18,968,376
2014	-	-	-	-
2015	$57,815	$130,676	$867,218	$1,960,142
2016	-	-	-	-
2017	$5,659	$12,791	$141,474	$319,784
2018	-	-	-	-
Total	**$902,643**	**$2,040,305**	**$9,400,388**	**$21,248,302**

6. Appendix

Terms and Definitions

The following is meant to serve as guide to the reader of common terms used in this section and to illustrate how the Green Bank defines these terms:

Applications Received - This is the number of applications submitted to CGB seeking an incentive or financing during a specific period regardless of whether they were approved or rejected. The specific metric is calculated by subtracting the total number of applications received at the beginning of the time period from the total number of applications received at the end of the time period. This indicates interest in our program and allows us to investigate trends in rejections and to assess employee time spent reviewing applications.

Approvals - An approval is a project whose application has been reviewed by Green Bank staff and has been authorized to proceed to the funding stage, involving the project's requested CGB financing and/or incentives. The number of approvals in one period is an indicator of potential completed projects in upcoming periods.

Closed - A "Closed" project is one that has been approved by the CGB and for which CGB financing and/or incentives have been mobilized. For RSIP projects, once a project is approved, it is considered closed. This status also suggests that physical work is in progress or is imminent.

Gross Investment - This is the total system costs for all solar installations and/or the total costs of all retrofit projects during the specified time period, regardless of how much of the projects are being financed. Closing costs for CGB financing are not included in this total.

Principal Amount Financed - This is the total amount of money that is being borrowed regardless of whether it is wholly or partially from the CGB. For some programs, this amount will be greater than the gross investment, to include closing costs that are rolled into the loans. Principal Amount Financed equals Gross Investment plus closing costs that are financed, minus any part of the projects paid upfront by the borrowers:

$$Principal\ Amount\ Financed = Gross\ Investment + Fees\ Financed - Owners'\ Contributions$$

This should also equal CGB investment plus third party investment:

$$Principal\ Amount\ Financed = CGB\ Investment + Third\ Party\ Financing$$

CGB Investment - Green Bank investment activity is broken down into two categories, presented below as separate metrics.

$$CGB\ Investment = CGB\ Incentives + CGB\ Financing$$

CGB Incentives - CGB incentives are funds that are not intended to be repaid by the recipient and are used to reduce the cost of a specific product or technology. At present, RSIP is the only active incentive program administered by CGB.

CGB Financing - CGB financing includes the total funds deployed by the Green Bank during the specified time period with the intention either that the funds will be repaid or to

bolster the creditworthiness of borrowers. CGB Financing is the sum of the types of financing below, each of which is its own metric.

CGB Financing = CGB Loans and Leases + CGB Credit Enhancements

CGB Loans and Leases - Loans and leases are the types of CGB financing in which capital is directly lent to fund projects. It does not include third party lending.

CGB Credit Enhancements - Credit enhancements involve the deployment of CGB capital to bolster the credit of borrowers. This financing category is comprised of the three categories of funds below, each as its own metric.

CGB Credit Enhancements = Loan Loss Reserves + Guarantees + Interest Rate Buy-Downs

Loan Loss Reserves - Loan Loss Reserves are capital that the CGB has segregated as part of a program to ensure against losses incurred by participating lenders due to the failure of borrowers to repay loans.

Guarantees - Guarantees reflect a specified dollar commitment that CGB has made to external lenders for repayment of specific transactions in the event one or more borrowers fail to repay the lenders.

Interest Rate Buy-Downs - Interest rate buy-downs involve the deployment of CGB capital by paying a portion of the interest on borrowers' loans to decrease their cost of capital.

Third Party Financing - This metric captures the amount of project financing that is provided by parties other than the CGB and project owner. It is this type of financing that the CGB seek s to grow in relation to its own financing. Current examples include the capital provided by Hannon Armstrong through the HACPACE facility and the capital provided by SMART-E lenders.

Leverage Ratio
This metric presents the relationship between private financing and CGB's direct financing.

Leverage Ratio = Gross Investment / CGB Investment

Mobilization Ratio
This metric presents the relationship between private financing and CGB's direct investment (both financing and incentives).

Mobilization Ratio = Third-Party Financing Amount / CGB Investment

Community Activity Table

See the Municipality Tables in here.[139]

Contractor Activity Table

See the Contractor Tables in here.[140]

Trained Contractor Table

See the Trained Contractor table in here.[141]

Calculations and Assumptions

Table 144. Capacity Factors and Expected Useful Life (EUL) By Technology

Technology	Capacity Factor	EUL
AD	0.80	15
CHP	0.90	15
EE	0.0	12
Fuel Cell	0.90	10
Geothermal	0.0	25
Hydro	0.49	25
PV	0.13	25
PV/Biomass	0.13	25
Solar Thermal	0.0	20
Wind	0.18	15

Table 145. Job Year Factors by Year Approved by Technology

	2009 Factors - Approved prior to 6/30/2016			2016 Factors - Approved after 7/1/2016		
	Direct Job Years	Indirect and Induced Jobs	Total Job Years per $1M Invested	Direct Job Years	Indirect and Induced Jobs	Total Job Years per $1M Invested
	Renewable Energy					
Fuel Cell Manufacturing	4.8	11.0	15.8	4.9	6.4	11.3
Fuel Cell R&D/Engineering[1]	0.0	0.0	0.0	2.9	3.8	6.7
Solar PV - Residential	5.9	9.5	15.4	3.9	5.1	9.0
Solar PV - Non-Residential	3.4	5.4	8.8	3.1	4.0	7.1
Ductless Split Heat Pump	0.0	0.0	0.0	6.7	8.7	15.4
Geothermal	8.3	13.3	21.6	6.7	8.7	15.4
Solar Thermal	7.6	12.2	19.8	5.6	7.3	12.9
Wind Installation	0.0	0.0	0.0	6.2	8.0	14.2
Hydro Installation	0.0	0.0	0.0	6.2	8.0	14.2
EV Charging Stations - Installation	0.0	0.0	0.0	3.1	4.0	7.1
Storage Installation[1]	0.0	0.0	0.0	2.2	2.9	5.1

[139] http://www.ctgreenbank.com/fy17-cafr-nfs-appendix/
[140] http://www.ctgreenbank.com/fy17-cafr-nfs-appendix/
[141] http://www.ctgreenbank.com/fy17-cafr-nfs-appendix/

	2009 Factors - Approved prior to 6/30/2016			2016 Factors - Approved after 7/1/2016		
	Direct Job Years	Indirect and Induced Jobs	Total Job Years per $1M Invested	Direct Job Years	Indirect and Induced Jobs	Total Job Years per $1M Invested
	Renewable Energy					
CHP[2]	6.2	9.9	16.1	6.2	8.1	14.3
	Energy Efficiency					
Residential	12.9	20.6	33.5	-	-	-
Residential Lighting[1]	0.0	0.0	0.0	7.7	10.0	17.7
Residential Home Energy Solutions (HES) - Audits[1]	0.0	0.0	0.0	7.8	10.2	18.0
Residential HES - Weatherization & HVAC	0.0	0.0	0.0	5.6	7.3	12.9
Residential Gas Conversion	0.0	0.0	0.0	5.6	7.3	12.9
Small Business Energy Advantage	9.1	14.6	23.7	6.2	8.0	14.2
Large Commercial and Industrial	7.6	12.2	19.8	5.6	7.3	12.9

1. Not currently being used.
2. Developed by Green Bank.

Table 146. Residential Single Family Annual and Lifetime MMBTUs and Cost Savings[142]

Improvement Type	Average Annual Savings MMBTUs	Average Lifetime Savings MMBTUs	Average Annual $ Savings	Average Lifetime $ Savings	Average Expected Useful Life (EUL)
Air Source Heat Pump	10	190	$419	$8,374	20
Boiler	18	370	$372	$7,441	20
Central AC	3	58	$142	$2,552	18
Ductless Heat Pump	10	176	$443	$7,975	18
Furnace	15	295	$357	$7,136	20
Geothermal Heat Pump	5	104	$1,593	$31,860	20
Heat Pump Water Heater	6	78	$215	$2,584	12
Insulation	19	471	$413	$10,328	25
Other	7	138	$154	$3,075	20
Solar Hot Water Heater	6	157	$150	$3,740	25
Solar PV[1]	27	680	$1,199	$29,970	25
Water Heater	5	102	$78	$1,564	20
Windows	8	197	$134	$3,362	25

1. Used for other residential market programs.

[142] This chart was developed in in conjunction with utility staff as a guide for the Residential Sector based on utility program savings documents from 2016-17.

Table 147. Average Emission Rates by Year Completed by Technology

	Year Completed					
	2017 [4]	2016	2015	2014	2013	2012 [5]
	CO2 tons					
AD	0.000	0.000	0.000	0.000	0.000	0.000
CHP	0.000	0.000	0.000	0.000	0.000	0.000
EE Only[1]	0.530	0.543	0.570	0.549	0.555	0.536
Fuel Cell[2]	0.068	0.068	0.068	0.068	0.068	0.068
Geothermal[2]	0.400	0.400	0.400	0.400	0.400	0.400
Hydro[2]	0.520	0.520	0.520	0.520	0.520	0.520
Solar PV[1]	0.539	0.562	0.575	0.551	0.572	0.558
Solar Thermal[2]	0.547	0.547	0.547	0.547	0.547	0.547
Wind[1]	0.528	0.537	0.575	0.562	0.558	0.523
	NOX pounds					
AD	0.000	0.000	0.000	0.000	0.000	0.000
CHP	0.000	0.000	0.000	0.000	0.000	0.000
EE Only[1]	0.400	0.480	0.648	0.739	0.741	0.548
Fuel Cell[2]	0.540	0.540	0.540	0.540	0.540	0.540
Geothermal[2]	0.335	0.335	0.335	0.335	0.335	0.335
Hydro[2]	0.430	0.430	0.430	0.430	0.430	0.430
Solar PV[1]	0.463	0.575	0.697	0.790	0.859	0.689
Solar Thermal[2]	0.453	0.453	0.453	0.453	0.453	0.453
Wind[1]	0.367	0.428	0.642	0.760	0.737	0.469
	SO2 pounds					
AD	0.000	0.000	0.000	0.000	0.000	0.000
CHP	0.000	0.000	0.000	0.000	0.000	0.000
EE Only[1]	0.261	0.340	0.665	0.890	0.952	0.732
Fuel Cell[2]	0.391	0.391	0.391	0.391	0.391	0.391
Geothermal[2]	0.297	0.297	0.297	0.297	0.297	0.297
Hydro[2]	0.390	0.390	0.390	0.390	0.390	0.390
Solar PV[1]	0.303	0.411	0.698	0.956	1.107	0.911
Solar Thermal[2]	0.411	0.411	0.411	0.411	0.411	0.411
Wind[1]	0.267	0.333	0.723	1.012	1.000	0.643
	PM2.5 pounds[3]					
AD	0.000	0.000	0.000	0.000	0.000	0.000
CHP	0.000	0.000	0.000	0.000	0.000	0.000
EE Only[1]	0.042	0.043	0.045	0.045	0.045	0.045
Fuel Cell[2]	0.000	0.000	0.000	0.000	0.000	0.000
Geothermal[2]	0.000	0.000	0.000	0.000	0.000	0.000
Hydro[2]	0.000	0.000	0.000	0.000	0.000	0.000
Solar PV[1]	0.046	0.049	0.050	0.050	0.050	0.050
Solar Thermal[2]	0.000	0.000	0.000	0.000	0.000	0.000
Wind[1]	0.040	0.039	0.044	0.044	0.044	0.044

1. Average Emission Rates from AVERT Model.
2. Average Emission Rates from 2007 New England Marginal Emission Rate Analysis.
3. PM 2.5 Rates for 2012 - 2014 are unavailable and use the 2015 rates.
4. 2017 rates are used for projects completed in 2018 and those pending completion.
5. 2012 rates are used for projects completed prior to 2012.

Table 148. Tax Generation Rates per $1 Million Deployed by Technology and Product Structure

Technology and Program	2010-2016			2017 and later		
	Personal Income Tax Factor	Corporate Tax Factor	Sales Tax Factor	Personal Income Tax Factor	Corporate Tax Factor	Sales Tax Factor
Anaerobic Digestion Pilot	$9,693.00	-	$57,231.69	$10,823.00	-	$57,231.69
Biomass - CPACE	$9,693.00	-	$57,231.69	$10,823.00	-	$57,231.69
CHP - Pilot/Strategic Investments	$32,436.00	$26,599.00	$54,741.79	$21,703.00	$26,599.00	$54,741.79
Energy Efficiency - CPACE	$39,888.00	$19,662.00	$58,303.00	$28,807.00	$19,662.00	$58,303.00
Energy Efficiency - Home Energy Solutions Audits (HES)	$96,903.00	$5,152.00	$18,694.00	$40,976.00	$5,152.00	$18,694.00
Energy Efficiency - Multifamily (non-CPACE)	$67,491.00	$19,662.00	$58,303.00	$28,807.00	$19,662.00	$58,303.00
Energy Efficiency (non HES) - Smart-E	$67,491.00	$22,910.00	$30,773.00	$28,908.00	$22,910.00	$30,773.00
Fuel Cell - Strategic Investments	$25,182.00	$7,108.00	$55,195.48	$23,489.00	$7,108.00	$55,195.48
Geothermal - CPACE	$43,515.00	$26,887.00	-	$35,791.22	$26,887.00	-
Geothermal - Smart-E	$43,515.00	$26,887.00	-	$35,791.00	$26,887.00	-
Hydro - CPACE	$28,674.00	$38,937.00	$52,239.00	$32,640.00	$38,937.00	$52,239.00
Other - CPACE	$28,674.00	$19,662.00	$58,303.00	$28,807.00	$19,662.00	$58,303.00
Solar PV - CEBS	$15,435.00	$41,893.01	-	$15,641.23	$41,893.01	-
Solar PV - Clean Energy Communities	$15,435.00	$41,893.01	-	$15,641.23	$41,893.01	-
Solar PV - CPACE	$15,435.00	$41,893.01	-	$15,641.23	$41,893.01	-
Solar PV - CPACE Onyx	$15,435.00	$16,916.65	-	$15,641.23	$16,916.65	-
Solar PV - CPACE SL2	$15,435.00	$16,916.65	-	$15,641.23	$16,916.65	-
Solar PV - CPACE SL3	$27,040.50	$3,373.73	-	$20,878.21	$3,373.73	-
Solar PV - Low Income - PosiGen	$27,040.50	$3,373.73	-	$20,878.21	$3,373.73	-

Technology and Program	2010-2016			2017 and later		
	Personal Income Tax Factor	Corporate Tax Factor	Sales Tax Factor	Personal Income Tax Factor	Corporate Tax Factor	Sales Tax Factor
Solar PV - Multi-Family (blank)	$15,435.00	$14,617.00	-	$15,641.00	$14,617.00	-
Solar PV - OSDG	$15,435.00	$41,893.01	-	$15,641.23	$41,893.01	-
Solar PV - RSIP	$27,040.50	$8,076.60	-	$20,878.21	$8,076.60	-
Solar PV - Smart-E	$27,040.50	$5,250.00	-	$20,878.21	$ 5,250.00	-
Solar PV - Solar Lease SL2	$27,040.50	$26,886.74	-	$20,878.21	$26,886.74	-
Solar PV - Solar Loan	$27,040.50	$26,886.74	-	$20,878.21	$26,886.74	-
Solar PV - Solar PV - Lease Onyx	$15,435.00	$16,916.65	-	$15,641.23	$16,916.65	-
Solar PV - Solar PV - Lease SL2	$15,435.00	$16,916.65	-	$15,641.23	$16,916.65	-
Solar PV - Solar PV - Lease SL3	$27,040.50	$ 3,373.73	-	$20,878.21	$ 3,373.73	-
Solar Thermal - CPACE	$39,888.00	$26,887.00	-	$29,826.00	$26,887.00	-
Solar Thermal - Smart-E and Pilots	$39,888.00	$26,887.00	-	$29,826.00	$26,887.00	-
Waste Heat Recovery - CPACE	$39,888.00	$26,599.00	$54,741.79	$21,703.00	$26,599.00	$54,741.79
Wind - Strategic	$28,674.00	$15,501.00	$52,239.00	$32,640.00	$15,501.00	$52,239.00

Table 149. Public Health Savings Rates per ton of pollutant avoided

Ton avoided	$PM_{2.5}$ - Low	$PM_{2.5}$ - High	SO_X - Low	SO_x - High	NO_x - Low	NO_x - High
1	$120,799	$273,010	$28,665	$64,794	$5,881	$13,293