845 Brook Street, Rocky Hill, CT 06067
T 860.563.0015
ctgreenbank.com

CONNECTICUT
GREEN BANK

October 14, 2016

Dear Audit, Compliance and Governance (ACG) Committee Members,

We look forward to our meeting on Friday, October 21st at the Connecticut Green Bank in Rocky Hill from 8:00 a.m. to 9:00 a.m. We will discuss the following agenda items:

1. Proposed draft revisions to Green Bank Bylaws and Operating Procedures;
2. Proposed draft Comprehensive Annual Financial Report (CAFR);
3. 2016 Legislative and Regulatory Update;
4. FY 2016 Compliance Reporting;
5. Evaluation Framework: Societal Performance Economic Development Metrics; and
6. Updated Banking Resolutions.

The materials for the meeting can be found in the link to the Board of Director's ACG package. As always, please let me know if you have any questions.

Sincerely,

Brian Farnen
General Counsel & Chief Legal Officer

AGENDA

Audit, Compliance and Governance Committee of the
Connecticut Green Bank
845 Brook Street
Rocky Hill, CT 06067

Friday, October 21, 2016 – Special Meeting
8:00-9:00 a.m.

Staff Invited: George Bellas, Brian Farnen, Bryan Garcia, Bert Hunter, Matt Macunas and Eric Shrago

1. Call to order
2. Public Comments – 5 minutes
3. Approve Meeting Minutes for May 25, 2016 Regular Meeting* – 5 minutes
4. Discuss proposed draft revisions to Green Bank Bylaws and Operating Procedures** – 5 minutes
5. Discuss proposed draft Comprehensive Annual Financial Report (CAFR)** – 20 minutes
6. 2016 Legislative and Regulatory Update –5 minutes
7. Discuss FY 2016 Compliance Reporting – 5 minutes
8. Discuss Evaluation Framework: Societal Performance: Economic Development Metrics** – 5 minutes
9. Discuss Updated Banking Resolutions – 5 minutes**
10. Adjourn

*Denotes item requiring Committee action
** Denotes item requiring Committee action and recommendation to the Board for approval

Join the meeting online at https://global.gotomeeting.com/join/351545757

Or call in using your telephone:
Dial +1 (872) 240-3412
Access Code: 351-545-757

Next Regular Meeting: Wednesday, May 24, 2017 from 8:30-9:30 a.m.
Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT
(**Pending Approval from CGB BOD**)

RESOLUTIONS

Audit, Compliance and Governance Committee of the
Connecticut Green Bank
845 Brook Street
Rocky Hill, CT 06067

Friday, October 21, 2016 – Special Meeting
8:00-9:00 a.m.

Staff Invited: George Bellas, Brian Farnen, Bryan Garcia, Bert Hunter, Matt Macunas and Eric Shrago

1. Call to order

2. Public Comments – 5 minutes

3. Approve Meeting Minutes for May 25, 2016 Regular Meeting* – Matt Ranelli - 5 minutes

Resolution #1

Motion to approve the minutes of the Audit, Compliance and Governance Committee meeting for May 25, 2016. Second. Discussion. Vote

4. Discuss proposed draft revisions to Green Bank Bylaws and Operating Procedures** – Brian Farnen -5 minutes

Resolution #2

RESOLVED, that the Audit, Compliance, and Governance Committee hereby recommends to the Board of Directors of the Connecticut Green Bank approval of the revisions to the Green Bank Bylaws.

RESOLVED, that the Audit, Compliance, and Governance Committee hereby recommends to the Board of Directors of the Connecticut Green Bank approval of the revisions to the Green Bank Operating Procedures, which shall be contingent upon no material or substantive revisions pursuant to the public notice and comment period under CT Gen Stat § 1-121.

Discussion. Vote

5. Discuss proposed draft Comprehensive Annual Financial Report (CAFR)** – George Bellas and Marcum - 20 minutes

Resolution #3

WHEREAS, Article V, Section 5.3.1(ii) of the Connecticut Green Bank ("Green Bank") Operating Procedures requires the Audit, Compliance, and the Governance Committee (the "Committee") to meet with the auditors to review the annual audit and formulation of

an appropriate report and recommendations to the Board of Directors of the Green Bank (the "Board") with respect to the approval of the audit report;

NOW, therefore be it:

RESOLVED, that the Committee hereby recommends to the Board of Directors for approval the proposed draft Comprehensive Annual Financial Report (CAFR) contingent upon no further adjustments to the financial statements or additional required disclosures which would materially change the financial position of the Green Bank as presented.

Discussion. Vote

6. Discuss IT Vendor Escalation Documentation* – Eric Shrago - 5 minutes

Resolution #4

Motion to approve the IT Vendor Escalation Documentation. Second. Discussion. Vote

7. 2016 Legislative and Regulatory Update –5 minutes

8. Discuss FY 2016 Compliance Reporting – 5 minutes

9. Discuss Evaluation Framework: Societal Performance: Economic Development Metrics** – 5 minutes

Resolution #5

RESOLVED, that the Audit, Compliance and Governance Committee hereby recommends to the Board of Directors for approval of the proposed draft Economic Development: Societal Performance documentation in the memo to the Department of Economic and Community Development of September 13, 2016 to support the Evaluation Framework. Second. Discussion. Vote

10. Discuss Updated Banking Resolutions – 5 minutes**

RESOLUTION #6

RESOLVED, that Audit, Compliance and Governance Committee (the "Committee") recommend that for any FDIC insured bank requiring a particular form of resolution of the Connecticut Green Bank ("Green Bank") Board of Directors for opening a bank account or for other bank account matters, the President and CEO of the Green Bank is authorized to approve the form of such resolutions after review and approval by the General Counsel of the Green Bank,

RESOLVED, the Committee recommends that upon such approval, each resolution is adopted and the Secretary or Assistant Secretary as applicable is authorized to certify the adoption of all such resolutions.

RESOLVED, that the Committee recommends that the Board of Directors authorize the President and CEO to open such bank accounts as are necessary or desirable in the ordinary course of business for the Green Bank and any affiliates it controls that are in existence as of the date of this resolution or to be created by the Board of Directors including but not limited to:

- CEFIA Holdings LLC
- CT Solar Loan I LLC
- CEFIA Services Inc.
- CT Solar Lease 2 LLC
- CGB Meriden Hydro LLC

RESOLVED, that the Committee recommends that the Board of Directors authorize the following Green Bank employee positions to draw checks and initiate and release wire or ACH transfers from such accounts in accordance with the established signatory authority as stated in the Green Bank internal control procedures manual:

- President and CEO
- Vice President Finance and Administration
- Executive Vice President and Chief Investment Officer
- Vice President, Commercial and Industrial Programs
- Managing Director, Statutory and Infrastructure Programs
- Director of Operations

RESOLVED, that the Committee recommends that the Board of Directors affirm that as of the date of this resolution these positions are occupied by the following individuals:

- President and CEO - Bryan Garcia
- Vice President Finance and Administration - George Bellas
- Executive Vice President and Chief Investment Officer – Roberto Hunter
- Vice President, Commercial and Industrial Programs – Michael Dykes
- Managing Director, Statutory and Infrastructure Programs – Dale Hedman
- Director of Operations – Eric Shrago
- Secretary – Matthew Ranelli

11. Adjourn

*Denotes item requiring Committee action
** Denotes item requiring Committee action and recommendation to the Board for approval

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Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT
(**Pending Approval from CGB BOD**)

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #1

Call to Order

October 21, 2016

Special Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #2

Public Comments

October 21, 2016

Special Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #3

Approval of Meeting Minutes of May 25, 2016 (Regular Meeting)

October 21, 2016

Special Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #4

Discuss Proposed Draft Revisions to Green Bank Bylaws and Operating Procedures

October 21, 2016

Special Meeting

Connecticut Green Bank
Proposed Revisions to Bylaws

Conform Board and Committee schedules set to our fiscal year, not calendar year

Board meetings must be 6 times a year, but don't have to be regularly scheduled meetings

Delete section related to being within Connecticut Innovations, Inc. (CI) for administrative purposes

October 21, 2016
Special Meeting

Connecticut Green Bank

Proposed Revisions to Operating Procedures

Operating Procedures require 30 Day Public Notice in CT Law Journal

Revise CDFI enabling language to include both the Green Bank *and an affiliate* – (latter being the more likely option)

Delete sections related to being within CI for administrative purposes

Clarify and simplify state contracting requirement language

~~*Remove requirement that the amount to be financed by the Green Bank and other nonequity financing sources cannot exceed eighty per cent (80%) of the cost of developing and deploying such projects*~~

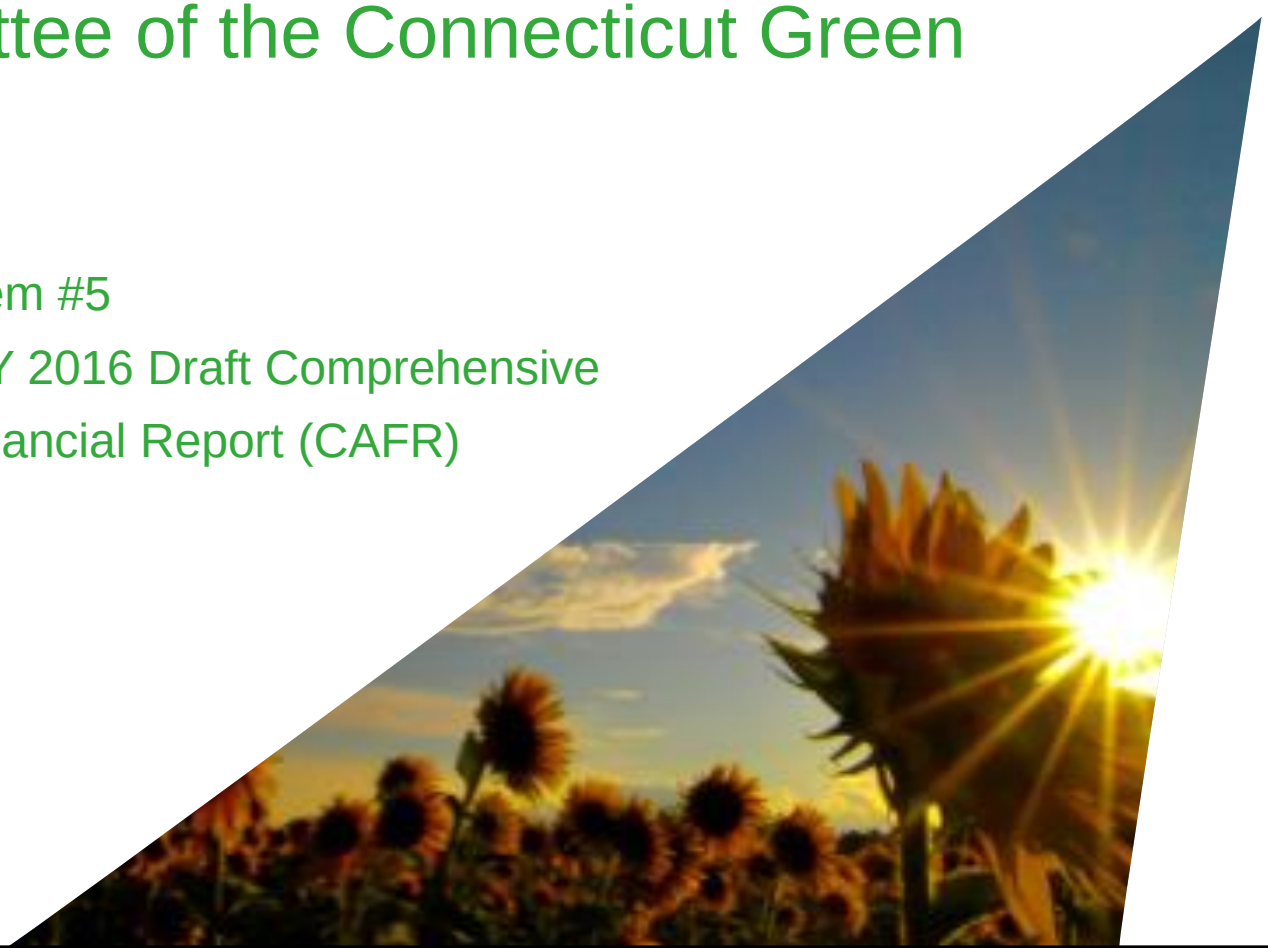
Clarify borrower Chief Financial Officer certification requirement only needed during time period when funds are dispersed, not afterwards

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #5

Discuss FY 2016 Draft Comprehensive Annual Financial Report (CAFR)



October 21, 2016

Special Meeting

Results of Annual Financial Audit and Status of 2016 Comprehensive Annual Financial Report (CAFR)

- The draft 2016 CAFR is substantially complete. Three footnote disclosures remain to be completed pertaining to program loans, financing activities, future commitments and loan guarantees. No material changes to the net financial position of the Green Bank is anticipated before the issuance of the CAFR to the public.
- The structure, financial statement disclosures and financial statement statistics presented in the 2016 draft CAFR are consistent with presentations made in the 2015 CAFR.
- GFOA Certificate of Achievement in Financial Report update
- Blum Shapiro will now present the results of its financial audit of the Green Bank and FY2016 Financial Highlights.

October 21, 2016
Special Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #6

2016 Legislative and Regulatory Update

October 21, 2016

Special Meeting

Connecticut Green Bank
2017 Legislative Concepts

Policy	Description	Green Bank Role
Defense	Defend our funding sources and potential cash sweeps	Lead – Number one legislative priority
R-PACE	Full policy, CGB administration	Lead
C-PACE	Technical tweak	Lead
Local manufacturing incentive	Remove an unused residential solar "kicker" incentive, and possibly replace with incentive for local labor. US-India trade dispute says an existing 5% kicker may be against WTO obligations.	Lead
Accessing low-cost federal capital	Open our enabling statute to allow us to match USDA loan guarantee definitions for "eligible borrowers"	Lead, seek support of DEEP and also utilities and EEB. Necessity of this legislative change TBD.
Data Coordination	Standardized definition for census tract data sources and "distressed communities" between CGB and EDCs. For statutory DEEP reporting in 16-245ee.	Defer to DEEP to lead. CGB support.
Lead By Example	Performance contracting on state buildings has the potential to count against either the spending cap or bonding cap (or both).	Defer to DEEP to lead, with Treasurer's Office. CGB support.
Anaerobic digester pilot expansion	Others might propose more AD activity	No – likelier to be either be DEEP or third party proposal if we see it
Renewable Thermal Technologies	Policies that might flow from a 2016 draft Comprehensive Energy Strategy	Support DEEP's lead
Electric Vehicles	Policies that might flow from a 2016 draft Comprehensive Energy Strategy	Support DEEP's lead
Grid 2.0 catch-all	Policies that might flow from a 2016 draft Comprehensive Energy Strategy	Support DEEP's lead
Rate Design	Fixed/variable charge type of debate	Advocates lead – potential CGB support

October 21, 2016
Special Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #7

Discuss FY 2016 Compliance Reporting

October 21, 2016

Special Meeting

Connecticut Green Bank
FY 2016 Compliance Reporting

Connecticut Green Bank	Statutory Reporting Requirement Checklist															
Report Coordinator: Matt Macunas																
		FY14				FY15				FY16				FY17			
	Individual Responsible for Filing	9/30/2013	12/31/2013	3/31/2014	6/30/2014	9/30/2014	12/31/2014	3/31/2015	6/30/2015	9/30/2015	12/31/2015	3/31/2016	6/30/2016	9/30/2015	12/31/2015	3/31/2016	6/30/2016
Accounting - Section 1-123 subsection(b): Quarterly Financial Cash Flow Report to OFA. Such Report shall include, but not be limited to, for each fund and account of the agency: (1) The beginning fiscal year balance;(2) all funds expended and all revenue collected by the end of the quarter; and (3) total expenditures and revenues	G. Bellas	03/14/14	03/14/14	04/21/15	04/21/15	06/16/16	06/16/16	06/16/16	06/16/16	05/31/16	05/31/16	05/31/16	08/10/16				
HB - Section 1-123 subsection (c): Quarterly Personnel Status Report to OFA. Such report shall include, but not be limited to: (1) The total number of employees by the end of the quarter.	C. Baisden	06/17/14	06/17/14	06/17/14	08/05/14	10/02/14	01/12/15	04/12/15	07/09/15	10/09/15	01/08/16	03/31/16	07/05/16	10/05/16			
"Annual Report"/CAFR - Section 1-123 subsection (e) "(1) A list of all bond issues for the preceding fiscal year, including, for each such issue, the financial advisor and underwriter, whether the issue was competitive, negotiated or privately placed, and the issue's face value and net proceeds; (2) a list of all projects other than those pertaining to owner-occupied housing or student loans receiving financial assistance during the preceding fiscal year, including each project's purpose, location, and the amount of funds provided by the		Governor	Auditors of Public Accounts	Legislative Program Review and Investigations Committee (2 copies)		Governor	Auditors of Public Accounts	Legislative Program Review and Investigations Committee (2 copies)		Governor	Auditors of Public Accounts	Legislative Program Review and Investigations Committee (2 copies)					
	FY14-16: M. Dykes FY16: E. Shrago, M. Macunas	12/30/2014	12/30/2014	12/30/2014	12/30/2014	12/31/2015	12/31/2015	12/31/2015	12/31/2015								
BEEEFA bonding - Section 16-245aa subsection (d): CGB shall report on the effectiveness of the Renewable Energy and Efficient Energy Finance program to the joint standing committee of the General Assembly having cognizance of matters relating to energy	B. Garcia	January 1, 2013	January 1, 2014	January 1, 2015	January 1, 2016												
	Date Filed:	2/8/2013	1/15/2014	15-Mar-2015	12/23/2015												
RSIP - Section 16-245ff report by January 1, 2017 and every two years thereafter to the Legislative Energy and Technology Committee on its progress toward deploying 300 MW of residential solar PV	FY15: D. Goldberg, A. Brydges FY17: M. Macunas	January 1, 2014 (obligation prior to PA 15-194)	January 1, 2017											January 1, 2019			
	Date filed:																
		DEEP		Energy & Technology Committee	Commerce Committee	DEEP		Energy & Technology Committee	Commerce Committee	DEEP		Energy & Technology Committee	Commerce Committee				
Annual Report - Section 245n(f)(1) The board shall issue annually a report to the Department of Energy and Environmental Protection reviewing the activities of the Connecticut Green Bank in detail and shall provide a copy of such report, in accordance with the provisions of section 11-4a, to the joint standing committees of the General Assembly		12/30/2014		12/30/2014	12/30/2014	12/31/2015		12/31/2015	12/31/2015	10/17/2016		10/17/2016	10/17/2016				
Board Meetings - At least 6 per fiscal year, per CGB Bylaws					FY16						FY17						
					12/16/2015 R	1/15/2016 R	2/26/2016 S	3/3/2016 S	4/22/2016 R	6/17/2016 R	7/6/2016 S	7/22/2016 R	10/21/2016 R				

October 21, 2016
Special Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #8

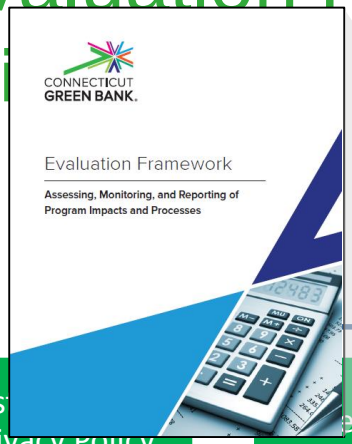
Draft Evaluation Framework: Societal Performance: Economic Development Metrics

October 21, 2016

Special Meeting

Evaluation Framework
"Bi or Architecture

CONNECTICUT GREEN BANK

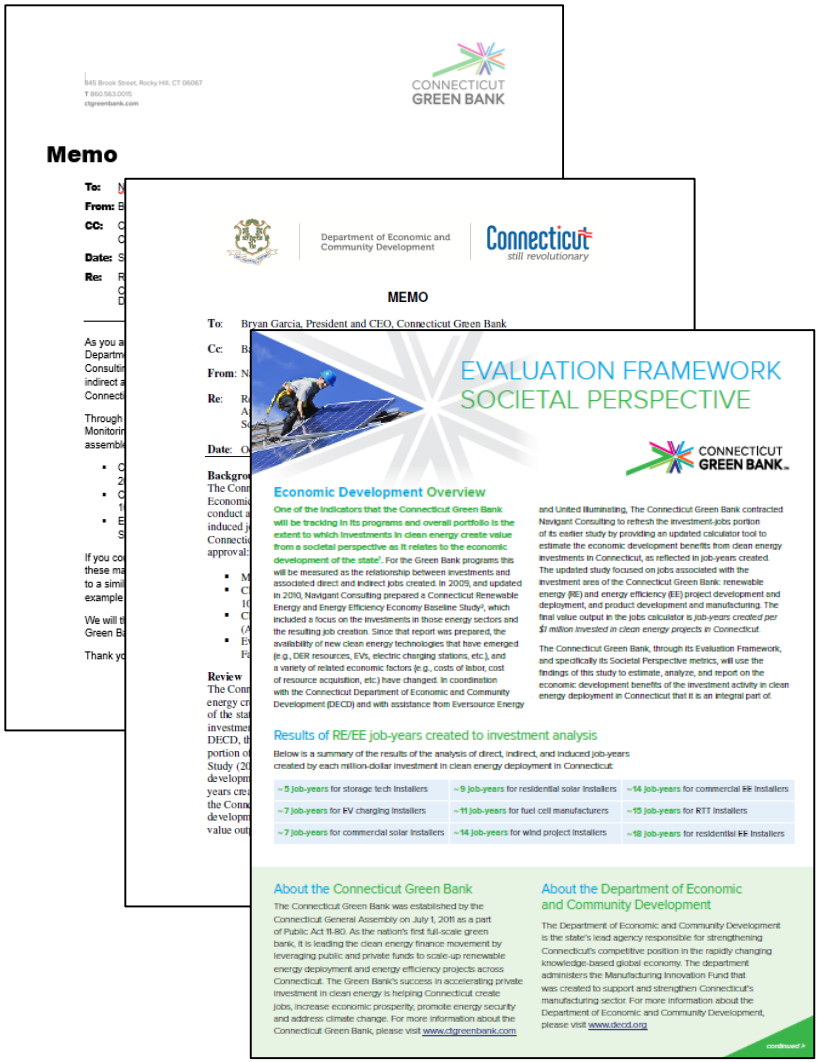


- Evaluation Framework
  - Cus… Privacy Policy
  - Data …ection and Analysis Protocol
    - Smart-E Loan
    - C-PACE
    - Other
  - Societal Benefits
    - Energy
      - Energy Efficiency (PSD and SRS)
      - Renewable Energy (Power Clerk & Locus)
      - Others (e.g., RTT, AFV and Infrastructure)
    - Environment (DEEP)
      - CO2 Emissions (EPA AVERT)
      - Equivalencies (EPA AVERT)
      - Public Health (EPA COBRA)
    - Economy (DECD)
      - Investment
      - Direct, Indirect, and Induced Jobs
      - Others (e.g., GDP growth)

Evaluation Framework

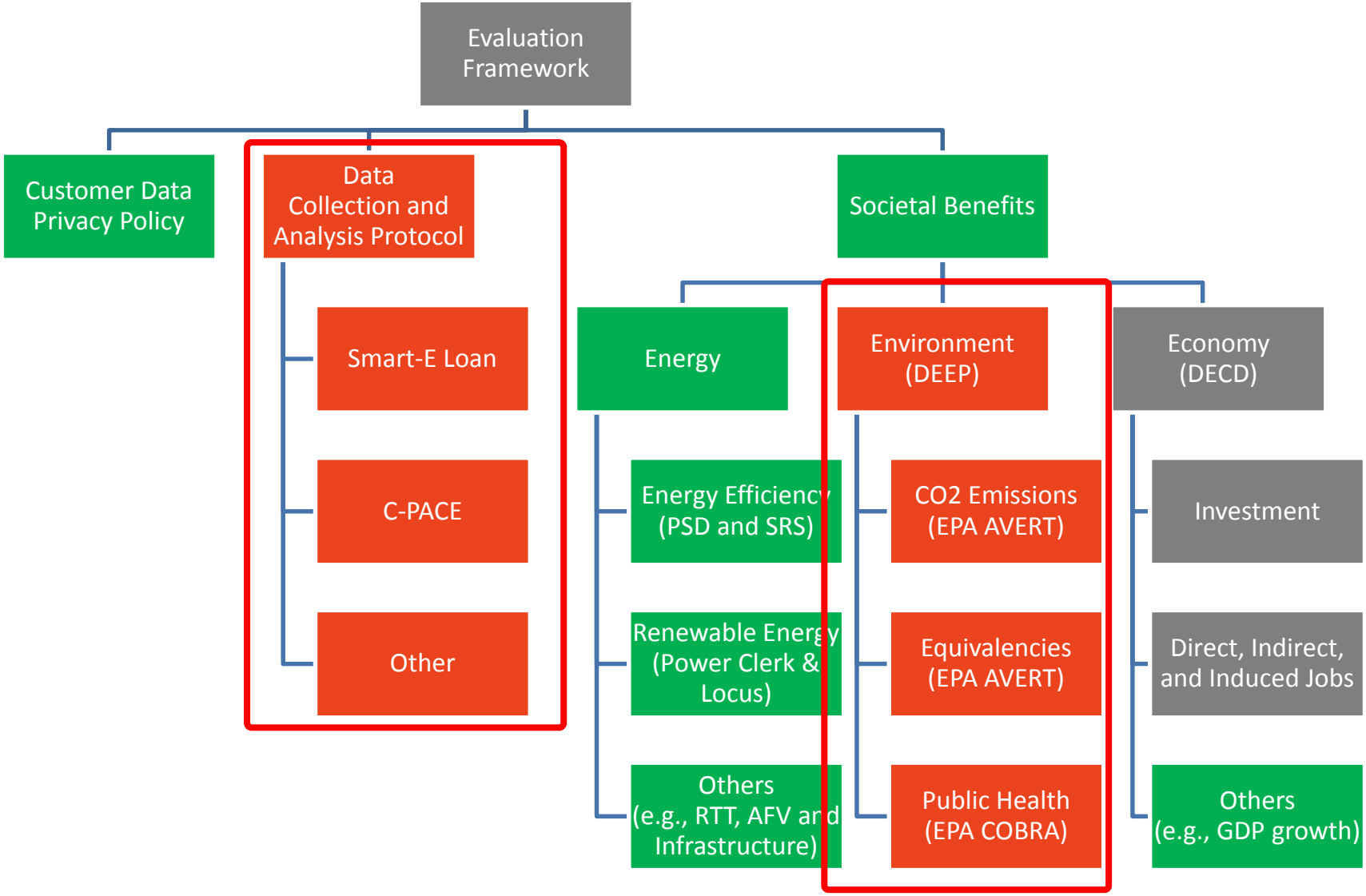
Societal Perspective – Economy

- **Overview** – updated prior analysis done by Navigant Consulting for DECD, CCEF, and CEEF in 2009 and 2010.
- **Focus** – specifically targeted the products and services portion of the RE/EE Value Chain with a focus on investment leading to direct, indirect, and induced jobs-years.
- **Documentation** – Final Report, Calculator, CGB Request for Approval, DECD Approval, and Fact Sheet.
- **Next Step** – use for FY 2017 CAFR



Evaluation Framework

FY 2017 – Data Collection and Environment



CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #9

Discuss Updated Banking Resolutions

October 21, 2016

Special Meeting

Connecticut Green Bank
Updated Banking Resolutions

Revised set of resolutions will authorize the President and CEO and the VP - Finance and Administration to set up bank accounts when a need to do so arises pursuant to:

- an applicable Board authorization and
- consistent with our governance documents

For the purposes of such things as the creation of a SPEor a loan program that requires the establishment of a bank account.

October 21, 2016
Special Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #10

Adjourn

October 21, 2016

Special Meeting

AUDIT, COMPLIANCE, & GOVERNANCE COMMITTEE OF THE CONNECTICUT GREEN BANK

Draft Minutes – Regular Meeting
Wednesday, May 25, 2016
8:30 – 9:30 AM

A regular meeting of the Audit, Compliance, and Governance Committee ("Audit Committee") of the Board of Directors of the Connecticut Green Bank (the "Green Bank") was held on May 25, 2016, at the office of the Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT in the Albert Pope Board Room.

1. **Call to order:** Mr. Ranelli, Chairperson of the Audit Committee, called the meeting to order at 8:32 a.m. Audit Committee members participating: Matthew Ranelli, John Harrity, & Patricia Wrice.

   Staff Attending: Bryan Garcia, Brian Farnen (by phone), George Bellas, Bert Hunter, Cheryl Samuels, Jane Murphy, and Eric Shrago.

2. **Public Comments**

   There were no public comments.

3. **Approve Meeting Minutes for December 4, 2015 Regular Meeting**

   Matt Ranelli requested that a typo be fixed listing him as T. Ranelli.

   Upon a motion made by John Harrity, seconded by Pat Wrice, the Committee unanimously approved the minutes from the December 4, 2015 meeting.

   Resolution #1

   Motion to approve the minutes of the Audit, Compliance and Governance Regular Meeting for December 4, 2015

4. **Review Audit RFP Process and Recommendation**

   George Bellas provided an overview of the Audit RFP Process. He stated that since the Green Bank has used the same accounting firm to provide audit services for six consecutive years we are statutorily obligated to change to a new accounting firm. He explained that they received three proposals in response to the RFP. Based upon the recommendation of the staff audit evaluation team that reviewed and scored each response based upon a myriad of scoring factors, staff is recommending Blum Shapiro to provide audit services for the fiscal years 2016 through 2018

George Bellas explained that Blum Shapiro is familiar with the Green Bank and that the audit evaluation team believes that they had the best overall response and that the hours that they proposed make sense. Matt Ranelli advised that there is a large difference between the hours estimated with Blum Shapiro and RSM. He questioned if it is a fixed price. George Bellas explained that it is a fixed price.

Brian Farnen explained that with Jane Murphy on board in the position of Controller, this should reduce the hours needed to complete the audit. George Bellas reiterated that thought stating the process of preparing the necessary financial statements and schedules should be more efficient..

Matt Ranelli questioned the sustainability and diversity responses. George Bellas explained that sustainability accounting is an evolving area of practice in the accounting field and the profession is developing standards, and individual firms are gaining experience as the demand for such engagements grows. He explained that staff is working with our current accounting firm, Marcum to develop a scope of engagement to provide a report to the Green Bank on its internal data collection system used to develop and report on sustainability metrics included in the annual CAFR. He explained that right now there are no established reporting standards in the United States pertaining to sustainability accounting. .

Bryan Garcia stated that this is a very new process and that once the Green Bank begins issuing Green Bonds they must have accurate accounting for the use of proceeds in a format required by the bond investors. He explained that they are defining how the Green Bonds are going to be tracked and monitored in order to speak to the societal benefit (e.g., GHG emission reductions). Matt Ranelli noted the challenges with reporting emission reductions given that the REC goes into the Class I RPS. Bryan will work with DEEP on the appropriate way to communicate the Connecticut Green Bank's contribution to emission reductions through its programs. Matt Ranelli also commented that since this is a multiple year contract, the firm selected should be asked to report back annually on their standing in the areas of diversity and sustainability. Staff agreed with this view.

John Harrity stated that as for firm size and location Blum Shapiro is an excellent fit. He stated that they are not too large, yet not too small, yet they seem large enough to handle the complexity of the business of the Green Bank.

Matt Ranelli questioned if this was a three-year agreement. George Bellas stated that is, but the Green Bank will only enter into a PSA with the firm for one fiscal year at a time. During this three year period if the Green Bank determined a need to engage another firm to perform the audit it could do so..

Matt Ranelli requested that they have a motion to approve Blum Shapiro, but asked staff to reach out to Blum Shapiro requesting clarification and further information on some of the terms and conditions that were discussed with staff during the meeting.

Upon a motion made by John Harrity, and seconded by Pat Wrice, the Committee voted unanimously in favor.

Resolution #2

RESOLVED, that the Audit, Compliance and Governance Committee hereby recommends to the Board of Directors for approval of Blum Shapiro as the auditor of the Connecticut Green Bank based on the Audit RFP review and evaluation process.

5. Review CT SL2 LLC audited financial statements issues May 11, 2016

George Bellas provided an overview of the audited financial statements of CT Solar Lease 2 LLC, CTSL2. He explained that CT SL2 is required to engage an accounting firm to issue an annual audit report on its financial statements which is to be distributed to CT SL2's equity investor and its creditors.. He explained that for the year ending December 31, 2015the accounting firm engaged by CT SL2, Marcum, issued an unqualified, "clean" opinion. Marcum also did not bring to management's attention any material weaknesses in internal accounting controls that needed to be corrected.. He did advise that with the complexity of some of CT SL 2's activities, staff had some complicated accounting issues to work through, but that it took a team effort to work through these challenges and complete the preparation of the financial statements in a timely manner. He explained that the audit report was being presented to the Committee for their review and to answer any questions they might have on CT SL2's activities for informational purposes and that he wanted to the Committee to see it.

Matt Ranelli advised that typically Marcum has always contacted the Committee members individually. He explained that they did contact him to see if he had any concerns. George Bellas noted that ordinarily staff would have circulated a draft of the audit report in advance to obtain any comments from Committee members, but due to time constraints involving the report issuance deadline, this effort was overlooked this year. Staff will make sure the report is available sooner to the Committee next year to give them the ability to review it before its issuance.

John Harrity stated that there has been remarkable growth between 2014 and 2015. George Bellas stated that it has been a total team effort. Bert Hunter stated that revenues will significantly accelerate in the months ahead and that the Committee is not seeing the full revenue effect that they will see next year when a majority of the contracted revenues will be in place for a complete year.

The Committee would like George Bellas and Bryan Garcia to extend appreciation on behalf of the Board of Directors to Marcum for their services on prior audits of the Green Bank.

Resolution #3

RESOLVED, that the Audit, Compliance and Governance Committee hereby recommends to the Board of Directors for approval the proposed CT SL2 LLC audited financial statements issued May 11, 2016.
Second. Discussion. Vote

6. **Modification of Internal Control Procedure CGB 101— Purchasing and Accounts Payable, and CGB 102 – Consulting and Advisory Services to reflect the hiring of Eric Shrago, Director of Operations, to replace Mackey Dykes, COO**

George Bellas welcomed Eric Shrago as Director of Operations to replace Mackey Dykes. Bryan Garcia explained that it had been a very competitive hiring process. He explained that Eric was the perfect fit for the position.

Matt Ranelli asked Eric Shrago to provide a bit of his background. Eric Shrago stated that he was at Goldman Sachs for just over nine years. He explained that he had spent a lot of his career building new business. He stated that he had left Goldman Sachs in 2011 and went to a financial tech firm. He explained that he decided to pursue his Masters at Columbia. He explained that he had graduated in May 2015 and spent about nine months doing consulting on his own.

George Bellas explained that Mackey Dykes has moved on to manage Commercial, Industrial, and Institutional Programs. He requested that the Committee replace Mackey Dykes name with Eric Shrago on purchasing, accounts payable, consulting and advisory services, and on credit cards. He requested that the Committee approve these changes and recommend them to the Board.

Upon a motion made by Pat Wrice, seconded by John Harrity, the Committee voted unanimously in favor of the changes.

Resolution #4

RESOLVED, that the Audit, Compliance and Governance Committee hereby recommends to the Board of Directors for approval the proposed revisions to the current internal accounting control policies.

7. **Review Draft Evaluation Framework and Recommendation**

Bryan Garcia provided an overview of the Draft Evaluation Framework and Recommendation. He stated that they are developing their own systems to collect information on projects that the Connecticut Green Bank supports. He explained that in some cases they monitor the performance of projects over time. He explained, that in the past, that they have not had a formal evaluation framework to work from. He explained that they are going to have to have this foundation when they move into the Green Bond world in order to account for use of proceeds and to track and monitor system performance.

Bryan Garcia explained that Andy Brydges was the lead on this, but when Andy left in March Bryan Garcia took over the lead. He explained that through an RFQ process in 2013, that they have decided on a company, Opinion Dynamics and Dunsky Energy Consulting to assist them in developing the framework.

Bryan Garcia explained what the evaluation framework is and isn't. . He explained that the Connecticut Green Bank is very critical of assessing its impact, and that the evaluation framework is a management tool for the organization in helping to constantly look at how it is performing to targets. He explained that this is going to be an ongoing data integration system, less driven by incentives and less punitive. It will be more focused on their mission of doing more of what the Connecticut Green Bank does as an organization.

Bryan Garcia explained the process framework and that they will look at the market potential (e.g., total available market), what are the key performance indicators, what data are they collecting and analyzing, as well as what human and financial resources are being devoted to products and programs through the annual budget and accounting processes. He explained that they report out impact through the non-financial statistics section of the CAFR. He explained that they will look at how the Connecticut Green Bank measures its social impact.

Bryan Garcia explained that on the efficiency side data collection is estimated, but renewables can be metered. On the environmental side he explained that they are working with DEEP on how to collect and analyze data on clean energy and what the associated greenhouse gas emissions and criteria pollutant reductions are. He explained that historically EPA data has been used through e-Grdi, but not they are transitioning to AVERT. He explained that DEEP suggested that the Connecticut Green Bank use the EPA AVERT tool.

Matt Ranelli questioned how the REC's are being handled. Bryan Garcia stated that the Connecticut Green Bank is helping Connecticut to hit meet its Class I RPS through the installation of instate clean energy projects. Matt Ranelli questioned if this accounts for the REC's being sold back into the market. Bryan Garcia advised that it does not and noted that he will work with DEEP through the process to properly communicate this.

Matt Ranelli requested a modified resolution to provide comments prior to the Board Meeting, conditioned on whatever comments that they might have.

Upon a motion made by John Harrity, seconded by Pat Wrice, the Committee voted unanimously to approve the modified resolution.

Resolution #5

RESOLVED, that the Audit, Compliance and Governance Committee provides a conditional recommendation to the Board of Directors for approval of the proposed draft Evaluation Framework subject to written comments from the members of the Committee before the next Board of Directors meeting.

8. 2016 Legislative and Regulatory Update

Brian Farnen provided an overview of the Legislative and Regulatory update. He explained that it had been an overall successful session. Brian explained that Green Bank offered a suite of legislative proposals, and also worked to defend its operating budget by educating policymakers on the negative impact of fund sweeps on the Green Bank and our unique model. He explained that there had been four overall that needed to be addressed. They were (1) technical changes to the Solar Home Renewable Energy Credit ("SHREC") policy to enable master purchase agreements to proceed, (2) a technical fix to the C-PACE enabling statute, (3) a redraft of the Green Bank's authorizing statute so that it is not within Connecticut Innovations ("CI") for administrative purposes and allows for direct access to the same powers, and (4) overhauls the existing Residential PACE ("R-PACE") statute to operationalize the program

He explained that he had met with the Majority and Minority Leaders in the House and Senate, all the statewide constitutional offficers and that we were going to continue that outreach.

Brian Farnen discussed three bills that were combined into one related to the Connecticut Green Bank Administrative Authority plus the technical fixes to CPACE and SHREC. He explained that as a result of the passage of the bill, the Green Bank is no longer within Connecticut Innovations for administrative purposes. He also provided clarification on the SHREC. He stated that the Green Bank and the electric utilities needed this legislative change to move forward with implementation of the SHREC legislation from last year.

Brian Farnen discussed RPACE explaining that staff wanted to enact residential PACE, similar to what was done on the Commercial PACE side. He explained that the Green Bank is making progress, but that the biggest hurdle is with FHFA, and the bill failed to achieve passage in this year's session.

Matt Ranelli requested that the rate design issue be brought back for discussion at the next meeting of the ACG Committee.

9. Discuss FY 2016 Compliance Reporting

To be taken up next time.

10. Discuss Board Member Appointments Ending During FY 2016

To be taken up next time.

11. Discuss Draft Succession Plan

Matt Ranelli noted that Bryan Garcia should check to see if senior staff indeed are likely to stay over the long-term as was stressed in the document with all of the "D's" in the table. Bryan Garcia requested that if the Committee members had additional comments, they can send them to him prior to June 10th. The Succession Plan will be discussed at a future meeting of the Board of Directors.

12. <u>Adjourn</u>

Upon a motion made by John Harrity, seconded by Pat Wrice, the Audit Committee members voted unanimously in favor of adjourning the May 25, 2016 meeting at 9:38 a.m.

Respectfully Submitted,

_____

Matthew Ranelli, Chairperson of the Audit,
Compliance, and Governance Committee

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CONNECTICUT
GREEN BANK

Memo

To: Audit, Compliance & Governance Committee of the CGB Board of Directors

From: Brian Farnen, General Counsel and Chief Legal Officer

CC: Bryan Garcia, Suzanne Kaswan and Eric Shrago

Date: October 21, 2016

Re: Proposed Draft Revisions to Green Bank Bylaws and Operating Procedures

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The Bylaws and the Operating Procedures of the Connecticut Green Bank have been revised for the Audit, Compliance & Governance (ACG) Committee's review and consideration.

Proposed revisions to Bylaws:

- Conform Board and Committee schedules set to our fiscal year, not calendar year
- Board meetings must be 6 times a year, but don't have to be regularly scheduled meetings
- Delete section related to being within Connecticut Innovations, Inc. (CI) for administrative purposes

Proposed Revisions to the Operating Procedures:

- Revise CDFI enabling language to include both the Green Bank *and an affiliate* – (latter being the more likely option)
- Delete sections related to being within CI for administrative purposes
- Clarify and simplify state contracting requirement language
- Remove requirement that the amount to be financed by the Green Bank and other nonequity financing sources cannot exceed eighty per cent (80%) of the cost of developing and deploying such projects
- Clarify borrower Chief Financial Officer certification requirement only needed during time period when funds are dispersed, not afterwards

Please note that both documents require a 2/3rds majority of the Board of Directors after the ACG Committee recommends approval. The Operating Procedures must also go out for public notice for thirty days in the Connecticut Law Journal pursuant to CT Gen Stat § 1-121. If we receive any material or substantive comments pursuant to this public notice, we will bring back any worthy revisions for consideration to the ACG Committee for review and approval before final review and consideration by the Board which will occur after the public comment period.

Resolution

RESOLVED, that the Audit, Compliance, and Governance Committee hereby recommends to the Board of Directors of the Connecticut Green Bank approval of the revisions to the Green Bank Bylaws.

RESOLVED, that the Audit, Compliance, and Governance Committee hereby recommends to the Board of Directors of the Connecticut Green Bank approval of the revisions to the Green Bank Operating Procedures, which shall be contingent upon no material or substantive revisions pursuant to the public notice and comment period under CT Gen Stat § 1-121.

CONNECTICUT GREEN BANK

BYLAWS

PURSUANT TO

Section 16-245n of the
Connecticut General Statutes

Adopted: ~~June~~ October 17, 2015~~21, 2013~~

Revised: ~~October 17, 2014~~[ ]

ARTICLE I
NAME, PLACE OF BUSINESS

1.1. **Name of the Green Bank**. The name of the Green Bank shall be, in accordance with the Statute, the "Connecticut Green Bank".

1.2. **Office of the Green Bank**. The office of the Green Bank shall be maintained at such place or places within the State of Connecticut as the Board may designate.

ARTICLE II
BOARD OF DIRECTORS

2.1. **Powers**. The powers of the Green Bank are vested in and exercised by a Board of Directors which may exercise all such authority and powers of the Green Bank and do all such lawful acts and things as are necessary to carry out the Comprehensive Plan and the purposes of the Green Bank as provided in the Resolution of Purposes, or as are otherwise authorized or permitted by the Statute or other provisions of the General Statutes, including the authorization of expenditures and use of funds from the Clean Energy Fund created by Section 16-245n(c) of the General Statutes, formerly known as the Renewable Energy Investment Fund, and the Green Connecticut Loan Guaranty Fund created by Section 16a-40f(b) of the General Statutes.

2.2. **Chairperson**. The Chairperson of the Board shall be appointed by the Governor. The Chairperson shall perform the duties imposed by the Statute, these Bylaws, and by resolution of the Board, and shall preside at all meetings of the Board which he or she attends. At each meeting the Chairperson shall submit such recommendations and information as the Chairperson may consider appropriate concerning the business, affairs, and policies of the Green Bank. The Chairperson shall serve at the pleasure of the

Governor but no longer than the term of office of the Governor or until the Chairperson's successor is appointed and qualified, whichever is longer.

2.3. **Vice Chairperson**. The Board shall elect from its members a Vice Chairperson. The Vice Chairperson shall perform the duties imposed by the Statute, these Bylaws, and by resolution of the Board. In the absence or incapacity of the Chairperson, the Vice Chairperson shall perform all the duties and responsibilities of the Chairperson. In the absence or incapacity of the Vice Chairperson, or in case of his or her resignation or death, the Board shall elect its members an acting Vice Chairperson during the time of such absence or incapacity or until such time as the Board shall elect a new Vice Chairperson. The Vice Chairperson shall serve until a successor is elected by the Board.

2.4. **Secretary**. A Secretary may be elected by the Board. The Secretary shall perform the duties imposed by the Statute, these Bylaws, and by resolution of the Board. In the absence or incapacity of the Secretary, or in case of a resignation or death, the Board shall elect from their number an acting Secretary who shall perform the duties of the Secretary during the time of such absence or incapacity or until such time as the Board shall elect a new Secretary. The Secretary shall serve until a successor is elected by the Board.

2.5. **Delegation of Powers**. The Board may, by resolution, delegate to the President or other officers of the Green Bank such powers of the Green Bank as they believe are necessary, advisable, or desirable to permit the timely performance of the functions of the Green Bank and to carry out the plans, policies, procedures, and decisions of the Board, except that such delegation shall not include any duties or responsibilities required by the Statute

or these Bylaws to be performed by the Chairperson or the Board or otherwise in conflict with law.

2.6. **Directors**. The Directors shall be appointed and serve as provided in the Statute.

ARTICLE III
OFFICERS AND EMPLOYEES

3.1. **Officers**. The Board shall have the power to create positions for such officers as it may deem to be in the interests of the Green Bank, and shall define the powers and duties of all such officers. All such officers shall be subject to the orders of the Board and serve at its pleasure. Such officers shall include a President and may include a Director of Finance and Chief Investment Officer, a General Counsel and such other officers as the Board may determine to be appropriate. The Board shall be responsible for determining or approving compensation for each officer.

3.2. **President**. The Board shall hire a President. The President shall be the chief executive officer of the Green Bank and shall have such duties and responsibilities as may be determined by the Board, except that the duties and responsibilities of the office of President shall not include those required by the Statute or these Bylaws to be performed by the Chairperson or the Board or otherwise in conflict with law. The President shall be a non-voting, *ex officio* member of the Board pursuant to the Statute. The Board may delegate to such other person or persons all or part of the duties of the President. The President may, with the approval of the Board, assign or delegate to the officers and employees of the Green Bank any of the powers that, in the opinion of the President, may be necessary, desirable, or appropriate for the prompt and orderly transaction of the business of the Green Bank.

3.3. **Acting President**. The Board may, by resolution adopted by a majority vote, appoint some other person to serve as Acting President and perform the duties of the President in the event of the death, inability, absence, or refusal to act of the President. The Acting President shall be subject to all of the same restrictions placed upon the President.

3.4. **Chief Investment Officer**. The Board may appoint a Chief Investment Officer (CIO). The CIO shall have such duties and responsibilities as may be determined by the Board, except that the duties and responsibilities of the office of CIO shall not include those required by the Statute or these Bylaws to be performed by the Chairperson or the Board or otherwise in conflict with law. The CIO shall not be a Director.

3.5. **General Counsel**. The Board may appoint a General Counsel. The General Counsel shall be the chief legal officer of the Green Bank and shall have such duties and responsibilities as may be determined by the Board, except that the duties and responsibilities of the office of General Counsel shall not include those required by the Statute or these Bylaws to be performed by the Chairperson or the Board or otherwise in conflict with law. The General Counsel shall not be a Director.

3.6. **Additional Officers and Other Personnel**. The Green Bank may from time to time employ such other personnel as it deems necessary to exercise its powers, duties, and functions pursuant to the Statute and any and all other laws of the State of Connecticut applicable thereto. The President shall develop a staffing plan which shall include without limitation a chart of positions and position descriptions for the Green Bank, personnel policies and procedures, and related compensation levels. Such staffing plan may provide for officers of the Green Bank in addition to those specifically provided for in these Bylaws, and the appointment of such officers shall be in the discretion of the

President, except as the Board may otherwise determine. The President shall deliver the staffing plan to the Budget and Operations Committee for its review and approval pursuant to Article V, Section 5.3.2 hereof.

3.7. **Signature Authority; Additional Duties**. The President and officers of the Green Bank shall have such signature authority as is provided in the Green Bank's Operating Procedures, and as may from time to time be provided by resolution of the Board. The officers of the Green Bank shall perform such other duties and functions as may from time to time be required.

ARTICLE IV
BOARD MEETINGS

4.1. **Regular Meetings**. Regular meetings of the Board or any Committee for the transaction of any lawful business of the Green Bank shall be held in accordance with a schedule of meetings established by the Board or such Committee, provided that the Board shall meet at least six (6) times per ~~calendar~~ fiscal year through either a regularly scheduled or special meeting.

4.2. **Special Meetings**. The Chairperson may, when the Chairperson deems it expedient, call a special meeting of the Board for the purpose of transacting any business designated in the notice of such meeting. The Committee Chair of any Committee may, when the Committee Chair deems it expedient, call a special meeting of such Committee for the purpose of transacting any business designated in the notice of such meeting.

4.3. **Legal Requirements**. All meetings of the Board or any Committee shall be noticed and conducted in accordance with the applicable requirements of the Statute and the Connecticut Freedom of Information Act, including without limitation applicable

requirements relating to the filing with the Secretary of the State of any schedule of regular meetings and notices of special meetings, meeting notices to Directors and Committee members, public meeting requirements, the filing and public availability of meeting agenda, the recording of votes and the posting or filing of minutes, the addition of agenda items at any regular meeting, and the holding of any executive session.

4.4. **Order of Business**. The order of business of any meeting of the Board or any Committee shall be as set forth in the agenda for such meeting, provided that the Board or Committee may vary the order of business in its discretion.

4.5. **Organization**.

4.5.1. At each meeting of the Board, the Chairperson, or in the absence of the Chairperson, the Vice Chairperson, or in the absence of both, a Director chosen by a majority of the Directors then present, shall act as Presiding Officer. The Secretary, or a staff member designated by the President, shall prepare or direct the preparation of a record of all business transacted at such meeting. Such record when adopted by the Directors at the next meeting and signed by the Chairperson or the Secretary shall be the official minutes of the meeting.

4.5.2. At each meeting of a Committee, the Committee Chair, or in the absence of the Committee Chair any other Committee member designated by the majority of the Committee members then present, shall act as Presiding Officer. The President, a staff member designated by the President, or any Committee member chosen by the Presiding Officer, shall prepare or direct the preparation of a record of the business transacted at such meeting. Such record when adopted by a majority of the Committee members in attendance at the next

meeting and signed by the Committee Chair shall be the official minutes of the Committee meeting.

4.6. **Attendance**. A Director or a member of a Committee may participate in a meeting of the Board or of such Committee by means of teleconference, videoconference, or similar communications equipment enabling all Directors and Committee members participating in the meeting to hear one another, and participation in a meeting pursuant to this Section shall constitute presence in person at such a meeting. Directors or their designees who miss more than three (3) consecutive meetings shall be asked to become more active on the Board. In the event of further absence, the Board may decide by majority vote to recommend to the appointing authority that the appointment be reconsidered.

4.7. **Quorum**.

4.7.1. A majority of the Directors then in office shall constitute a quorum for the transaction of any business or the exercise of any power of the Green Bank.

4.7.2. A majority of the Director-members of a Committee shall constitute a quorum, provided that, except in the case of an advisory committee, such quorum shall consist of a minimum of three (3) Directors, at least one (1) of which shall not be a State employee.

4.8. **Enactment**. When a quorum is present, an affirmative vote of a majority of Directors in attendance at Board or Committee meetings shall be sufficient for action, including the passage of any resolution, except as may otherwise be required by these Bylaws or applicable law. Non-Director members of any Committee may participate in the Committee's discussions and deliberations and may join in the Committee's recommendations to the Board, but shall not have a vote on any matters as to which the

Committee is exercising the powers of the Board, including without limitation, any funding decisions.

4.9. **Designation of Substitutes for Directors**. If authorized by the Statute, then a Director may appoint a designee to serve as the Director's representative on the Board with full power to act and to vote on that Director's behalf. For the purposes of maintaining consistency and efficiency in Board matters, alternating attendance between the Director and his or her designee is strongly discouraged. If not authorized by statute, then a Director may not name or act through a designee. An authorized appointment of a designee shall be made by filing with the Board a short bio of the designee, the designee's CV, and a certificate substantially similar to the following:

"Certificate of Designation

I, _____, a member of the Board of Directors of the Connecticut Green Bank, do hereby designate _____ [Name & Title] to represent me at the meetings of the Board or committees thereof with full powers to act and vote on my behalf. This designation shall be effective until expressly revoked in writing.

_____

[Name]"

ARTICLE V
COMMITTEES

5.1. **Delegation Generally**. The Board may delegate any and all things necessary or convenient to carry out the purposes of the Green Bank to three (3) or more Directors, provided that at least one (1) of which shall not be a State employee, and, to the extent of

powers, duties, or functions not by law reserved to the Board, to any officer or employee of the Green Bank as the Board in its discretion shall deem appropriate.

5.2. **Appointments; Quorum; Transaction of Business; Recordkeeping**.

5.2.1. **Appointments**. The Chairperson shall appoint all Committee Chairs. The Committee Chair need not be a Director on the Deployment Committee any *ad hoc* committee, or an advisory committee.

5.2.2. **Quorum**. If necessary to achieve a quorum at any meeting of a Committee other than an advisory committee, then the Chairperson or the Vice Chairperson may sit, participate, and vote as an alternate member of such committee at such meeting.

5.2.3. **Report of Committee Actions**. Each Committee shall report to the Board on such Committee's actions and activities at the ~~regular~~ Board meeting next following each Committee meeting.

5.2.4. **Recordkeeping**. Committee recordkeeping shall be in accordance with Article IV, Section 4.5.2 hereof.

5.3. **Standing Committees**. The Green Bank shall have four (4) Standing Committees of the Board consisting of an Audit, Compliance, and Governance Committee, a Budget and Operations Committee, a Deployment Committee, and a Joint Committee of the Energy Conservation Management Board and the Connecticut Green Bank. Each Standing Committee may form subcommittees in its discretion, but no such subcommittee shall exercise powers of the Board unless authorized by the Board to do so.

5.3.1. **Audit, Compliance, and Governance Committee**. The Audit, Compliance, and Governance Committee shall consist of no less than three (3) Directors

appointed by the Chairperson on a biennial basis, at least one (1) of which shall not be a State employee. The principal functions, responsibilities, and areas of cognizance of the Audit, Compliance, and Governance Committee shall be as follows: (i) recommendation to the Board as to the selection of auditors; (ii) meetings with the auditors to review the annual audit and formulation of an appropriate report and recommendations to the Board with respect to the approval of the audit report; (iii) review of the audit and compliance findings of the Auditors of Public Accounts, and meetings with the staff auditors there as appropriate; (iv) review with the auditors, President, and senior finance staff of the adequacy of internal accounting policies, procedures and controls; (v) review of the sufficiency of financial and compliance reports required by statute; (vi) recommendation to the Board as to the selection of the Green Bank's ethics liaison and ethics compliance officer(s); (vii) review of the adequacy of employee education and training on ethics and related legal requirements; (viii) review and approval of, and in its discretion recommendations to the Board regarding, all governance and administrative matters affecting the Green Bank, including but not limited to matters of corporate governance, corporate governance policies, committee structure and membership, management qualifications and evaluation, and Board and Standing Committee self-evaluation; (ix) oversight of the Green Bank's legal compliance programs, including but not limited to compliance with state contracting and ethics requirements; (x) management succession planning; (xi) oversight of any Director conflict of interest matters; (xii) as-needed review of

any staff recommendations to the Board regarding the Green Bank's regulatory or policy initiatives including but not limited to the Comprehensive Plan and other clean energy regulatory or policy evidentiary matters before the Public Utilities Regulatory Authority and other state and federal commissions and tribunals that may affect clean energy development and/or the Green Bank's statutory mandate; (xiii) acting as a resource to the appointing authorities with respect to the identification and recruitment of qualified and interested private sector Director candidates; and (xvi) the exercise of such authority as may from time to time be delegated by the Board to the Audit, Compliance, and Governance Committee within its areas of cognizance.

5.3.2. **Budget and Operations Committee**. The Budget and Operations Committee shall consist of no less than three (3) Directors appointed by the Chairperson on a biennial basis, at least one (1) of which shall not be a State employee. Additionally, the Chairperson or the Vice Chairperson shall be a non-voting *ex officio* member of the committee, subject to the provisions of Article V, Section 5.2.2 hereof. The principal functions, responsibilities, and areas of cognizance of the Budget and Operations Committee shall be as follows: (i) to recommend and monitor compliance with prudent fiscal policies, procedures, and practices to assure that the Green Bank has the financial resources and financial strategy necessary to carry out its statutory responsibilities and mission, including oversight of the Green Bank's budget process, asset and liability management, asset risk management, insurance and loss prevention, and performance measurement; (ii) recommendation to the Board as to approval of the annual

operating budget and plan of operation; (iii) oversight of space planning and office leases, systems, and equipment, and procedures and practices with respect to purchasing; (iv) to recommend and monitor compliance with policies, programs, procedures, and practices to assure optimal organizational development, establishment of policies, programs, procedures and practices to assure optimal organizational development, the recruitment and retention of qualified personnel and the just and fair treatment of all employees of the Green Bank, including employment policies and practices, employee training, development, evaluation and advancement, employee compensation and benefits, and matters of employee separation and severance; (v) review and approval of the Green Bank staffing plan as developed by the President; (vi) with respect to reallocation of amounts between approved budget line items in excess of ten thousand dollars ($10,000) but not exceeding seventy-five thousand dollars ($75,000) in total, approval of such reallocation; (vii) with respect to increases to the operating budget or unbudgeted disbursements in amounts in excess of ten thousand ($10,000) but not exceeding seventy-five thousand ($75,000), approval of such increases; and (viii) the exercise of such authority as may from time to time be delegated by the Board to the Budget and Operations Committee within its areas of cognizance.

5.3.3. **Deployment Committee**. The Deployment Committee shall consist of no more than six (6) members total, consisting of no less than three (3) Directors and up to three (3) non-Directors, all appointed by the Chairperson on a biennial basis, and at least one (1) of the Director-members shall not be a State employee.

Additionally, the State Treasurer, or her or his designee, shall be a voting *ex officio* member of the committee. Additionally, the Chairperson or the Vice Chairperson shall be a non-voting *ex officio* member of the committee, subject to the provisions of Article V, Section 5.2.2 hereof. The non-Director members of the Deployment Committee shall each have expertise in such areas as: project finance, levelized cost of clean energy, investment banking, commercial lending, tax-exempt or tax-advantaged financing or municipal banking, or clean energy policy. The principal functions, responsibilities, and areas of cognizance of the Deployment Committee shall be as follows: (i) to recommend and monitor compliance with program, project, and investment guidelines, criteria, policies, and practices supporting the Green Bank's statutory mission and management of such by the Green Bank's professional staff; (ii) with respect to loans, loan guarantees, loan loss reserves, credit enhancements, debt support programs, debt, debt-like, grants, equity, near-equity, and related measurement and verification studies and evaluation audit funding requests, including but not limited to ~~the On-Site Renewable Distributed Generation Program,~~ the Residential Solar program, the Combined Heat and Power pilot program, the Anaerobic Digestion pilot program, and the Condominium Renewable Energy grant program, between three hundred thousand dollars ($300,000) and two million five hundred thousand dollars ($2,500,000), evaluation and approval of such requests on behalf of the Board so long as such approval is within the Green Bank's approved Operations and Program Budget; (iii) with respect to loans, loan guarantees, loan loss reserves, credit enhancements, debt support

programs, debt, debt-like, grants, equity and near-equity funding requests which exceed two million five hundred thousand dollars ($2,500,000), evaluation of such requests and recommendation to the Board regarding such requests; (iv) oversight of policies and practices relating to the evaluation and recommendation of initial investments, follow-on investments, investment modifications and restructurings, and the sale or other disposition of investments by the Green Bank's professional investment staff; (v) oversight of policies and practices relating to investment management by the Green Bank's professional investment staff, including implementation of investment exit strategies; (vi) except to the extent of any investment powers expressly reserved to the Board itself in any resolution of the Board, to approve on behalf of the Board investments, follow-on investments, investment modifications and restructurings, and the sale or other disposition of investments; (vii) to review and recommend to the Board the issuance of bonds, notes or other obligations of the Green Bank, and upon such approval, to sell, issue and deliver such bonds, notes or obligations on behalf of the Green Bank; and (viii) the exercise of such other authority as may from time to time be delegated by the Board to the Deployment Committee within its areas of cognizance.

5.3.4. **Joint Committee of the Energy Conservation Management Board and the Connecticut Green Bank**. The Standing Committee Related to the Joint Committee of the Energy Conservation Management Board and the Board of Directors of the Green Bank shall consist of no more than (2) voting Directors and (2) nonvoting members who shall be appointed by the Chairperson on a biennial

basis to serve on both this Standing Committee and the Joint Committee. Said Directors of this Standing Committee shall be charged with joining with four (4) members, no more than (2) voting Directors and (2) nonvoting members, from the Energy Conservation Management Board to form the Joint Committee as required pursuant to 16-245m(d)(2) of the General Statutes.

5.3.4.1. The principal functions, responsibilities and areas of cognizance of this Standing Committee shall be as follows: (i) to work with the Joint Committee to examine opportunities to coordinate the programs and activities contained in the plan developed under section 16-245n (c) of the General Statutes with the programs and activities contained in the plan developed under section 16-245m(d)(1) of the General Statutes; and (ii) to work with the Joint Committee 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.

5.3.4.2. This Standing Committee, in consultation with and upon approval of the Joint Committee, is authorized to vote and allocate funding in an amount not to exceed three hundred thousand dollars ($300,000.00) per program or project so long as such program or project is within the Green Bank's approved Operations and Program Budget, consistent with the Green Bank's Comprehensive Plan, within an approved program of the Board or Deployment Committee and consistent with

the credit and investment guidelines, criteria, policies, and practices approved by the Board. No resolution of the Joint Committee to approve an expenditure of funds may be approved without an affirmative vote of at least two (2) voting Directors of the Connecticut Green Bank.

5.3.4.3. Notwithstanding anything contained in these Bylaws to the contrary, the Joint Committee may adopt its own bylaws which shall govern the conduct and operations of the Joint Committee. If there are conflicting provisions between these Bylaws and any bylaws adopted by the Joint Committee, these Bylaws shall be controlling.

5.3.5. Additional Standing Committees or *ad hoc* committees of the Board may be formed by the Board at its discretion by resolution setting forth the purposes and responsibilities of such additional Standing Committee or *ad hoc* committee. Each additional Standing Committee or *ad hoc* committee shall have at least three (3) members who are Directors, at least one (1) of which shall not be a State employee.

5.4. **Advisory Committees**.

5.4.1. The Board may form such advisory committees as the Board in its discretion may determine to be appropriate to advise and assist the Board, any Standing Committee of the Board, or management of the Green Bank in the performance of its statutory responsibilities. Such advisory committees may include as members such individuals as may be knowledgeable in the subject matter whether or not Directors or employees of the Green Bank.

5.4.2. Members of an advisory committee who are not Directors or employees of the Green Bank shall be considered "members of an advisory board" for purposes of the Connecticut Code of Ethics for Public Officials.

5.4.3. Public confidence in the recommendations and other actions of an advisory committee requires that advisory committee members avoid both actual conflicts of interest and situations that might give the appearance of a conflict of interest. It is to be expected, however, that many advisory committee members will have outside business or professional interests relating to the Green Bank's statutory mission. It is not intended that such outside business or professional interests be considered a conflict of interest, provided that an advisory committee member shall not participate in any deliberation or vote, and shall not take any other affirmative action as an advisory committee member, with respect to a matter in which such member has an interest which is in substantial conflict with the proper discharge of the duties and responsibilities of membership on the advisory committee. For this purpose, the determination of whether an advisory committee member has an interest which is in substantial conflict with the duties and responsibilities of membership on the advisory committee shall be made in the same manner as provided in Section 1-85 of the Connecticut General Statutes for conflicting interests of public officials. In addition to disclosures required by law, the existence and nature of any such substantial conflict shall be promptly disclosed to the Committee Chair.

ARTICLE VI
FISCAL YEAR

6.1. **Fiscal Year**. The fiscal year of the Green Bank shall extend from July 1 through the following June 30 except as the same may be otherwise determined by resolution of the Board.

ARTICLE VII
CONFLICTS OF INTEREST

7.1. Public confidence in the recommendations and other actions of the Board and Committees requires that Directors avoid both actual conflicts of interest and situations that might give the appearance of a conflict of interest. Given the statutory qualifications for membership on the Board, it is to be expected, however, that some Directors will have outside business or professional interests relating to the Green Bank's statutory mission. It is not intended that such outside business or professional interests be considered a conflict of interest, provided that a Director shall not participate in any deliberation or vote, and shall not take any other affirmative action as a Director or Committee member, with respect to a matter in which such Director has an interest which is in substantial conflict with the proper discharge of the duties and responsibilities of membership on the Board or such Committee. For this purpose, the determination of whether a Director has an interest which is in substantial conflict with the duties and responsibilities of membership on the Board or a Committee shall be made in the manner provided in Section 1-85 of the Connecticut General Statutes for conflicting interests of public officials. The existence and nature of any potential conflict of interest shall be promptly disclosed to the Chairperson (or, in the case of the Chairperson, to the Vice Chairperson) and otherwise as may be required by Section 1-86 of the Connecticut General Statutes.

7.2. With respect to potential conflicts of interest, as defined in Section 1-86(a) of the Connecticut General Statutes and pursuant thereto and pursuant to Section 1-81-30(c) of the Regulations of Connecticut State Agencies, the Member shall either (1) excuse himself or herself from participating in any deliberation or vote on the matter and may not otherwise take any affirmative action on the matter or (2) shall prepare a written statement prepared under penalty of false statement describing the matter requiring action and the nature of the potential conflict and explaining why, despite the potential conflict, such Member is able to vote and otherwise participate fairly, objectively, and in the public interest, and shall deliver a copy of such statement to the Office of State Ethics and shall enter a copy of the statement in the minutes of the Board or committee, as applicable.

7.3. In addition to the steps described in Section 7.1 and 7.2, above, a conflicted or potentially conflicted Director:

7.3.1. is strongly encouraged to leave the room during discussion and vote on the matter at hand; and

7.3.2. shall not participate in such discussion and vote; and

7.3.3. shall not have access to non-public confidential information regarding the matter at hand.

ARTICLE VIII
COMPENSATION

8.1. No Director or Committee member shall at any time receive or be entitled to receive any compensation for the performance of his or her duties as a Director, but may be

reimbursed by the Green Bank for reasonable and necessary expenses incurred in the performance of such duties.

ARTICLE IX
PARLIAMENTARY AUTHORITY

9.1. Robert's Rules of Order, current revised edition, shall govern the proceedings of the Board when not in conflict with these Bylaws.

~~ARTICLE X~~
~~ROLE OF CONNECTICUT INNOVATIONS, INC.~~

~~10.1. **For Administrative Purposes Only**. Pursuant to the Statute, the Green Bank is within Connecticut, Innovations, Incorporated, for administrative purposes only. The relationship between the Green Bank and Connecticut Innovations, Inc., will be governed by the Statute, Conn. Gen. Stat. § 4-38f as if applicable to the relationship between the Green Bank and Connecticut Innovations, Incorporated, and other applicable law, and shall be memorialized in a contract for services.~~

ARTICLE X~~I~~
AMENDMENT

~~1.1.~~10.1. **Amendment or Repeal**. These Bylaws may be amended or repealed or new Bylaws may be adopted by the affirmative vote of a Super Majority of the Directors then in office. The Green Bank may adopt rules for the conduct of its business, and the adoption of such rules shall not constitute an amendment of these Bylaws.

ARTICLE XII
DEFINITIONS

~~1.1.~~11.1. **Definitions**. Unless the context shall otherwise require, the following words and terms shall have the following meanings:

~~1.1.1.~~11.1.1. "Green Bank" means the Connecticut Green Bank, as created and existing pursuant to the Statute.

~~1.1.2.~~11.1.2. "Board" means the board of directors of the Green Bank appointed and serving pursuant to the Statute.

~~1.1.3.~~11.1.3. "Chairperson" means the Chairperson of the Board appointed pursuant to the Statute.

~~1.1.4.~~11.1.4. "Committee" means any committee of or formed by the Board, including any Standing Committee, *ad hoc* committee, or advisory committee.

~~1.1.5.~~11.1.5. "Committee Chair" means the Chairperson of a Committee.

~~1.1.6.~~11.1.6. "Comprehensive Plan" means the plan developed by the Green Bank pursuant to section 16-245n(c) of the General Statutes.

~~1.1.7.~~11.1.7. "Connecticut Freedom of Information Act" means the Connecticut Freedom of Information Act, Connecticut General Statutes § 1-200 *et seq.*, as amended.

~~1.1.8.~~11.1.8. "Director" means a voting member of the Board appointed pursuant to the Statute.

~~1.1.9.~~11.1.9. "General Statutes" means the Connecticut General Statutes, as amended.

~~1.1.10.~~11.1.10. "Majority", whether capitalized or lowercase, means one more than half.

~~1.1.11.~~11.1.11. "President" means the President of the Green Bank hired by and serving at the pleasure of the Board of Directors of the Green Bank.

~~1.1.12.~~11.1.12. "Presiding Officer" has the meaning attributed to that term in Article IV, Section 4.5 of these Bylaws.

~~1.1.13.~~11.1.13. "Resolution of Purposes" means a resolution of the Board adopted pursuant to the penultimate sentence of Section 16-245n(d) of the General Statutes.

~~1.1.14.~~11.1.14. "Secretary" means the Secretary of the Board elected pursuant to the Statute and these Bylaws.

~~1.1.15.~~11.1.15. "Standing Committee" means a Standing Committee established by these Bylaws or another standing committee appointed by the Board for a specified period of time for the purpose of carrying out one or more functions of the Green Bank.

~~1.1.16.~~11.1.16. "Statute" means Connecticut General Statutes § 16-245n, as amended.

~~1.1.17.~~11.1.17. "Super Majority" means two thirds rounded up to the next whole integer.

~~1.1.18.~~11.1.18. "Vice Chairperson" means the Vice Chairperson of the Board elected pursuant to these Bylaws.

ARTICLE XIII
AUTHORITY

13.1. These Bylaws are adopted pursuant to the Statute and effective as of ~~May 18, 2012~~[ ].

CONNECTICUT GREEN BANK

OPERATING PROCEDURES

PURSUANT TO

Section 16-245n of the
Connecticut General Statutes

Adopted ~~December 16, 2011~~July 18, 2014
Revised ~~July 18, 2014~~[ ]

I. DEFINITIONS

Definitions of terms used in these Operating Procedures are as stated in the Green Bank's Bylaws or in Section 16-245n of the General Statutes.

Clean Energy Project: An activity that (i) promotes investment in clean energy; (ii) fosters the growth, development, and commercialization of clean energy sources and related enterprises; (iii) stimulates demand for clean energy and deployment of clean energy sources that serve end use customers in this state; or (iv) supports the development of advanced technologies that reduce energy use from traditional sources. For purposes of this definition, "clean energy" has the meaning as provided in Connecticut General Statutes § 16-245n(a), as may be amended from time to time.

II. GENERAL PURPOSES

The general purposes of the Connecticut Green Bank shall be as prescribed in Section 16-245n of the General Statutes, and in a resolution of purposes adopted by the Board pursuant to Section 16-245n(d)(1) of the Connecticut General Statutes, including implementation of the Comprehensive Plan (all together referred to in these Operating Procedures as "the purposes of the Green Bank").

III. GOVERNANCE

The Green Bank, a quasi-public authority of the State of Connecticut, shall be governed by a Board of Directors comprised of a number and appointed in a manner as prescribed in Section

16-245n(e) of the General Statutes. The affairs of the Board shall be conducted in accordance with applicable law, the Green Bank's Bylaws, and such policies with respect to corporate governance as may be adopted by the Board.

IV. ADMINISTRATION

The affairs of the Green Bank shall be administered in accordance with applicable law, the Bylaws, these Operating Procedures and other administrative policies as may be adopted by the President in consultation with the Board. The Board shall appoint a President and such other officers as provided in the Bylaws. Under the direction of the Board, such officers shall conduct the business of the Green Bank and shall have such authority as is conferred by applicable law, the Bylaws, these Operating Procedures, and the Board. References in these Operating Procedures to approval by the Board shall mean and include approval by the Board or by any duly constituted committee thereof authorized to act on behalf of the Board pursuant to the Bylaws of the Green Bank.

V. ADOPTION OF ANNUAL OPERATING BUDGET AND PLAN OF OPERATION

Sixty (60) days prior to the close of each fiscal year, the President shall cause to be prepared a suggested Annual Operating Budget for the forthcoming fiscal year, which shall also comprise the Annual Plan of Operation. The suggested Annual Operating Budget for the forthcoming fiscal year shall be considered by the Board prior the close of the then current fiscal year, modified if deemed necessary, and adopted to be effective beginning the first day of the forthcoming fiscal year.

Any expenditure that exceeds the amount annually budgeted for a specific line item in the Annual Operating Budget by an amount greater than ten thousand dollars ($10,000) shall require the approval of the Board.

The Annual Operating Budget shall incorporate the Green Bank's Annual Plan of Operation by specifying operating, programmatic, investment, and other expenses for the forthcoming fiscal year.

VI. COMMUNITY DEVELOPMENT FINANCIAL INSTITUTION

The Green Bank or an affiliate may seek to qualify as a Community Development Financial Institution under Section 4702 of the United States Code. If approved as a Community Development Financial Institution, then the Green Bank would be treated as a qualified community development entity for purposes of Section 45D and Section 1400N(m) of the Internal Revenue Code.

VII. PERSONNEL POLICIES

All employees shall be exempt from the classified service and shall have all rights and benefits provided by applicable law. Grade classifications for each job title shall be established by the President, subject to Board approval.

Hiring & Promotions: The President shall, in accordance with the Green Bank's Bylaws, establish a schedule of positions and total staffing levels for the Green Bank. The schedule of positions shall describe the signature authority, if any, of each position. The President, acting on

behalf of the Board, may from time to time fill any position on such schedule of positions and within such total staffing levels, except as may otherwise be provided in the Bylaws or any applicable resolution of the Board. The creation of any new Director-level position shall require the separate approval of the Board. For these purposes, "Director-level" means a Green Bank staff position one level under the officers in the Green Bank's staff organizational chart.

Whenever possible, the Green Bank shall maintain an identifiable career path for each class of positions on the schedule of positions approved by the Board. If the President determines it to be appropriate, then a current employee's position may be reclassified to another position within said career path. New positions approved by the Board and existing positions that become available as a result of a current employee vacating such position shall be posted internally and, if the President determines it to be appropriate, then publicly advertised in a manner reasonably designed to reach a range of possible applicants. A current employee shall be eligible for reclassification or promotion to an existing or new position only if such employee has at least six (6) months of service with the Green Bank and meets the minimum qualifications for such position.

Notwithstanding any other provision of this section or any employee handbook or other personnel policies of the Green Bank, the position of the President, the manner of the conduct of any search for qualified applicants for such position, and the terms and conditions of employment in such position, including matters of compensation, dismissal, and severance, shall be in the discretion and subject to the approval of the Board. Hiring and promotion shall in all cases be in accordance with the Green Bank's Affirmative Action Plan and applicable statutes.

Compensation and Benefits: The Board shall establish and may from time to time modify reasonable compensation plans and employee benefits programs and policies as the Board determines to be necessary or appropriate to attract and retain qualified employees and carry out the Green Bank's statutory mission, including:

(a) A compensation plan, which shall consist of sufficient salary grades to provide such compensation rates as may be determined to be necessary or desirable for all job classifications within the Green Bank, and which may include an incentive compensation program for all jobs classifications;

(b) An employee benefits program, which may include, but is not limited to, vacation days, holidays, sick days, group health, life, and disability insurance, tuition reimbursement, length of service awards and other benefits, including eligibility criteria and benefit levels;

(c) A performance evaluation system, which may be used to determine merit increases in salary and incentive compensation levels;

(d) Policies with respect to compensatory time, flex-time, and telecommuting;

(e) Policies with respect to severance pay and benefits;

(f) Policies with respect to business and travel reimbursement; and

(g) Other reasonable compensation and employee benefits programs and policies as the Board determines to be necessary and appropriate to attract and retain qualified employees.

The President shall be empowered to administer the Green Bank's compensation plan and employee benefit programs and policies as approved by the Board, and shall have the authority to approve performance evaluations, determine merit increases and incentive compensation payments, and carry out such other duties and responsibilities as appropriate within the overall salary and employee benefits administration plan, except that performance evaluations and determination of merit or other salary increases and bonus payments for the position of President shall be reserved to the Board or the committee of the Board with responsibility for matters of compensation. The President has the authority to establish and modify certain employee policies involving workplace flexibility that do not in the aggregate have an adverse financial impact on the Green Bank. The Board shall review the Green Bank's compensation plan and employee benefit programs a part of its annual review of the Green Bank's Operating Budget and Plan of Operation.

Dismissal: Employment with the Green Bank is at-will, which means that either the employee or the Green Bank may terminate the relationship at any time and for any reason, with or without cause. The President may impose any level of disciplinary action, including termination, based upon the severity of the offense requiring discipline and the employee's past work record. This in no way alters the at-will employment policy.

~~Coordination with and Administration by Connecticut Innovations, Incorporated: To the extent permitted by any contract for administrative support and services between the Green Bank and Connecticut Innovations, Incorporated, personnel policies, compensation plans, and benefit~~

~~programs and polices of the Green Bank may be coordinated and/or combined with, and administered by, Connecticut Innovations, Incorporated, subject to appropriate cost sharing.~~

VIII. PURCHASE, LEASE, ACQUISITION POLICY FOR REAL AND PERSONAL PROPERTY

The Green Bank, acting through the President or another duly authorized officer, shall have the authority to invest in, acquire, lease, purchase, own, manage, hold, and dispose of real and personal property, and to lease, convey, or deal in or enter into agreements with respect to such real and personal property, on any terms necessary or incidental to the carrying out of the purposes of the Green Bank.

Procurement Procedures: The Green Bank may purchase, lease, or acquire real and personal property on a bid, negotiated, or open-market basis, including through a sole-source procurement or in such other manner as the President determines to be appropriate and in the best interests of the Green Bank in the circumstances, provided that in the case of any contract or agreement for the purchase, lease, or acquisition of real or personal property requiring an expenditure by the Green Bank in excess of seventy-five thousand dollars ($75,000), wherever possible bids or proposals shall be solicited from at least three (3) qualified parties. The requirements of this subsection shall not be applicable to transactions entered into by the Green Bank primarily for the purpose of providing financial assistance pursuant to Articles XII, XIII and XIV of these Operating Procedures. ~~To the extent permitted by any contract for administrative support and services between the Green Bank and Connecticut Innovations, Incorporated, space, systems, supplies and other property, goods or services necessary for the business operations of the Green~~

~~Bank may be provided by Connecticut Innovations, Incorporated, subject to appropriate cost sharing, and in such cases the procurement procedures of Connecticut Innovations, Incorporated shall apply thereto.~~

IX. CONTRACTING FOR PROFESSIONAL SERVICES

The Green Bank, acting through the President or another duly authorized officer, shall have the authority to engage accountants, attorneys, appraisers, financial advisers, investment advisors, underwriters, investment managers, investment bankers, brokers, architects, construction managers, engineers, and other consultants and professionals on any terms necessary or incidental to the carrying out of the purposes of the Green Bank. ~~In the absence of a conflict of interest, such consultants and professionals may be those also providing services to Connecticut Innovations, Incorporated.~~

Procurement Procedures: Contracts for professional services shall be awarded by the Green Bank in such manner, including on the basis of a sole-source procurement, as the Board determines to be appropriate and in the best interests of the Green Bank in the circumstances, provided that (i) for such contracts requiring an expenditure by the Green Bank up to and including seventy-five thousand dollars ($75,000) over a period of one (1) fiscal year, the President has sole approval authority; (ii) for such contracts requiring an expenditure by the Green Bank over seventy-five thousand dollars ($75,000) and up to and including one hundred fifty thousand dollars ($150,000) over a period of one (1) fiscal year, the President and the Chairperson must both approve the expenditure; and (iii) for such contracts requiring an expenditure by the Green Bank of over one hundred fifty thousand dollars ($150,000), such contract shall, whenever possible, be

awarded on the basis of a process of competitive negotiation where proposals are solicited from at least three (3) qualified parties. ~~To the extent permitted by any contract for administrative support and services between the Green Bank and Connecticut Innovations, Incorporated, professional services may also be provided by consultants and professionals selected by and under contract to Connecticut Innovations, Incorporated, subject to appropriate cost sharing.~~ The provisions of Section 1-127 of the General Statutes shall apply to the engagement of auditors by the Green Bank.

X. STATE CONTRACTING REQUIREMENTS

Any solicitation of bids or proposals by the Green Bank, and any award of a contract by the Green Bank, shall be subject to all state procurement and contracting requirements applicable to ~~quasi-public agencies of the state~~the Green Bank as a quasi public agency of the state~~, including without limitation the following to the extent applicable in the circumstances:~~

~~Section 9-612 of the General Statutes, as amended, relating to campaign contributions by state contractors and their principals and related notices to state contractors and prospective state contractors;~~

~~Section 4-252 of the General Statutes relating to affidavits as to gifts from contractors under certain large state contracts;~~

~~Section 4a-81 of the General Statutes relating to affidavits with respect to consulting fees;~~

~~Section 3-13l of the General Statutes relating to the prohibition of finder's fees in connection with investment transactions;~~

~~Section 3-13j of the General Statutes relating to the disclosure of third party fees attributable to investment services contracts;~~

~~Section 4-61dd of the General Statutes relating to whistleblower protections; and~~

~~Section 4a-60 and 4a-60a of the General Statutes relating to non-discrimination in state contracting and documentation of contractor adoption of a corporate policy supporting the non-discrimination agreements and warranties required by Sections 4a-60 and 40a-60a.~~

XI. FUNDING SOURCES AND PROCEDURES OF GENERAL APPLICABILITY TO FINANCIAL ASSISTANCE

Funding Sources: Funding sources specifically authorized by the Statute include, but are not limited to:

(a) Funds repurposed from existing programs providing financing support for clean energy projects, provided any transfer of funds from such existing programs shall be subject to approval by the General Assembly and shall be used for expenses of financing, grants, and loans;

(b) Any federal funds that can be used for the purposes specified in Section 16-245n(c) of the General Statutes;

(c) Charitable gifts, grants, and contributions, as well as loans from individuals, corporations, university endowments, and philanthropic foundations;

(d) Earnings and interest derived from financing support activities for clean energy projects backed by the Green Bank;

(e) If and to the extent that the Green Bank or an affiliate qualifies as a Community Development Financing Institution under Section 4702 of the United States Code, then funding from the Community Development Financing Institution Fund administered by

the United States Department of Treasury, as well as loans from and investments by depository institutions seeking to comply with their obligations under the United States Community Reinvestment Act of 1977; and

(f) The Green Bank may enter into contracts with private sources to raise capital. The average rate of return on such debt or equity shall be set by the Board.

Procedures of General Applicability to Financial Assistance:

~~(a) For clean energy projects, the amount to be financed by the Green Bank and other nonequity financing sources cannot exceed eighty per cent (80%) of the cost of developing and deploying such projects.~~

~~(b) For energy efficiency projects the amount to be financed by the Green Bank and other nonequity financing sources cannot exceed one hundred per cent (100%) of the cost of financing such projects.~~

~~(c)~~(a) The Green Bank may assess reasonable fees on its financing activities to cover its reasonable costs and expenses, as determined by the Board.

~~(d)~~(b) The Green Bank shall make information regarding the rates, terms, and conditions for all of its financing support transactions available to the public for inspection, including formal annual reviews by both a private auditor conducted pursuant to Section 16-245n(f)(2) of the General Statutes and the Comptroller, and providing details to the public on the Green Bank's Web site; provided that public disclosure shall be restricted for patentable ideas, trade secrets, proprietary or confidential commercial or financial information, disclosure of which may cause commercial harm to a nongovernmental

recipient of such financing support and for other information exempt from public records disclosure pursuant to Section 1-210 of the General Statutes.

~~(e)~~(c) Any entity that receives financing for a clean energy project from the Clean Energy Fund (Fund) shall provide the board an annual statement during the time period that funds are dispersed, certified as correct by the chief financial officer of the recipient of such financing, setting forth all sources and uses of funds for such project in such detail as may be required by the Green Bank. The Green Bank shall maintain any such audits for not less than five (5) years. Residential projects for buildings with one to four dwelling units are exempt from this and any other annual auditing requirements, except that residential projects may be required to grant their utility companies' permission to release their usage data to the Green Bank.

XII. FINANCIAL ASSISTANCE—GRANTS, LOANS OR LOAN GUARANTEES, DEBT AND EQUITY INVESTMENTS

The procedures in this section are generally applicable to the award of grants, loans or loan guarantees, and debt and equity investments for clean energy projects when the Board determines that one of the following methods be used in the selection and award process: (i) competitive selection and award; (ii) programmatic selection and award; or (iii) strategic selection and award. The factors to be considered in choosing the appropriate selection and award method, and the general procedures to be followed in each such case are set forth below.

Competitive Selection and Award

Applicability: Competitive selection and award shall be the preferred method when the Board determines that it is appropriate in the circumstances to invite and consider proposals for a particular clean energy project or projects in a competitive process under an established schedule and pursuant to formal qualification and selection criteria so that proposers and proposals may be evaluated fairly and thoroughly on a comparative basis.

Issuance of RFP: A request for proposals (RFP) shall be published or distributed in a manner that the Green Bank determines will promote broad participation in the competitive process. Deadlines for particular stages in the competitive selection process will be set forth in the RFP. Notice of the RFP shall be posted on the Web site of the Green Bank, may be published in one or more major daily newspapers published in the State, and may also be posted on the Web site of the Connecticut Department of Administrative Services. The RFP itself shall also be posted on the Web site of the Green Bank and shall be mailed to or otherwise made available to interested parties in a reasonable manner.

Eligibility: Each RFP shall be issued pursuant to guidelines established by the Green Bank consistent with the Green Bank's Comprehensive Plan and Annual Operating Budget. Such guidelines shall at a minimum set forth: (i) proposer qualification requirements; (ii) project eligibility criteria; (iii) the nature and amount of financial assistance available from the Green Bank under the program; (iv) the principal selection criteria; (v) any mandatory terms and conditions under which such funding is available; (vi) applicable application, processing, or other program fees; and (vii) the process by

which proposals will be considered and acted upon. Such guidelines may be modified, in whole or in part, from time to time and at any time by the Green Bank, consistent with the authorizing resolution of the Board.

Selection Criteria: Selection criteria shall include, as applicable, (i) the eligibility of the proposer; (ii) the proposer's qualifications and experience; (iii) the financial feasibility of the project, including the availability and firmness of required financing; (iv) the cost-effectiveness of the project; (v) the technological characteristics of the project, including the potential for technological improvements and advancements; the project's operational feasibility and commercial applicability; (vi) the jobs created by the project; (vii) the environmental benefits stemming from the project; and (viii) the contributions to be made by the project toward the statutory purposes of the Green Bank and the furtherance of the Comprehensive Plan. Other selection criteria may be established for any RFP, and any weighting of selection criteria shall be in the discretion of the Green Bank as provided in such RFP. If appropriate in the circumstances, then an RFP may be first issued as a request for qualifications, following which those respondents found to be qualified are invited to respond to a final RFP.

Selection Process: The selection process shall be designed to provide for a fair and thorough evaluation of each eligible and qualified proposal, and shall be described in the RFP. The selection process may include the use of a review or scoring team, which may include members of any advisory committee, members of the staff of the Green Bank, and independent members with relevant industry, academic, or governmental experience. No member of any such review or scoring team shall have any financial or other personal interest in any proposed project. Any such review or scoring team shall act in an advisory

capacity only and shall not constitute a committee or subcommittee of the Board, and the members of any such review or scoring team shall not be deemed to be public officials as a result of their service thereon. If the Green Bank determines that the responses to the RFP have been insufficient in number or quality to achieve the objectives of a competitive selection and award process or otherwise determines it to be in the best interest of the Green Bank, then the RFP may be extended, withdrawn and reissued, or cancelled at any time.

Selection Decision: One or more proposers may be selected for the purpose of entering into negotiations, if applicable, with respect to a project. Such selection shall be made by the Green Bank after taking into account the established selection criteria, any report or recommendation by staff of the Green Bank, the report of any review or scoring team, and the results of any review and recommendation by any advisory committee to the Board, applied on an equitable basis. If more than one proposal is selected, then they may be ranked in order of preference, which ranking may be based on the recommendation of staff of the Green Bank, such advisory committee, or the review or scoring team.

Notification to Proposers; Effect of Selection: All proposers shall be promptly notified of the results of the selection process. Such results may also be posted on the Web site of the Green Bank. Any such selection and notification is solely for the purpose of qualification for possible negotiation and does not constitute a financing commitment or the award of a contract.

Negotiation: The Green Bank may enter into good faith negotiations with one or more of the selected proposers at such time and in such order as the Green Bank may determine in

its discretion consistent with the terms of the RFP. The commencement of such negotiations does not signify a commitment to provide financial assistance or to enter into a contract with a proposer. Either the proposer or the Green Bank may terminate such negotiations at any time for any reason. The Green Bank reserves the right to enter into negotiations with any other proposer at any time. Such negotiations shall not be limited to the scope or terms of the proposal but may include such other matters or different terms as the Green Bank may determine to be in the best interests of the Green Bank.

Award: Upon mutual agreement regarding the terms and conditions of the financial assistance, the Green Bank and the selected proposer may enter into a contract which memorializes the agreed-upon terms and conditions subject to all necessary Green Bank approvals, including the Board or a duly authorized committee of the Board.

Fees and Expenses: The Green Bank may impose reasonable application, processing, or similar fees in connection with the submission and processing of proposals, and may require, as a condition of negotiation with any selected proposer, that such proposer agree to pay costs incurred by the Green Bank, including fees and disbursements of the Green Bank's counsel, consultants, and other professional advisors. Any pre-established application, processing, or other program fees shall be set forth in the RFP.

State Contracting Requirements: Any RFP shall be subject to, and any definitive financing or contracting documents shall include, such provisions as may be required by applicable laws or executive orders, including with respect to non-discrimination and affirmative action.

Other Terms and Conditions: Any RFP may be subject to and include such other terms and conditions, not inconsistent with the requirements of these procedures, as the Green Bank may determine in its discretion to be appropriate and in the best interests of the Green Bank.

Programmatic Selection and Award

Applicability: Programmatic selection and award shall be the preferred method when the Board determines that it is appropriate in the circumstances to invite applications on a continuing or periodic basis for clean energy projects with identified characteristics and to consider such applications under pre-established program-based qualification, eligibility, and selection criteria, but that it is not necessary or appropriate to evaluate such applications on a comparative basis as part of a competitive RFP process. Any such program may be discontinued, suspended, extended, or expanded at any time by the Board based on its determination of what is appropriate and in the best interests of the Green Bank.

Program Guidelines: Each such program shall be authorized by resolution of the Board and operated and administered by the Green Bank pursuant to program guidelines established by the Green Bank consistent with such Board authorization, which shall at a minimum set forth: (i) applicant qualification requirements; (ii) project eligibility criteria; (iii) the nature and amount of financial assistance available from the Green Bank under the program; (iv) the principal selection criteria; (v) any mandatory terms and conditions under which such funding is available; (vi) the application process, including a standard application form; (vii) applicable application, processing, or other program fees; and

(viii) the process by which applications will be considered and acted upon. Such program guidelines may be modified, in whole or in part, from time to time and at any time by the Green Bank, consistent with the authorizing resolution of the Board. A general description of each such program, including the applicable program guidelines, and all such modifications, if any, shall be posted on the Web site of the Green Bank.

Approval; Terms and Conditions of Award: Applications shall be subject to the approval of the Board, or of the President or other officer of the Green Bank if and to the extent so authorized in the authorizing resolution of the Board, after taking into account any report or recommendations of the staff of the Green Bank or an advisory committee, if applicable. Financial support for a project under any such program shall be in such amount, and shall be subject to such project-specific terms, conditions, and requirements, as may be determined by the Green Bank within the limits established by the authorizing resolution of the Board and consistent with the program guidelines.

Fees and Expenses: The Green Bank may impose reasonable application, processing, or similar fees in connection with the submission and processing of proposals, and may require, as a condition of negotiation with any selected proposer, that such proposer agree to pay costs incurred by the Green Bank, including fees and disbursements of the Green Bank's counsel, consultants, and other professional advisors. Any pre-established application, processing, or other program fees shall be set forth in the applicable program guidelines.

Strategic Selection and Award

Applicability: While the utilization of an open and public process, either competitive or programmatic, for awards from the Green Bank is anticipated most often to be in the best interest of the Green Bank and is to be strongly preferred, there are nevertheless recognized to be certain circumstances in which, based on special capabilities, uniqueness of the opportunity, urgency of need, cost, and similar factors, the public interest and the strategic mission of the Green Bank is best served by direct participation by the Green Bank in, and funding of, a particular clean energy project outside of an existing program and absent a competitive process of selection and award. Such strategic selection and award method may be utilized upon an affirmative resolution, adopted by a two-thirds majority of the members of the Board present at a meeting of the Board, determining that the advantages of strategic selection and award clearly outweigh the general public interest in an open and public process based on a finding that at least three (3) of the following characteristics are present and are of predominant importance to the Green Bank:

(a) Special Capabilities: The opportunity is presented by a party with exceptional experience, expertise, or availability, or holding patent or other proprietary rights of special value to the Green Bank.

(b) Uniqueness: The opportunity is one-of-a-kind by virtue of location, high visibility, and leverage with other already committed public or private funding or similar unique attributes.

(c) Strategic Importance: The opportunity has exceptionally strong compatibility with the mission of the Green Bank, including the jobs

created by the project or the environmental benefits stemming from the project, or offers the Green Bank an organizational role, participation in governance, a formative or other key role in the industry, high funding leverage potential, broad market reach, exceptional educational or public relations value, or similar special strategic advantages important to the Green Bank.

(d) Urgency and Timeliness: There is an urgent need to act on the opportunity as a result of public exigency or emergency, or a strategically important opportunity would become unavailable as a result of delay, or it would take an unacceptable length of time for a similar opportunity to reach the same level of readiness.

(e) Multiphase Project; Follow-on Investment: The opportunity relates to the next phase of a multiphase proposal or the expenditure is necessary to support or protect an existing the Green Bank investment or initiative.

Other Requirements: Awards made by strategic selection and award shall to the extent applicable be otherwise subject to the same procedures set forth with respect to competitive selection and award under the headings "Negotiation", "Award", "Fees and Expenses", "State Contracting Requirements", and "Other Terms and Conditions".

XIII. ISSUING AND RETIRING BONDS, BOND ANTICIPATION NOTES, AND OTHER OBLIGATIONS OF THE GREEN BANK

The Board shall approve the issuance and retirement of all bonds, bond anticipation notes, and other obligations of the Green Bank. Such approval may include, but not be limited to, their form, denominations, maturities, rates, prices, public or private sales, and other provisions important or necessary for their issuance or retirement, including the payment of all expenses, premiums, and commissions in connection therewith.

XIV. SURPLUS FUNDS

Surplus funds generated through the sale of bonds, bond anticipation notes, or other obligations of the Green Bank, to the extent not needed for the payment of interest and principal due on any payment of said bonds, bond anticipation notes, or other obligations, if any accrued by the Green Bank, shall be withdrawn and transferred to the Green Bank's Operating Account at such times as is permitted under applicable resolutions for the bonds, bond anticipation notes, or other obligations to be used for any lawful purposes of the Green Bank.

XV. PERIODIC REVIEW; AMENDMENT OF PROCEDURES

At least annually, the Audit, Compliance, and Governance Committee of the Board shall meet to review and discuss the matters addressed by these Procedures and, if deemed necessary, to make recommendations for amendment of these Procedures to Board. Amendments to these Procedures shall be effective only upon adoption of such amendments by a two-thirds vote of the Board.

* * *

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CONNECTICUT GREEN BANK

Memo

To: Members of the Connecticut Green Bank (the "Green Bank")) Audit Committee

From: George Bellas

CC: Bryan Garcia, Brian Farnen, Bert Hunter, Mackey Dykes

Date: October 21, 2016

Re: Results of annual financial audit of the Green Bank and the Green Bank 2016 draft CAFR

Dear Committee members:

Results of Annual Financial Audit:

Blum Shapiro and Company Performed the annual financial audit of the Green Bank for the fiscal year ending June 30, 2016. They will be presenting the results of their audit to the Committee during the meeting. A copy of their presentation is included in the materials you have received. The audit itself went well with no material internal control weaknesses identified or material adjustments to the financial books and records recorded.

Green Bank 2016 draft CAFR:

I am enclosing the draft Green Bank 2016 CAFR for your review. The major sections of the CAFR are as follows:

1. Financial Audit Section

2. Statistical Section

Financial Section:

This section contains Management's Discussion and Analysis of the results of operations for the current and prior fiscal years as well as the audited financial statements and related footnotes.

The financial statements themselves, comprised of the Statement of Net Position, the Statement of Revenues, Expenses and Changes in Net Position and the Statement of

Cash Flows have been completed except for some additional disclosures in the Statement of Cash Flows which will be completed by the date of the Committee meeting. The related footnotes are materially complete except for the following additional disclosures which will be complete by the date of the Committee meeting:

- Note 8 – Program Loans: Completion of the repayment schedule for program loans.
- Note 9 – Financing Activities – Updating the Solar Mosaic note payment schedule and adding narrative and a repayment schedule for the Reinvestment Fund note payable.
- Note 15 Commitments and Loan Guarantees – Adding narrative and a schedule for program loan guarantees of the Green Bank.

In addition, there is general clean-up for typos and grammar in the footnote narratives. We do not anticipate any further adjustments to the financial statements themselves which would have a material impact on the financial position of the Green Bank.

Statistical Section

The statistical section is broken out into two subsections:

Financial Statistics:

Financial Statistics are organized in tables as follows:

- Net Position by Component
- Changes in Net Position
- Operating Revenue by Source
- Significant Sources of Operating Revenue
- Outstanding Debt by Type
- Demographic and Economic Information
- Principal Employers for the State of Connecticut
- FTE's by Function
- Operating Indicators by Function

No additional changes to the data in these tables is anticipated.

Non-Financial Statistics:

The non-financial statistical section contains statistical data and narrative pertaining to the Green Bank's current programs. There is a table of contents in the front of this section for the reader's use.

In conclusion I wish to thank the committee members for their effort in reviewing this document. Our goal is to provide readers with a comprehensive overview of the financial and programmatic activities of the Green Bank on an annual basis.

RESOLUTION:

WHEREAS, Article V, Section 5.3.1(ii) of the Connecticut Green Bank ("Green Bank") Operating Procedures requires the Audit, Compliance, and the Governance Committee (the "Committee") to meet with the auditors to review the annual audit and formulation of an appropriate report and recommendations to the Board of Directors of the Green Bank (the "Board") with respect to the approval of the audit report;

NOW, therefore be it:

RESOLVED, that the Committee hereby recommends to the Board of Directors for approval the proposed draft Comprehensive Annual Financial Report (CAFR) contingent upon no further adjustments to the financial statements or additional required disclosures which would materially change the financial position of the Green Bank as presented.

CONNECTICUT GREEN BANK

(A Component Unit of the State of Connecticut)

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FISCAL YEAR ENDED JUNE 30, 2016

(With Summarized Totals as of and for Fiscal Year Ended June 30, 2015)

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

CONNECTICUT GREEN BANK

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CONNECTICUT GREEN BANK

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INTRODUCTORY SECTION

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CONNECTICUT
GREEN BANK

October XX, 2016

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, 2016 accompanied by summarized totals as of and for the fiscal year ended June 30, 2015.

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 has issued an unmodified opinion on the Green Bank's financial statements for the fiscal year ending June 30, 2016. 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.

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 year ended June 30, 2015 and June 30, 2014. 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'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 three goals:

1. To attract and deploy capital to finance the clean energy[2] goals for Connecticut, including:

2. To develop and implement strategies that bring down the cost of clean energy in order to make it more accessible and affordable to consumers.

3. To reduce reliance on grants, rebates, and other subsidies and move towards innovative low-cost financing of clean energy deployment.

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 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.

[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.

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 five years, we are deploying more green energy in our state than ever before (see Table 1).[3]

Table 1. Project Investments between FY 2012 through FY 2016[4]

	FY 2016	FY 2015	FY 2014	FY 2013	FY2012	Total
Total Investment ($ MM)	$ 314.1	$ 335.5	$ 140.2	$ 111.1	$ 15.0	$ 915.8
Green Bank Investment ($ MM)	$ 48.0	$ 55.7	$ 37.8	$ 18.6	$ 4.8	$ 165.0
Leverage Ratio	6.6 : 1.0	6.1 : 1.0	3.7 : 1.0	6.0 : 1.0	3.1 : 1.0	5.6 : 1.0
% of Funding Approved as Grants	43%	50%	48%	67%	100%	51%
Installed Capacity (MW)	74.4	65.5	26.1	23.5	2.9	192.3

By using $165.0 million of ratepayer funds, we have attracted over $750.8 million of private investment in clean energy for a total investment of $915.8 million. This is supporting the deployment of 192.3 MW of renewable energy and producing and saving an estimated 1.3 million MMBtu of clean energy while creating over 11,000 job-years and reducing an estimated 2.1 million tons of CO2 emissions over the life of the projects.

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 providing positive value to our consumers.

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.

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

[3] Connecticut Green Bank – Investment and Public Benefit Performance from Clean Energy Projects from FY 2012 through FY 2015 – Board of Director Memo of October 16, 2015

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

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.

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.

This year, we have seen several of our programs serving as replicable and scalable models, including:

- Commercial Property Assessed Clean Energy (C-PACE) for commercial, industrial, multifamily, and non-profit buildings with Hannon Armstrong
- Solar for All residential solar PV lease and energy efficiency energy savings agreement for low-to-moderate income households with PosiGen

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.

In a study done by the Center for America Progress,[5] it is estimated that the U.S. needs at least $200 billion in efficient and renewable energy annually for 20 years to reduce carbon emissions and avert climate disaster. The Natural Resources Defense Council and Coalition for Green Capital estimate that based on Connecticut, its market size, growth rate, and private-public leverage ratio, that a green bank – like the Connecticut Green Bank – successfully operating in every state in America would yield $200 billion in national annual investment within 5 years, with 90% of funds coming from private sources and all public contributions returned over 10 to 20 years.

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 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.

[5] Green Growth: A U.S. Program for Controlling Climate Change and Expanding Job Opportunities by the Center for American Progress (September 2014)

Acknowledgements

First and foremost, we would like to thank the Staff of the Connecticut Green Bank. In our first five years, through their hard work, commitment and innovation, we 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, for their assistance and advice during the course of this audit, 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 and Administration

Board of Directors

Connecticut Green Bank

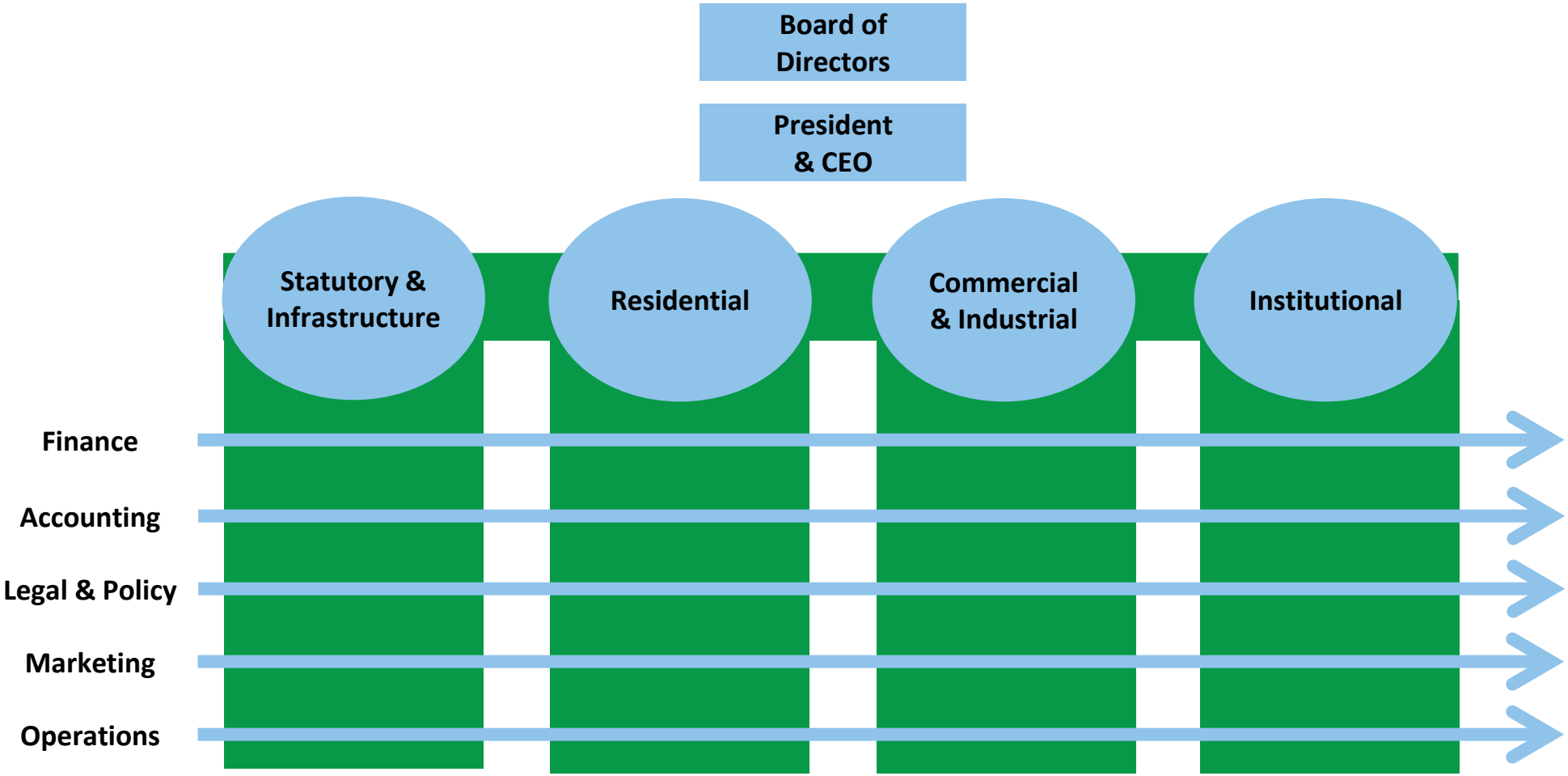
Position	Status	Voting	Name	Organization
State Treasurer (or designee)	Ex Officio	Yes	Bettina Ferguson	Treasurer's Office
Commissioner of DEEP[6] (or designee)	Ex Officio	Yes	Robert Klee[7]	DEEP
Commissioner of DECD[8] (or designee)	Ex Officio	Yes	Catherine Smith[9]	DECD
Residential or Low Income Group	Appointed	Yes	Pat Wrice	Operation Fuel
Investment Fund Management	Appointed	Yes	Norma Glover	NJG Associates
Environmental Organization	Appointed	Yes	Matthew Ranelli[10]	Shipman & Goodwin
Finance or Deployment	Appointed	Yes	Thomas Flynn	Environmental Data Resources
Finance of Renewable Energy	Appointed	Yes	Reed Hundt[11]	Coalition for Green Capital
Finance of Renewable Energy	Appointed	Yes	Kevin Walsh	GE Energy Financial Services
Labor	Appointed	Yes	John Harrity	IAM Connecticut
R&D or Manufacturing	Appointed	Yes	Mun Choi	University of Connecticut
President of the Green Bank	Ex Officio	No	Bryan Garcia	Connecticut Green Bank
Board of Connecticut Innovations[12]	Ex Officio	No	(unfilled)	(unfilled)

Discretely Presented Component Units

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

[6] Department of Energy and Environmental Protection
[7] Vice Chairperson of the Board of Directors and Chairperson of the Budget and Operations Committee
[8] Department of Economic and Community Development
[9] Chairperson of the Board of Directors
[10] Secretary of the Board of Directors and Chairperson of the Audit, Compliance and Governance Committee
[11] Chairperson of the Deployment Committee
[12] It should be noted that several members of the Board of Directors of the Green Bank currently serve on the Board of Directors of Connecticut Innovations, including Mun Choi and Catherine Smith.

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, 2015

Executive Director/CEO

FINANCIAL SECTION

INDEPENDENT AUDITORS' REPORT

To the Board of Directors
Connecticut Green Bank

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 (CGB) (a component unit of the State of Connecticut) as of and for the fiscal year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise CGB'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, 2016, 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 Method of Accounting for Pensions

As described in Note 2 to the financial statements, CGB changed its method for accounting and financial reporting for pensions as a result of the adoption of Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Report Reporting for Pensions – an Amendment of GASB Statement No. 27* and GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent To the Measurement Date – an Amendment of GASB Statement No. 68*, both effective July 1, 2014. 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 and schedule of Green Bank's proportionate share of the net pension liability and proportionate share of contributions to the state employees' retirement system (SERS) be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who 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

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.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated XXXX XX, 2016, 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 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 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.

Hartford, CT
XXXX XX, 2016

CONNECTICUT GREEN BANK

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following Management's Discussion and Analysis (MD&A) provides an overview of the financial performance of the Connecticut Green Bank (CGB), 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, 2016. 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 "Financial Statements" section of this report.

CBG as a reporting entity is comprised of the primary government and two 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*.

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.

CGB 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 CGB 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 CGB 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. CGB 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 were transferred to the newly created CGB as of July 1, 2011.

The 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 CGB'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 CGB. The Statement of Cash Flows reconciles the changes in cash and cash equivalents with the activities of CGB for the period presented. The activities are classified as to operating, noncapital financing, capital and related financing, and investing activities.

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

FINANCIAL HIGHLIGHTS OF FISCAL 2016

NET POSITION

Net position increased by $18.2 million to $127.4 million at June 30, 2016 and cash and cash equivalents increased by $9.1 million in 2016 to $57.8 million.

The acquisition of $3.5 million in bonds was a part of the proceeds received by CGB as a result of the sale of CPACE program loans during fiscal years 2014 through 2016. See Note 6. Solar lease notes decreased $811,000 as a result of scheduled principal repayments. See Note 7. The decrease in program loans in 2016 to $33.3 million as compared to $40.5 million in 2015 was primarily a result of the sale of CPACE loans held in the CGB portfolio to an outside investor. See Note 8. Capital assets increased to $57.9 million in 2016 compared to $27.0 million in 2015 as a result of the continued acquisition of solar equipment by CT Solar Lease 2 LLC. See Note 1 for further discussion of CT Solar Lease 2 LLC's operations.

As of June 30, 2016, the Board of Directors designated $95.3 million in net position to fund contingent grant, loan and investment commitments as described in Note 15. These grants, loans and investments are expected to be paid or funded over the next one to six fiscal years.

The following table summarizes the net position of the reporting entity at June 30, 2016 and 2015 (in thousands):

	2016	2015	Increase (Decrease)
Cash and cash equivalents	$ 57,822	$ 48,693	$ 9,129
Bonds receivable	3,492	1,600	1,892
Portfolio investments	1,000	1,000	--
Solar lease notes	9,008	9,819	(811)
Program loans	33,268	40,518	(7,250)
Capital assets, net	65,927	26,971	38,956
Other assets	6,061	8,972	(2,911)
Total Assets	176,578	137,573	39,005
Deferred Outflows of Resources			
Deferred amount for pensions	2,573	1,669	904
Total Deferred Outflows of Resources	2,573	1,669	904
Current liabilities	6,612	6,825	(213)
Unrearned revenue	6,258	2,519	3,739
Pension liabilities	16,096	14,900	1,196
Other long term liabilities	2,528	1,093	1,435
Long term debt, less current maturities	18,648	3,546	15,102
Total Liabilities	50,142	28,883	21,259
Deferred Inflows of Resources			
Fair value of interest rate swap	1,628	660	968
Deferred amount for pensions	(3)	532	(535)
Total Deferred Outflows of Resources	1,625	1,192	433
Invested in capital assets	57,864	26,971	30,893
Restricted Net Position:			
Non-expendable	1	1	--
Restricted - energy programs	9,750	8,799	951
Unrestricted	59,769	73,396	(13,627)
Total Net Position	$ 127,384	$ 109,167	$ 18,217

CHANGES IN NET POSITION

Revenue from interest on cash deposits and promissory notes increased $ 705,000 to $3.0 million in 2016. CGB received $6.5 million from the State in RGGI auction proceeds during the year as compared to RGGI auction proceeds of $16.6 million in 2015. Public Act 13-247, see Note 11, allowed the Commissioner of the Connecticut Department of Energy and Environmental Protection to transfer additional RGGI auction proceeds to CGB to be used to support energy efficiency financing opportunities. This increase in RGGI auction proceeds helped offset payments to the State by CGB required under Public Act 13-247 during fiscal year 2015.

Total expenditures for grants and programs in 2016 were $27.2 million, an increase of $5.1 million when compared to the total expenditures of $22.1 million in 2015. Included in these totals are payments representing financial incentives to residential and commercial property owners to install renewable energy or energy efficiency measures of $12.8 million in 2016 and 11.3 million in 2015. These financial incentives and the associated costs to administer these payments fluctuate from year to year as they are based on the achievement of contract milestones established by each CGB program.

General and administrative expenses increased by $1.5 million in 2016 to $4.6 million compared to $3.1 million in 2015 primarily as a result of new marketing and branding initiatives undertaken in 2016.

The following table summarizes the changes in net position between June 30, 2016 and 2015 (in thousands):

Changes in Net Position
(in thousands)

	2016	2015	Increase (Decrease)
Revenues	$ 37,788	$ 46,294	$ (8,506)
Operating Expenses			
Grants and programs	27,228	22,131	5,097
General and administrative expense	4,630	3,117	1,513
Total Operating Expenses	31,858	25,248	6,610
Operating Income	5,930	21,046	(15,116)
Non-Operating Revenues (Expenses)			
Interest earned	3,017	2,312	705
Interest expense	(731)	(119)	(612)
Investment loss	(3)	(1,180)	1,177
Unrealized loss on interest rate swap	(968)	(660)	(308)
Provision for loan losses	(1,022)	(564)	(458)
Capital contribution	12,294	6,844	5,450
Distribution to member	(301)	(105)	(196)
Payments to State of Connecticut	--	(19,200)	19,200
Net Change	$ 18,216	$ 8,374	$ 9,842

FINANCIAL HIGHLIGHTS OF FISCAL 2015

NET POSITION

Net position increased by $8.4 million to $109.1 million at June 30, 2015 and cash and cash equivalents decreased by $32 million in 2015 to $48.7 million.

The acquisition of $1.6 million in bonds was a part of the proceeds received by CGB as a result of the sale of CPACE program loans during fiscal year 2014. See Note 6. Solar lease notes decreased $0.7 million as a result of scheduled principal repayments. See Note 7. The increase in program loans in 2015 to $40.5 million as compared to $13.4 million in 2014 was primarily a result of increased CGB financings of CPACE and residential solar projects. See Note 8. Capital assets increased to $27.0 million from $3.1 million in 2015 as a result of the continued acquisition of solar equipment by CT Solar Lease 2 LLC. See Note 1 for further discussion of CT Solar Lease 2 LLC's operations.

As of June 30, 2015, the Board of Directors designated $89.5 million in net position to fund contingent grant, loan and investment commitments as described in Note 15. These grants, loans and investments are expected to be paid or funded over the next one to six fiscal years. In addition to these commitments, an additional $23 million has been designated by the Board to fund future program commitments.

The following table summarizes the net position at June 30, 2015 and 2014 (in thousands):

	2015	2014	Increase (Decrease)
Cash and cash equivalents	$ 48,693	$ 80,925	$ (32,232)
Bonds receivable	1,600	1,600	--
Portfolio investments	1,000	1,000	--
Solar lease notes	9,819	10,544	(725)
Program loans	40,518	13,403	27,115
Capital assets, net	26,971	3,074	23,897
Other assets	8,971	9,943	(972)
Total Assets	137,572	120,489	17,083
Deferred Outflows of Resources			
Deferred amount for pensions	1,669	--	1,669
Total Deferred Outflows of Resources	1,669	--	1,669
Current liabilities	6,825	4,801	2,024
Unrearned revenue	2,519	469	2,050
Pension liabilities	14,900	14,305	595
Other long term liabilities	1,093	--	1,093
Long term debt, less current maturities	3,546	121	3,425
Total Liabilities	28,883	19,696	9,187
Deferred Inflows of Resources			
Fair value of interest rate swap	660	--	660
Deferred amount for pensions	532	--	532
Total Deferred Outflows of Resources	1,192	--	1,192
Invested in capital assets	26,971	3,074	23,897
Restricted Net Position:			
Non-expendable	1	1	--
Restricted - energy programs	8,799	9,096	(297)
Unrestricted	73,396	88,622	(15,226)
Total Net Position	$ 109,167	$ 100,793	$ 8,374

CHANGES IN NET POSITION

Revenue from interest on cash deposits and promissory notes increased $1.2 million to $2.3 million in 2015. CGB received $16.6 million from the State in RGGI auction proceeds during the year as compared to RGGI auction proceeds of $20.1 million in 2014. Public Act 13-247, see Note 11, allowed the Commissioner of the Connecticut Department of Energy and Environmental Protection to transfer additional RGGI auction proceeds to CGB to be used to support energy efficiency financing opportunities. This increase in RGGI auction proceeds helped offset payments to the State by CGB required under Public Act 13-247 during fiscal year 2015.

Total expenditures for grants and programs in 2015 were $22.1 million, a decrease of $1.3 million from the prior year. Grant and program expenditures fluctuate from year to year as they are based on the achievement of contract milestones by the grantee.

General and administrative expenses increased by $580 thousand from $2.5 million to $3.1 million.

The following table summarizes the changes in net position between June 30, 2015 and 2014 (in thousands):

Changes in Net Position
(in thousands)

	2015	2014	Increase (Decrease)
Revenues	$ 46,294	$ 48,754	$ (2,460)
Operating Expenses			
Grants and programs	22,131	23,439	(1,308)
General and administrative expense	3,117	2,537	580
Total Operating Expenses	25,248	25,976	(728)
Operating Income	21,046	22,778	(1,732)
Non-Operating Revenues (Expenses)			
Interest earned	2,312	1,142	1,170
Interest expense	(119)	--	(119)
Investment loss	(1,180)	--	(1,180)
Unrealized loss on interest rate swap	(660)	--	(660)
Provision for loan losses	(564)	(1,311)	747
Capital contribution	6,844	201	6,643
Distribution to member	(105)	(12)	(93)
Payments to State of Connecticut	(19,200)	(6,200)	(13,000)
Net Change	$ 8,374	$ 16,598	$ (8,224)

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of CGB'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.

CONNECTICUT GREEN BANK

STATEMENT OF NET POSITION

JUNE 30, 2016
(With Summarized Totals for June 30, 2015)

	Total Primary Government	**Discretely** Presented Component Units: CT Solar Lease 2 LLC	CEFIA Solar Services Inc.	Eliminating Entries	2016 Total Reporting Entity	2015 Total Reporting Entity
Assets						
Current Assets						
Cash and cash equivalents	$ 41,569,388	$ 1,381,506	$ 5,121,165	$ --	$ 48,072,060	$ 39,893,649
Accounts receivable	1,408,922	21,700	--	--	1,430,621	35,155
Utility remittance receivable	2,670,634	--	--	--	2,670,634	2,518,850
Other receivables	264,197	165,805	--	--	430,002	313,228
Due from component units	44,346,437	574,723	4,407,273	(49,328,433)	--	--
Prepaid expenses and other assets	3,286,803	959,003	--	--	4,245,806	1,030,251
Contractor loans	2,272,906	--	--	--	2,272,906	3,112,663
Current portion of solar lease notes	845,479	--	--	--	845,479	803,573
Current portion of portfolio investments	884,739	--	--	--	884,739	10,264,825
Total Current Assets	97,549,505	3,102,737	9,528,438	(49,328,433)	60,852,247	57,972,194
Noncurrent Assets						
Portfolio investments	1,000,000	--	--	--	1,000,000	1,000,000
Bonds receivable	3,492,282	--	--	--	3,492,282	1,600,000
Solar Lease Notes, less current portion	8,162,635	--	--	--	8,162,635	9,015,437
Program loans, less current portion	32,382,778	--	--	--	32,382,778	30,253,119
Renewable Energy Certificates	812,772	--	--	--	812,772	933,054
Investment in component units	100	--	20,982,892	(20,982,992)	--	--
Capital assets, net of depreciation and amortization	248,752	65,678,491	--	(8,063,456)	57,863,787	26,971,087
Asset retirement obligation,net	--	2,261,472	--	--	2,261,472	1,029,196
Restricted assets:	--	--	--	--	--	--
Cash and cash equivalents	5,249,983	4,500,000	--	--	9,749,983	8,799,005
Total Noncurrent Assets	51,349,302	72,439,963	20,982,892	(29,046,448)	115,725,709	79,600,898
Total Assets	$ 148,898,807	$ 75,542,701	$ 30,511,330	$ (78,374,881)	$ 176,577,957	$ 137,573,092
Deferred Outflows of Resources						
Deferred amount for pensions	2,572,833	--	--	--	2,572,833	1,669,961
Total Deferred Outflows of Resources	$ 2,572,833	$ -	$ -	$ -	$ 2,572,833	$ 1,669,961

The accompanying notes are an integral part of these financial statements.

CONNECTICUT GREEN BANK

STATEMENT OF NET POSITION (CONTINUED)

JUNE 30, 2016
(With Summarized Totals for June 30, 2015)

	Total Primary Government	**Discretely** Presented Component Units: CT Solar Lease 2 LLC	CEFIA Solar Services Inc.	Eliminating Entries	2016 Total Reporting Entity	2015 Total Reporting Entity
Liabilities and Net Position						
Liabilities						
Current maturities of long-term debt	$ 152,619	$ 1,560,600	$ --	$ --	$ 1,713,219	$ 307,203
Accounts payable and accrued expenses	1,962,712	745,107	4,500	--	2,712,319	5,820,169
Due to component units	574,723	18,593,259	30,160,451	(49,328,433)	--	--
Due to outside agency	30,127	--	--	--	30,127	49,516
Custodial liability	2,155,130	--	--	--	2,155,130	647,964
Deferred revenue	5,337,477	920,727	--	--	6,258,204	2,518,537
Total Current Liabilities	10,212,787	21,819,694	30,164,951	(49,328,433)	12,868,998	9,343,389
Asset retirement obligation	--	2,528,335	--	--	2,528,335	1,094,125
Long-Term Debt, less current maturities	3,041,297	15,607,075	--	--	18,648,372	3,546,321
Pension liability	16,096,113	--	--	--	16,096,113	14,899,766
Total Liabilities	29,350,197	39,955,104	30,164,951	(49,328,433)	50,141,818	28,883,601
Deferred Inflows of Resources						
Fair value of interest rate swap	--	1,627,864	--	--	1,627,864	660,073
Deferred amount for pensions	(2,535)	--	--	--	(2,535)	532,135
Total Deferred Inflows of Resources	(2,535)	1,627,864	--	--	1,625,329	1,192,208
Net Position						
Invested in capital assets	248,752	65,678,491	--	(8,063,456)	57,863,787	26,971,087
Restricted Net Position						
Non-expendable	1,000	17,482,892	100	(17,482,992)	1,000	1,000
Restricted for energy programs	5,249,983	4,500,000	--	--	9,749,983	8,799,005
Unrestricted (deficit)	116,624,244	(53,701,650)	346,280	(3,500,000)	59,768,873	73,396,151
Total Net Position	122,123,978	33,959,733	346,380	(29,046,448)	127,383,643	109,167,243

The accompanying notes are an integral part of these financial statements.

CONNECTICUT GREEN BANK

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

FOR THE YEAR ENDED JUNE 30, 2016

(With Summarized Totals for the Year Ended June 30, 2015)

		Discretely Presented Component Units				
	Total Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	Eliminations	2016 Total Reporting Entity	2015 Total Reporting Entity
Operating Revenues						
Utility remittances	$ 26,605,084	$ --	$ --	$ --	$ 26,605,084	$ 27,233,987
Grant revenue	589,917	--	--	--	589,917	192,274
RGGI auction proceeds	6,481,562	--	--	--	6,481,562	16,583,545
Energy system sales	32,767,009	--	--	(32,767,009)	0	16,688
REC sales	2,419,990	233,793	--	--	2,653,783	1,474,488
Other income	387,320	2,182,803	126,075	(1,238,311)	1,457,887	793,435
Total Operating Revenues	69,250,883	2,416,595	126,075	(34,005,320)	37,788,234	46,294,417
Operating Expenses						
Cost of goods sold - energy systems	28,826,976	--	--	(28,826,976)	--	--
Grants and program expenditures	25,261,516	3,078,633	--	(1,112,236)	27,227,913	22,130,677
General and administrative expenses	4,445,648	305,217	4,750	(126,075)	4,629,540	3,117,376
Total Operating Expenses	58,534,141	3,383,850	4,750	(30,065,287)	31,857,453	25,248,053
Operating Income	10,716,743	(967,254)	121,325	(3,940,033)	5,930,780	21,046,364
Nonoperating Revenue (Expenses)						
Interest income - prommisory notes	2,895,503	--	--	--	2,895,503	2,217,368
Interest income - short term cash deposits	92,536	27,777	300	--	120,613	93,949
Interest expenses LT debt	(61,795)	(669,043)	--	--	(730,838)	(119,345)
Interest income - component units	60,127	--	--	(60,127)	--	--
Interest expense - component units	--	(60,127)	--	60,127	--	--
Payments to State of Connecticut	--	--	--	--	--	(19,200,000)
Distributions to member	--	(301,548)	--	--	(301,548)	(104,579)
Realized loss on investments	(2,936)	--	--	--	(2,936)	(1,180,285)
Unrealized gain (loss) on interest rate swap	--	(967,791)	--	--	(967,791)	(660,073)
Provision for loan losses	(1,021,826)	--	--	--	(1,021,826)	(563,825)
Total Nonoperating Revenue (Expenses)	1,961,609	(1,970,732)	300	--	(8,823)	(19,516,790)

The accompanying notes are an integral part of these financial statements.

CONNECTICUT GREEN BANK

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION (CONTINUED)

FOR THE YEAR ENDED JUNE 30, 2016

(With Summarized Totals for the Year Ended June 30, 2015)

		Discretely Presented Component Units				
	Total Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	Eliminations	2016 Total Reporting Entity	2015 Total Reporting Entity
Change in Net Position before Payments to State of Connecticut and Capital Contributions	12,678,352	(2,937,987)	121,625	(3,940,033)	5,921,958	1,529,574
Capital contributions	--	21,770,182	--	(9,475,739)	12,294,443	6,844,430
Change in Net Position	12,678,352	18,832,195	121,625	(13,415,772)	18,216,401	8,374,004
Net Position - Beginning of Year	109,445,627	15,127,538	224,754	(15,630,677)	109,167,242	100,793,237
Net Position - End of Year	$ 122,123,979	$ 33,959,733	$ 346,379	$ (29,046,449)	$ 127,383,643	$ 109,167,241

The accompanying notes are an integral part of these financial statements.

CONNECTICUT GREEN BANK

STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED JUNE 30, 2016
(With Summarized Totals for the Year Ended June 30, 2015)

	Total Primary Government	Discretely Presented Component Units: CT Solar Lease 2 LLC	Discretely Presented Component Units: CEFIA Solar Services, Inc.	Eliminating Entries	2016	2015	2014
Cash Flows from Operating Activities							
Sales of energy systems	$ 35,128,140	$ --	$ --	(35,128,140)	$ --	$ 10,943	$ --
Sales of Renewable Energy Certificates	2,443,524	-	-	-	2,443,524	1,705,932	378,444
Utility company remittances	26,453,300	--	--	--	26,453,300	28,117,538	26,981,768
Grants	1,050,204	--	--	--	1,050,204	139,487	400,766
RGGI auction proceeds	5,313,666	--	--	--	5,313,666	21,078,165	17,520,889
Other income	454,393	865,226	--	--	1,319,620	688,944	204,322
Lease payments received	--	977,337	--	--	977,337	519,377	451,339
Grant and program expenditures	(13,219,423)	(1,543,473)	--	--	(14,762,895)	(11,331,214)	(7,897,133)
Grants, incentives and credit enhancements	(10,718,424)	--	--	--	(10,718,424)	(9,800,594)	(13,313,611)
Purchases of energy equipment	(34,278,293)	--	--	--	(34,278,293)	(19,989,550)	--
General and administrative expenditures	(4,350,882)	(179,791)	(4,450)	--	(4,535,123)	(3,806,822)	(2,354,525)
Net Cash Provided by (Used in) Operating Activities	8,276,206	119,300	(4,450)	(35,128,140)	(26,737,083)	7,332,206	22,372,259
Cash Flows from Non-capital Financing Activities							
Payments to State of Connecticut	--	--	--	--	--	(19,200,000)	(6,200,000)
Advances to CGB component units	(15,762,500)	--	(3,413,198)	19,175,698	--	--	--
Advances from CGB and component units	217,500	3,413,198	15,545,000	(19,175,698)	--	--	--
Repayments of Advances (to) from component units	--	(8,350,000)	8,350,000	--	--	--	--
Net Cash Provided by (Used in) Non-capital Financing Activities	(15,545,000)	(4,936,802)	20,481,802	--	--	(19,200,000)	(6,200,000)
Cash Flows from Capital and Related Financing Activities							
Purchase of capital assets	(67,645)	(35,128,140)	--	35,128,140	(67,645)	(89,808)	(79,713)
Proceeds from long-term debt	2,510,837	15,000,000	--	--	17,510,837	3,932,272	122,463
Repayment of long-term debt	(170,445)	(702,275)	--	--	(872,720)	(232,432)	--
Interest expense	(61,795)	(705,522)	--	--	(767,318)	(89,585)	--
Capital contributions from/(to) component entities	--	15,425,739	(15,425,739)	--	--	--	--
Capital contributions from Firststar Development, LLC	--	12,294,443	--	--	12,294,443	6,844,430	201,434
Return of capital to Firststar Development, LLC	--	(219,969)	--	--	(219,969)	(86,336)	(12,584)
Net Cash Provided by (Used in) Capital and Related Financing Activities	2,210,952	5,964,275	(15,425,739)	35,128,140	27,877,628	10,278,541	231,600
Cash Flows from Investing Activities							
Return of principal on WC & program loans	26,646,236	--	--	--	26,646,236	2,332,356	7,022,954
Interest on short-term investments, cash, solar lease notes and loans	2,200,748	14,016	300	--	2,215,065	887,457	450,899

The accompanying notes are an integral part of these financial statements.

CONNECTICUT GREEN BANK

STATEMENT OF CASH FLOWS (CONTINUED)

FOR THE YEAR ENDED JUNE 30, 2016
(With Summarized Totals for the Year Ended June 30, 2015)

	Total Primary Government	Discretely Presented Component Units: CT Solar Lease 2 LLC	Discretely Presented Component Units: CEFIA Solar Services, Inc.	Eliminating Entries	2016	2015	2014
Cash Flows from Investing Activities (Continued)							
Interest on short-term investments and cash deposits	--	--	--	--	--	--	--
Interest on solar lease notes	--	--	--	--	--	--	--
Program loan disbursements	--	--	--	--	--	--	--
CPACE program loan disbursements	$ (14,888,372)	$ --	$ --	$ --	$ (14,888,372)	$ (22,181,032)	$ (14,700,337)
Grid Tied program loan disbursements	(911,249)	--	--	--	(911,249)	(1,166,205)	(2,375,000)
AD/CHP program loan disbursements	--	--	--	--	--	--	(150,000)
Alpha/Operational Demo program loan disbursements	(350,000)	--	--	--	(350,000)	(100,000)	(516,200)
Energy Efficiency program loan disbursements	--	--	--	--	--	(89,000)	(75,000)
Campus Efficiency NOW program loan disbursements	--	--	--	--	--	(396,662)	(315,669)
HOPBI program loan disbursements	(1,684,862)	--	--	--	(1,684,862)	(4,443,148)	--
Residential Solar Loan program disbursements	(3,037,973)	--	--	--	(3,037,973)	(5,486,610)	(805,484)
Net Cash Used in Investing Activities	7,974,529	14,016	300	--	7,988,845	(30,642,844)	(11,463,837)
Net Increase (Decrease) in Cash and Cash Equivalents	2,916,686	1,160,790	5,051,913	--	9,129,390	(32,232,097)	4,940,022
Cash and Cash Equivalents - Beginning of Year	43,902,687	4,720,716	69,252	--	48,692,655	80,924,749	77,641,671
Cash and Cash Equivalents - End of Year	$ 46,819,373	$ 5,881,506	$ 5,121,165	$ --	$ 57,822,045	$ 48,692,652	$ 82,581,693
Reconciliation of Operating Loss to Net Cash Provided by (Used in) Operating Activities:							
Operating income (loss)	$ 10,716,743	$ --	$ --	$ --	$ 10,716,743	$ 21,046,364	$ 22,221,885
Adjustments to reconcile operating loss to net cash provided by (used in) operating activities:							
Depreciation	--	--	--	--	--	519,502	141,343
Other	--	--	--	--	--	--	671,994
Changes in operating assets and liabilities:							
(Increase)decrease in operating assets	--	--	--	--	--	(16,743,102)	(7,812,250)
(Decrease)increase in operating liabilities	--	--	--	--	--	2,509,442	7,149,287
Net Cash Provided by (Used in) Operating Activities	$ 10,716,743	$ --	$ --	$ --	$ 10,716,743	$ 7,332,206	$ 22,372,259

The accompanying notes are an integral part of these financial statements.

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS

The Connecticut Green Bank (CGB) 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. CGB, 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. CGB 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 were transferred to the newly created CGB as of July 1, 2011. Pursuant to Connecticut General Statute 4-38f, CGB is within CI for administrative purposes only.

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 CGB's financial statements for the year ended June 30, 2015, from which the summarized information was derived.

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS

In June 2012, the GASB issued Statement No. 68, *Accounting and Financial Reporting for Pensions* (GASB 68). The primary objective of this Statement is to improve the accounting and financial reporting by state and local governments for pensions. It also improves information provided by state and local governmental employers about financial support for pensions that are provided by other entities. The provisions of this Statement are effective for financial statements for periods beginning after June 15, 2014. The implementation of this standard resulted in an adjustment to reduce CGB's beginning net position by $15,430,912 as of July 1, 2014.

In November 2013, GASB issued Statement No. 71, *Pension Transaction for Contributions Made Subsequent to the Measurement Date, an amendment of GASB 68* (GASB 71). The objective of this statement is to address an issue regarding application of the transition provisions of GASB 68. The issue relates to amounts associated with contributions, if any, made by a state or local government employer on non-employer contributing entity to a defined benefit pension plan after the measurement date of the government's beginning net pension liability. The provisions of this Statement are effective for financial statements for the periods beginning after June 15, 2015. The implementation of this standard resulted in an adjustment to increase CGB's beginning net position by $1,125,502 as of July 1, 2014.

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 CGB and is the principal source of CGB's revenue. CGB 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.

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

PRINCIPAL REVENUE SOURCES (CONTINUED)

REPORTING ENTITY

CGB, 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.

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

REPORTING ENTITY (CONTINUED)

CGB established four legally separate for-profit entities whose collective purpose, at the present time, is to administer the CGB's solar energy programs. CGB 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 CGB (1% owned by CI), established to fund a portfolio of residential solar loans and, through its CT Solar Lease 2 program, to enable investment in solar photovoltaic and solar thermal 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, 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 administers the portfolio of projects with the assistance of AFC First Financial Corporation. CGB's board of directors acts as the governing authority of CEFIA Holdings LLC. CGB appoints CGB employees to manage the operations of CEFIA Holdings LLC. CGB is also financially responsible (benefit/burden) for CEFIA Holdings LLC's activities.

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. CGB's board of directors acts as the governing authority of CT Solar Loan I LLC. CGB appoints CGB employees to manage the operations of CT Solar Loan I LLC. CGB is also financially responsible (benefit/burden) for CT Solar Loan I LLC's activities.

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

REPORTING ENTITY (CONTINUED)

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 solar thermal equipment and the sale of energy under power purchase agreements as managing member of CT Solar Lease 2 LLC. CEFIA Solar Services, Inc. ("Solar Services") has a one percent ownership interest in CT Solar Lease 2 LLC 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. CGB through CEFIA Holdings LLC directly appoints the board of directors of Solar Services. 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. CGB 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 owner's 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 CGB has a minority membership interest in CT Solar Lease 2 LLC, CGB believes that to exclude it from these financial statements would be misleading.

Advances between the primary government (CGB) 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.

Condensed combining information for the primary government (CGB) and its two blended component units (CEFIA Holdings LLC and CT Solar Loan I LLC) is presented as follows:

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CONDENSED, COMBINING INFORMATION – STATEMENT OF NET POSITION

	CGB	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Assets					
Current Assets					
Cash and cash equivalents	$ 34,513,689	$ 3,042,146	$ 4,013,553	$ --	$ 41,569,388
Accounts receivable	1,408,922	--	--	--	1,408,922
Utility remittance receivable	2,670,634	--	--	--	2,670,634
Other receivables	189,894	--	74,303	--	264,197
Due from component units	40,965,279	--	20,269,002	(16,887,844)	44,346,437
Prepaid expenses and other assets	503,585	21,851	2,761,368	--	3,286,803
Contractor loans	2,272,906	--	--	--	2,272,906
Current portion of solar lease notes	845,479	--	--	--	845,479
Current portion of portfolio investments	690,557	194,182	--	--	884,739
Total Current Assets	84,060,944	3,258,179	27,118,226	(16,887,844)	97,549,505
Noncurrent Assets					
Portfolio investments	1,000,000	--	--	--	1,000,000
Bonds receivable	3,492,282	--	--	--	3,492,282
Solar Lease Notes, less current portion	8,162,635	--	--	--	8,162,635
Program loans, less current portion	28,509,165	3,873,614	--	--	32,382,778
Renewable Energy Certificates	812,772	--	--	--	812,772
Investment in component units	99,000	--	100	(99,000)	100
Capital assets, net of depreciation and amortization	248,752	--	--	--	248,752
Asset retirement obligation,net	--	--	--	--	--
Restricted assets:	--	--	--	--	--
Cash and cash equivalents	4,949,139	300,844	--	--	5,249,983
Total Noncurrent Assets	47,273,744	4,174,458	100	(99,000)	51,349,302
Total Assets	$ 131,334,689	$ 7,432,636	$ 27,118,326	$ (16,986,844)	$ 148,898,807
Deferred Outflows of Resources					
Deferred amount for pensions	$ 2,572,833	--	--	--	2,572,833
Total Deferred Outflows of Resources	$ 2,572,833	$ -	$ -	$ -	$ 2,572,833

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CONDENSED, COMBINING INFORMATION – STATEMENT OF NET POSITION (CONTINUED)

	CGB	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Liabilities and Net Position					
Liabilities					
Current maturities of long-term debt	$ --	$ 152,619	$ --	$ --	$ 152,619
Accounts payable and accrued expenses	1,739,809	3,041	219,862	--	1,962,712
Due to component units	574,723	4,072,500	12,815,344	(16,887,844)	574,723
Due to outside agency	30,127	--	--	--	30,127
Custodial liability	1,327,343	--	827,787	--	2,155,130
Deferred revenue	--	--	5,337,477	--	5,337,477
Total Current Liabilities	3,672,002	4,228,160	19,200,470	(16,887,844)	10,212,787
Asset retirement obligation	--	--	--	--	--
Long-Term Debt, less current maturities	--	3,041,297	--	--	3,041,297
Pension liability	16,096,113	--	--	--	16,096,113
Total Liabilities	19,768,115	7,269,457	19,200,470	(16,887,844)	29,350,197
Deferred Inflows of Resources					
Fair value of interest rate swap	--	--	--	--	--
Deferred amount for pensions	(2,535)	--	--	--	(2,535)
Total Deferred Inflows of Resources	(2,535)	--	--	--	(2,535)
Net Position					
Invested in capital assets	248,752	--	--	--	248,752
Restricted Net Position					
Non-expendable	--	--	100,000	(99,000)	1,000
Restricted for energy programs	4,949,139	300,844	--	--	5,249,983
Unrestricted (deficit)	108,944,051	(137,664)	7,817,857	--	116,624,244
Total Net Position	114,141,942	163,180	7,917,857	(99,000)	122,123,978

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CONDENSED, COMBINING INFORMATION – STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	CGB	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Operating Revenues					
Utility remittances	$ 26,605,084	$ --	$ --	$ --	$ 26,605,084
Grant revenue	807,417	--	--	(217,500)	589,917
RGGI auction proceeds	6,481,562	--	--	--	6,481,562
Energy system sales	--	--	32,767,009	--	32,767,009
REC sales	2,419,990	--	--	--	2,419,990
Other income	380,245	388	6,687	--	387,320
Total Operating Revenues	36,694,299	388	32,773,696	(217,500)	69,250,883
Operating Expenses					
Cost of goods sold - energy systems	--	--	28,826,976	--	28,826,976
Grants and program expenditures	24,948,249	319,816	210,951	(217,500)	25,261,516
General and administrative expenses	4,417,256	17,142	11,250	--	4,445,648
Total Operating Expenses	29,365,506	336,958	29,049,177	(217,500)	58,534,141
Operating Income	7,328,793	(336,570)	3,724,519	--	10,716,743
Nonoperating Revenue (Expenses)					
Interest income - prommisory notes	2,585,070	310,432	--	--	2,895,503
Interest income - short term cash deposits	83,372	338	8,826	--	92,536
Interest expenses LT debt	--	(61,795)	--	--	(61,795)
Interest income - component units	60,127	--	--	--	60,127
Interest expense - component units	--	--	--	--	--
Payments to State of Connecticut	--	--	--	--	--
Distributions to member	--	--	--	--	--
Realized loss on investments	(2,936)	--	--	--	(2,936)
Unrealized gain (loss) on interest rate swap	--	--	--	--	--
Provision for loan losses	(1,021,826)	--	--	--	(1,021,826)
Total Nonoperating Revenue (Expenses)	1,703,808	248,975	8,826	--	1,961,609

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CONDENSED, COMBINING INFORMATION – STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION (CONTINUED)

	CGB	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Change in Net Position before Payments to State of Connecticut and Capital Contributions	9,032,601	(87,594)	3,733,345	--	12,678,352
Capital contributions	--	--	--	--	--
Change in Net Position	9,032,601	(87,594)	3,733,345	--	12,678,352
Net Position - Beginning of Year	105,109,340	250,775	4,184,512	(99,000)	109,445,627
Net Position - End of Year	$ 114,141,941	$ 163,181	$ 7,917,857	$ (99,000)	$ 122,123,979

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CONDENSED, COMBINING INFORMATION – STATEMENT OF CASH FLOWS

	CGB	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Cash Flows from Operating Activities					
Sales of energy systems	$ --	$ --	$ 35,128,140	$ --	$ 35,128,140
Sales of Renewable Energy Certificates	2,443,524	-	-	-	2,443,524
Utility company remittances	26,453,300	--	--	--	26,453,300
Grants	1,050,204	--	--	--	1,050,204
RGGI auction proceeds	5,313,666	--	--	--	5,313,666
Other income	454,393	--	--	--	454,393
Lease payments received	--	--	--	--	--
Grant and program expenditures	(12,646,408)	(364,597)	(208,417)	--	(13,219,423)
Grants, incentives and credit enhancements	(10,718,424)	--	--	--	(10,718,424)
Purchases of energy equipment	--	--	(34,278,293)	--	(34,278,293)
General and administrative expenditures	(4,327,471)	(17,094)	(6,317)	--	(4,350,882)
Net Cash Provided by (Used in) Operating Activities	8,022,784	(381,692)	635,113	--	8,276,206
Cash Flows from Non-capital Financing Activities					
Payments to State of Connecticut	--	--	--	--	--
Advances to CGB component units	(15,762,500)	--	--	--	(15,762,500)
Advances from CGB and component units	--	217,500	--	--	217,500
Repayments of Advances (to) from component units	10,389	(219,239)	208,850	--	--
Net Cash Provided by (Used in) Non-capital Financing Activities	(15,752,111)	(1,739)	208,850	--	(15,545,000)
Cash Flows from Capital and Related Financing Activities					
Purchase of capital assets	(67,645)	--	--	--	(67,645)
Proceeds from long-term debt	--	2,510,837	--	--	2,510,837
Repayment of long-term debt	--	(170,445)	--	--	(170,445)
Interest expense	--	(61,795)	--	--	(61,795)
Capital contributions from/(to) component entities	--	--	--	--	--
Capital contributions from Firststar Development, LLC	--	--	--	--	--
Return of capital to Firststar Development, LLC	--	--	--	--	--
Net Cash Provided by (Used in) Capital and Related Financing Activities	(67,645)	2,278,597	--	--	2,210,952
Cash Flows from Investing Activities					
Return of principal on WC & program loans	25,636,808	1,009,428	--	--	26,646,236
Interest on short-term investments, cash, solar lease notes and loans	1,923,774	268,148	8,826	--	2,200,748

NOTE 1 – NATURE OF OPERATIONS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CONDENSED, COMBINING INFORMATION – STATEMENT OF CASH FLOWS (CONTINUED)

	CGB	CT Solar Loan I LLC	CEFIA Holdings LLC	Eliminating Entries	Total Primary Government
Cash Flows from Investing Activities (Continued)					
Interest on short-term investments and cash deposits	--	--	--	--	--
Interest on solar lease notes	--	--	--	--	--
Program loan disbursements	--	--	--	--	--
CPACE program loan disbursements	$ (14,888,372)	$ --	$ --	$ --	$ (14,888,372)
Grid Tied program loan disbursements	(911,249)	--	--	--	(911,249)
AD/CHP program loan disbursements	--	--	--	--	--
Alpha/Operational Demo program loan disbursements	(350,000)	--	--	--	(350,000)
Energy Efficiency program loan disbursements	--	--	--	--	--
Campus Efficiency NOW program loan disbursements	--	--	--	--	--
HOPBI program loan disbursements	(1,684,862)	--	--	--	(1,684,862)
Residential Solar Loan program disbursements	(2,489,159)	(548,813)	--	--	(3,037,973)
Net Cash Used in Investing Activities	7,236,939	728,763	8,826	--	7,974,529
Net Increase (Decrease) in Cash and Cash Equivalents	(560,033)	2,623,929	852,789	--	2,916,686
Cash and Cash Equivalents - Beginning of Year	40,022,862	719,061	3,160,764	--	43,902,687
Cash and Cash Equivalents - End of Year	$ 39,462,829	$ 3,342,990	$ 4,013,553	$ --	$ 46,819,373
Reconciliation of Operating Loss to Net Cash Provided by (Used in) Operating Activities:					
Operating income (loss)	$ 7,328,793	$ (336,570)	$ 3,724,519	$ --	$ 10,716,743
Adjustments to reconcile operating loss to net cash provided by (used in) operating activities:					
Depreciation	--	--	--	--	--
Other	--	--	--	--	--
Changes in operating assets and liabilities:					
(Increase)decrease in operating assets	--	--	--	--	--
(Decrease)increase in operating liabilities	--	--	--	--	--
Net Cash Provided by (Used in) Operating Activities	$ 7,328,793	$ (336,570)	$ 3,724,519	$ --	$ 10,716,743

NOTE 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

CGB, 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 CGB. 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.

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 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.

NOTE 1 – NATURE OF BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

OPERATING VS. NON-OPERATING REVENUE (EXPENSE)

All entities distinguish operating revenues and expenses from non-operating 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. Non-operating 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. NON-RESTRICTED 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 $500 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.

NOTE 1 – NATURE OF BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

CAPITAL ASSETS (CONTINUED)

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.

All solar facilities are owned by CT Solar Lease 2 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.

IMPAIRMENT OF LONG-LIVED ASSETS

CT Solar Lease 2 LLC reviews its 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 during the fiscal year ending June 30, 2016.

NOTE 1 – NATURE OF BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

ASSET RETIREMENT OBLIGATIONS

CT Solar Lease 2 LLC (CT SL2) is required to recognize its liability related to asset retirement obligations when it has the legal obligation to retire long-lived assets. Upon the expiration of operating leases or a PPA's initial or extended terms, customers generally have the option to purchase the solar facilities at fair market value or require CT SL2 to remove the solar facilities at its 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. 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 considers 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 routinely reviews and reassesses its 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 was $2,528,335 and $1,094,125 at June 30, 2016 and June 30, 2015 respectively. The following table shows changes in the aggregate carrying amount of CT SL2's asset retirement obligation for the year ended June 30, 2016:

Balance - June 30, 2015	$	1,094,125
Additional accruals		1,328,366
Accretion expense		105,843
Balance - June 30, 2016	$	2,528,334

NOTE 1 – NATURE OF BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

PORTFOLIO INVESTMENTS

CGB 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, CGB'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. CGB 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. CGB 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 CGB's portfolio investments are uninsured against loss and unregistered, and are held in the administrator's name.

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 CGB's component units by outside entities.
- *Unrestricted Net Position* represents assets which do not meet the definition of the two preceding categories.

NOTE 1 – NATURE OF BUSINESS 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 2015 summarized information have been reclassified to conform to the 2016 presentation.

SUBSEQUENT EVENTS

CGB has performed a review of events subsequent to the statement of net position date through October xx, 2016, the date of the financial statements where available to be issued. Except as described below, no additional events requiring recording or disclosure in the financial statements were identified.

NOTE 2 – CHANGE IN METHOD FOR ACCOUNTING FOR PENSIONS

On July 1, 2014, CGB adopted GASB 68 and GASB 71. GASB 68 requires cost-sharing employers to recognize liabilities, deferred outflows of resources, deferred inflows of resources, and expenses for their proportionate share of the pension plan's total. As the State Employees' Retirement System (SERS) did not have a practical way to provide each of its cost-sharing employers with all of the information needed to fully restate their prior period financial statements, CGB has elected to apply the "cumulative effect" method, as discussed in GASB 68, by restating beginning net position as of July 1, 2014. As of July 1, 2014, CGB recorded an adjustment to reduce beginning net position by $15,430,912 in accordance with GASB 68, as amended.

NOTE 2 – CHANGE IN METHOD FOR ACCOUNTING FOR PENSIONS (CONTINUED)

GASB 71 requires that, at transition, a government recognize a deferred outflow of resources for its pension contributions, if any, made subsequent to the measurement date of the net pension liability and the end of the government's report period. The provisions of the Statement are required to be applied simultaneously with the provisions of GASB 68. As of July 1, 2014, CGB recorded an adjustment to increase beginning net position by $1,923,687 for contributions made to SERS from July 1, 2013 through June 30, 2014.

As of July 1, 2014, the cumulative effect of adopting GASB 68 was a $14,305,410 reduction to beginning net position. The following table shows the impact of the "cumulative effect" method of adopting and implementing GASB 68 and GASB 71 on beginning net position.

Statement of Revenue, Expenses and Changes in Net Position	
Net position, beginning of period, July 1, 2014 (as previously started)	$ 98,500,605
Cumulative effect of adopting GASB 68 and GASB 71	(14,305,410)
Net position, beginning of period, July 1, 2014 (as restated)	$ 84,195,195

NOTE 3 – 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) and the lowest priority to unobservable inputs (Level 3). In determining fair value, CGB utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. CGB 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 of liabilities. CGB's Level 1 securities were valued at the closing price reported on the active markets on which the individual securities are traded.

NOTE 3 – FAIR VALUE MEASUREMENTS (CONTINUED)

Level 2 – Inputs other than quotes 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:

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

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.

NOTE 3 – FAIR VALUE MEASUREMENTS (CONTINUED)

The following table sets forth by level, within the fair value hierarchy, CGB's fair value measurements at June 30, 2016:

	Investment assets at Fair Value as of June 30, 2016			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	$ 57,822,043	$ --	$ --	$ 57,822,043
Portfolio investments	--	--	1,000,000	1,000,000
	$ 57,822,043	$ --	$ 1,000,000	$ 58,822,043

	Level 1	Level 2	Level 3	Total
Primary Government:				
Cash and cash equivalents	$ 46,819,372	$ --	$ --	$ 46,819,372
Portfolio investments	--	--	1,000,000	1,000,000
Discretely Presented Component Units:				
CEFIA Solar Services, Inc.	5,121,165	--	--	5,121,165
CT Solar Lease 2 LLC				
Cash and cash equivalents	5,881,506	--	--	5,881,506
	$ 57,822,043	$ --	$ 1,000,000	$ 58,822,043

NOTE 3 – FAIR VALUE MEASUREMENTS (CONTINUED)

The following table sets forth by level, within the fair value hierarchy, CGB's fair value measurements at June 30, 2015:

	Investment assets at Fair Value as of June 30, 2015			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	$ 48,692,654	$ --	$ --	$ 48,692,654
Portfolio investments	--	--	1,000,000	1,000,000
	$ 48,692,654	$ --	$ 1,000,000	$ 49,692,654

	Level 1	Level 2	Level 3	Total
Primary Government:				
Cash and cash equivalents	$ 43,902,687	$ --	$ --	$ 43,902,687
Portfolio investments	--	--	1,000,000	1,000,000
Discretely Presented Component Units:				
CEFIA Solar Services, Inc.	69,252	--	--	69,252
CT Solar Lease 2 LLC				
Cash and cash equivalents	4,720,716	--	--	4,720,716
	$ 48,692,655	$ --	$ 1,000,000	$ 49,692,655

There were no transfers between levels during the years ended June 30, 2016 and 2015.

Furthermore, there were no changes in level 3 assets during 2016 or 2015, respectively.

NOTE 4 – CASH AND CASH EQUIVALENTS

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

	2016	2015
Checking	$ 4,499,264	$ 4,680,259
Money Market	$ 10,103,292	$ 2,616,390
State Treasurer's Short-Term Investment Fund	33,469,504	32,597,000
Unrestricted cash and cash equivalents	48,072,060	39,893,649
Checking - restricted	1,109,782	1,670,516
Money Market - restricted	5,001,190	3,500,000
State Treasurer's Short-Term Investment Fund - restricted	3,639,011	3,628,489
Total cash and cash equivalents	$ 57,822,043	$ 48,692,654

	Cash and cash equivalents as of June 30, 2016			
	Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	Total
Checking	$ 4,179,675	$ 244,856	$ 74,733	$ 4,499,263
Money Market	3,920,210	1,136,651	5,046,432	10,103,292
State Treasurer's Short-Term Investment Fund	33,469,504	--	--	33,469,504
Unrestricted Cash and Cash Equivalents	41,569,388	1,381,506	5,121,165	48,072,059
Restricted Cash				
Checking	109,783	1,000,000	--	1,109,783
Money market	1,501,190	3,500,000	--	5,001,190
State Treasurer's Short-Term Investment Fund	3,639,011	--	--	3,639,011
	$ 46,819,372	$ 5,881,506	$ 5,121,165	$ 57,822,043

NOTE 4 – CASH AND CASH EQUIVALENTS (CONTINUED)

	Cash and cash equivalents as of June 30, 2015			
	Primary Government	CT Solar Lease 2 LLC	CEFIA Solar Services, Inc.	Total
Checking	$ 4,495,298	$ 161,841	$ 23,120	$ 4,680,259
Money Market	2,511,383	58,875	46,132	2,616,390
State Treasurer's Short-Term Investment Fund	32,597,000	--	--	32,597,000
Unrestricted Cash and Cash Equivalents	39,603,681	220,716	69,252	39,893,649
Restricted Cash				
Checking	670,516	1,000,000	--	1,670,516
Money market	--	3,500,000	--	3,500,000
State Treasurer's Short-Term Investment Fund	3,628,489	--	--	3,628,489
	$ 43,902,686	$ 4,720,716	$ 69,252	$ 48,692,654

STATE TREASURER'S SHORT-TERM INVESTMENT FUND

The State Treasurer's Short-Term Investment Fund is a Standard & Poors 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 CGB'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.

INVESTMENT MATURITIES

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

NOTE 4 – CASH AND CASH EQUIVALENTS (CONTINUED)

INTEREST RATE RISK

CGB 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.

CREDIT RISK

Connecticut General Statutes authorize CGB 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

CGB'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, CGB's deposits may not be returned to it. CGB does not have a deposit policy for custodial credit risk. As of June 30, 2016 and 2015, $19,019,356 and $12,212,054, respectively, of CGB's bank balances were exposed to custodial credit risk. Primary government consisted of $8,727,950 and $7,795,388 as of June 30, 2016 and 2015, respectively. CT Solar Lease 2, LLC consisted of $5,420,241 and $4,416,666 as of June 30, 2016 and 2015, respectively. CEFIA Solar Services, Inc. consisted of $ 4,871,165 as of June 30, 2016. CEFIA Solar Services, Inc. had no balances exposed to credit risk as of June 30, 2015. Funds held by banks on behalf of CGB, CT Solar Lease 2 LLC and CEFIA Solar Services included contractual requirements to maintain $6,000,346 in deposits with financial institutions participating 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, CGB will not be able to recover the value of the investment. CGB does not have a policy relating to the credit risk of investments. As of June 30, 2016 and 2015, CGB had no reportable credit risk.

NOTE 5 – 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 CGB and CI, CI manages these investments on behalf of CGB.

NOTE 6 – BONDS RECEIVABLE

Subordinate Series 2014B-1 and 2014C-1

This Series represents two $800,000 bonds received in connection with the CGB's May 2014 sale of C-PACE Loans to Clean Fund Holdings, LLC (CFH). CFH paid CGB approximately $6.4 million in cash along with two bonds issued to CGB 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. CGB received a principal repayment of $8,858 for each bond as a result of a C-PACE loan payoff in 2016. At June 30, 2016, management believes no valuation allowance is necessary on these bonds.

Each bond required semi-annual interest-only payments to CGB 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 CGB.

Subordinate Series 2015B-1 and 2015C-1

This Series represents two $955,000 bonds received in connection with the CGB's August 2015 sale of C-PACE Loans to Clean Fund Holdings, LLC (CFH). CFH paid CGB approximately $7.7 million in cash along with two bonds issued to CGB through Public Finance Authority. The 2015 Series bonds carry interest of 5.52% per annum with a maturity date of August 13, 2035. At June 30, 2016, management believes no valuation allowance is necessary on these bonds.

Each bond required semi-annual interest-only payments to CGB starting September 15, 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 CGB.

Principal maturities of these bonds are as follows:

Year ended June 30,	2014B-1	2014C-1	2015B-1	2015B-1	Total
2017	--	--	--	--	--
2018	--	--	--	--	--
2019	--	--	--	--	--
2020	--	--	--	--	--
2021					
2022 - 2026	--	--	--	--	--
2027 - 2031	277,500	277,500	--	--	555,000
2032 - 2036	513,641	513,641	955,000	955,000	2,937,282
	$ 791,141	$ 791,141	$ 955,000	$ 955,000	$ 3,492,282

NOTE 7 – SOLAR LEASE NOTES

In June of 2008 the predecessor of the CGB, 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

2017	$ 845,479
2018	888,736
2019	934,205
2020	982,001
2021	1,032,242
2022-2025	4,416,442
	9,099,105
Less reserve for losses:	(90,991)
	$ 9,008,114
Current portion	$ 845,479
Non-current portion	8,162,635
	$ 9,008,114

NOTE 8 – PROGRAM LOANS

Outstanding principal balances by program for the years ending June 30, 2016 and 2015 are as follows:

	2016	2015
Connecticut Green Bank		
CPACE Program benefit assessments	$ 19,335,073	$ 29,379,287
CPACE Promissory notes	1,553,884	$ --
Gried-Tied Program term loans	8,701,188	7,722,894
Multifamily/Affordable housing program loans	2,467,231	--
Alpha/Operational Demonstration program loans	1,136,421	836,421
Other program loans	680,737	1,746,443
CT Solar Loan I LLC		
Residential Solar PV Program loans-WIP	26,233	892,866
Residential Solar PV Program loans-Complete	4,041,563	3,584,829
	37,942,330	44,162,741
Reserve for loan losses	(4,674,813)	(3,644,796)
	$ 33,267,517	$ 40,517,945

Scheduled repayments of principal under these loans as of June 30, 2016 is as follows:

	2017	2018	2019	2020	2021	Thereafter	Total
Connecticut Green Bank							
CPACE Program benefit assessments- in repayment	--	--	--	--	--	--	--
Gried-Tied Program term loans	--	--	--	--	--	--	--
Multifamily/Affordable housing term loans	--	--	--	--	--	--	--
Alpha/Operational Demonstration program loans	--	--	--	--	--	--	--
Other program loans	--	--	--	--	--	--	--
CT Solar Loan I LLC							
Residential Solar PV Program loans - in repayment	--	--	--	--	--	--	--
	--	--	--	--	--	--	--
Reserve for loan losses	--	--	--	--	--	--	--
	$ --	$ --	$ --	$ --	$ --	$ --	$ --

NOTE 8 – PROGRAM LOANS (CONTINUED)

Benefits assessments under the C-PACE program will finance energy efficiency upgrades and the installation of renewable energy equipment on non-residential property. The assessments carry interest rates ranging from 5.0% to 6.0% with terms ranging from 10 to 20 years.

The grid–tied term loan represents the financing of two projects. The first project is the 15 megawatt Dominion 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 payments commence over a 48-month period. The second project is the 5 megawatt wind turbine project in Colebrook. Interest on the revolving term loan is paid quarterly at prime plus 3%. Interest on the non-revolving term loan is paid quarterly based on the project's cash flows. The minimum rate of interest on the non-revolving 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 of 2015.

Pre development loans finance a clean energy facility developer's costs associated with acquiring site control, environmental assessments, impact studies, permitting costs and facility design. Repayments of principal begin when one of the following milestones is achieved: the closing of permanent financing of the project, commencement of commercial operation, or the sale of the project or its assets. Interest on repayments is at a rate of prime plus 1%. The projects financed continue to be under development and are investments of the organization that are consistent with its Comprehensive Plan and budget.

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 and bridge loans to developers of solar PV projects for low to moderate income housing that fall inside the organization's Comprehensive Plan and Budget.

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

NOTE 9 – FINANCING ACTIVITIES

LONG-TERM DEBT - LINE OF CREDIT – PRIMARY GOVERNMENT

(to be updated)

Solar Mosaic Line of Credit

During 2014, CT Solar Loan 1 LLC entered into a $4,000,000 line of credit (LOC) with Solar Mosaic, Inc. (Mosaic). 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 are available after June 30, 2015. The LOC had $3,873,912 available at June 30, 2014. Borrowings on the LOC bear interest at 6.4586% (Base Rate) and have the 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, 2015 and 2014 there was $853,525 and $126,088, respectively, outstanding which matures in March 2029.

In connection with the LOC, CT Solar Loan 1 LLC 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 by residential borrowers. 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
2017	$ 50,129	$ 47,022	$ 97,151
2018	52,937	43,938	$ 96,875
2019	55,910	40,680	$ 96,590
2020	59,058	37,240	$ 96,298
2021	--	--	$ --
2022 - 2026	346,592	127,414	$ 474,006
Thereafter	241,796	24,495	$ 266,291
	$ 806,422	$ 320,789	$ 1,127,211

The Reinvestment Fund Line of Credit

(To be added)

NOTE 9 – FINANCING ACTIVITIES (CONTINUED)

LINE OF CREDIT –DISCRETELY PRESENTED COMPONENT UNIT – CT SOLAR LEASE 2, LLC

CT Solar Lease 2, LLC has a $24,000,000 line of credit agreement (Additional LOC) with First Niagara Bank, N.A. (First Niagara) as the Administrative Agent and Lender along with an additional participating lender. The additional LOC is broken down by lender as follows:

First Niagara Bank, N.A	$ 15,000,000
Webster Bank, National Association	9,000,000
	$ 24,000,000

Funds may be drawn down in no more than xxx total advances by October 1, 2016. With the exception of the final advance, each advance must be in the principal amount of $2,400,000 or a whole multiple of $100,000 in excess of $2,400,000. 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, 2016 and 2015, $18,000,000 and $3,000,000, respectively, had been advanced under the additional LOC. Principal repayments of $832,325 were made as of June 30, 2016. No principal repayments were made as of June 30, 2015.

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) First Niagara's prime rate, and (c) the LIBOR rate plus 1 percent. 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 15year amortization schedule as outlined in the credit agreement.

NOTE 9 – FINANCING ACTIVITIES (CONTINUED)

LINE OF CREDIT –DISCRETELY PRESENTED COMPONENT UNIT – CT SOLAR LEASE 2, LLC (CONTINUED)

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 10.

Certain obligations of CT Solar Lease 2 LLC under the credit agreement are guaranteed by CGB. 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.

NOTE 10 – INTEREST RATE SWAP AGREEMENT

CT Solar Lease 2 LLC entered into an interest rate swap agreement with First Niagara (the Swap Agreement) in September 2014 in anticipation of making its first draw down on the credit agreement. Payments made and received are based on a notional amount of $19,374,375 and $11,804,925 as of June 30, 2016 and 2015, respectively. The agreement provides for CT Solar Lease 2 LLC to receive payments based on the 1 month USD-LIBOR-BBA (0.44205% and 0.18550% at June 30, 2016 and 2015, respectively) and to make payments based on an interest rate of 2.78%. The agreement matures on December 15, 2025. The fair value of the interest rate swap agreement as of June 30, 2016 and 2015 were deferred inflows of $1,627,864 and $660,073, respectively which is represented as the fair value of the interest rate swap on the accompanying 2016 and 2015 Statement of Net Position. CGB used the dollar-offset method for evaluating effectiveness of the interest rate swap agreement.

NOTE 11 – PAYMENT TO STATE OF CONNECTICUT

The Connecticut Legislature passed Public Act 13-247 pertaining to the State's budget for the biennium ending June 30, 2015 and signed into law on June 19, 2013. This Act required the Connecticut Green Bank to transfer $19,200,000 to the State's General Fund during fiscal year 2015. No payments to the State were made in fiscal year 2016.

NOTE 12 – RELATED PARTY TRANSACTIONS AND OPERATING LEASES

DUE TO OUTSIDE AGENCY

CGB utilizes the services of CI, as provided in the General Statutes of the State of Connecticut. CI provides services to CGB, at cost, for its operations. Such services include, but are not limited to, staff for human resources and information technology support, office space, equipment, supplies and insurance. Expenses billed to CGB by CI totaled $58,401 and $477,161 for the years ended June 30, 2016 and 2015, respectively. As of June 30, 2016 and 2015, amounts due to CI were $30,127 and $49,516, respectively.

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 year, 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 percent 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 percent. The unused commitment fee totaled $99,486 and $252,135 for the years ended June 30, 2016 and 2015, respectively, and is included in accounts payable and accrued expenses on the accompanying statement of net position.

PRIORITY RETURN

The Investor Member is the Tax-Equity Investor and is entitled to substantially all of the tax benefits of CT Solar Lease 2 LLC until January I of the year which is five years after the date the last project is installed, which is anticipated to be January 1, 2021, the Flip Date.

NOTE 12 – RELATED PARTY TRANSACTIONS AND OPERATING LEASES (CONTINUED)

PRIORITY RETURN (CONTINUED)

The investor Member of CT Solar Lease 2 LLC shall be due a cumulative, quarterly distribution 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 a priority returns of $299,831 and $26,159 for the years ended June 30, 2016 and 2015, respectively.

ADMINISTRATIVE SERVICES FEE

The Managing Member of CT Solar Lease 2 LLC, CEFIA Solar Services, Inc. provides administrative and management services to the Company and earns a quarterly fee initially equal to $30,000 per quarter beginning July 1, 2013. The amount of the fee increased 2.5 percent each July 1st beginning July 1, 2014. The administrative services fee totaled $130,075 and $123,000 for the years ended June 30, 2016 and 2015, respectively, and is included in accounts payable and accrued expenses on the accompanying statement of net position.

PREPAID PRIORITY RETURN

The investor member of CT Solar Lease 2 LLC will be paid a prepaid priority return with respect to each residential energy system project where the customer has made a prepayment to CT Solar Lease 2 LLC. The prepaid priority return is a one-time distribution to the investor member equal to 4.2055% of each prepaid project's purchase price. The prepaid priority return will be paid to the investor member on the date it makes its initial acquisition capital contribution with respect to the purchase of the prepaid project. During the years ended June 30, 2016 and 2015, the investor member was paid $1,717 and $72,402, respectively, related to the prepaid priority return.

NOTE 12 – RELATED PARTY TRANSACTIONS AND OPERATING LEASES (CONTINUED)

PAYROLL TAXES AND FRINGE BENEFIT CHARGES

Pursuant to state statute, CGB is subject to fringe benefit charges for pension plan and medical plan contributions which are paid at the state level. CGB's employer payroll taxes are also paid at the state level. CGB reimburses the state for these payments. The reimbursement for 2016 and 2015 was $3,691,048 and $3,061,004, respectively, comprising 74.30% and 75.80%, respectively, of gross salaries.

OPERATING LEASES

During 2014, CGB entered into a non-cancellable 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, 2016 and 2015 was $ 159,498 and $154,572, respectively.

In addition, CGB has a non-cancelable 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, 2016 and 2015 amounted to $ 105,422 and $97,723, respectively. CGB also began sub leasing additional office space from CI in March of 2016. Initial monthly payments are $5,665.50 with escalating payments through December 2020. Rent expense related to this sub lease was $22,662 for the year ended June 30, 2016.

In addition, CGB leases office equipment on a month-to-month basis. Rent expense related to the office equipment for the years ended June 30, 2016 and 2015 was $13,465 and $6,439, respectively.

Future minimum lease payments for office rentals are as follows:

Years ending June 30,	
2017	$ 325,318
2018	333,379
2019	341,440
2020	349,501
2021	176,766
Thereafter	--
	$ 1,526,404

NOTE 13 – CAPITAL ASSETS

Capital asset activity for reporting entity for the years ended June 30, 2016 and 2015 are as follows:

Primary Government

2016	Balance, July 1, 2015	Additions	Deletions	Adjustments	Balance, June 30, 2016
Capital assets being depreciated:					
Solar lease equipment	$ --	$ --	$ --	$ --	$ --
Furniture and equipment	222,701	11,417	(7,054)	(57,641)	169,423
Computer hardware and software	128,627	35,963	(9,400)	57,641	212,831
Leasehold improvements	153,657	72,187	--	--	225,844
Capital assets not being depreciated:					
WIP solar lease equipment	--	--	--	--	--
Construction in progress	7,141	23,090	(25,729)	--	4,502
	512,126	142,657	(42,184)	--	612,600
Less accumulated depreciation and amortization:					
Solar lease equipment	--	--	--	--	--
Furniture and equipment	122,149	60,653	(4,125)	(75,598)	103,078
Computer hardware and software	50,906	26,124	(1,055)	75,598	151,573
Leasehold improvements	75,232	33,964	--	--	109,196
	248,287	120,741	(5,181)	--	363,848
Capital assets, net	$ 263,839	$ 21,916	$ (37,003)	$ --	$ 248,752

2015	Balance, July 1, 2014	Additions	Deletions	Adjustments	Balance, June 30, 2015
Capital assets being depreciated:					
Solar lease equipment	$ --	$ --	$ --	$ --	$ --
Furniture and equipment	338,938	18,353	(134,590)	--	222,701
Computer hardware and software	88,337	57,480	(17,190)	--	128,627
Leasehold improvements	139,682	13,975	--	--	153,657
Capital assets not being depreciated:					
WIP solar lease equipment	--	--	--	--	--
Construction in progress	7,141	--	--	--	7,141
	574,098	89,808	(151,780)	--	512,126
Less accumulated depreciation and amortization:					
Solar lease equipment	--	--	--	--	--
Furniture and equipment	205,820	50,919	(134,590)	--	122,149
Computer hardware and software	33,845	34,250	(17,189)	--	50,906
Leasehold improvements	44,501	30,731	--	--	75,232
	284,166	115,900	(151,779)	--	248,287
Capital assets, net	$ 289,932	$ (26,092)	$ (1)	$ --	$ 263,839

NOTE 13 – CAPITAL ASSETS (CONTINUED)

Discretely Presented Component Units

2016	Balance, July 1, 2015	Additions	Deletions	Adjustments	Balance, June 30, 2016
Capital assets being depreciated:					
Solar lease equipment	$ 21,011,832	$ 29,240,167	$ --	$ (2,717,508)	$ 47,534,490
Furniture and equipment	--	--	--	--	--
Computer hardware and software	--	--	--	--	--
Leasehold improvements	--	--	--	--	--
Capital assets not being depreciated:					
WIP solar lease equipment	6,014,560	18,206,739	(11,067,035)	(1,222,525)	11,931,740
Construction in progress	--	--	--	--	--
	27,026,392	47,446,906	(11,067,035)	(3,940,033)	59,466,230
Less accumulated depreciation and amortization:					
Solar lease equipment	319,144	1,532,051	--	--	1,851,195
Furniture and equipment	--	--	--	--	--
Computer hardware and software	--	--	--	--	--
Leasehold improvements	--	--	--	--	--
	319,144	1,532,051	--	--	1,851,195
Capital assets, net	$ 26,707,248	$ 45,914,855	$ (11,067,035)	$ (3,940,033)	$ 57,615,035

2015	Balance, July 1, 2014	Additions	Deletions	Adjustments	Balance, June 30, 2015
Capital assets being depreciated:					
Solar lease equipment	$ 1,035,159	$ 22,753,915	$ --	$ (2,777,242)	$ 21,011,832
Furniture and equipment	--	--	--	--	--
Leasehold improvements	--	--	--	--	--
Computer hardware and software	--	--	--	--	--
Capital assets not being depreciated:					
WIP solar lease equipment	1,759,111	4,847,060	--	(591,611)	6,014,560
Construction in progress	--	--	--	--	--
	2,794,270	27,600,975	--	(3,368,853)	27,026,392
Less accumulated depreciation and amortization:					
Solar lease equipment	9,865	309,279	--	--	319,144
Furniture and equipment	--	--	--	--	--
Computer hardware and software	--	--	--	--	--
Leasehold improvements	--	--	--	--	--
	9,865	309,279	--	--	319,144
Capital assets, net	$ 2,784,405	$ 27,291,696	$ --	$ (3,368,853)	$ 26,707,248

NOTE 13 – CAPITAL ASSETS (CONTINUED)

Total Reporting Entity

2016	Balance, July 1, 2015	Additions	Deletions	Adjustments	Balance, June 30, 2016
Capital assets being depreciated:					
Solar lease equipment	$ 21,011,832	$ 29,240,167	$ --	$ (2,717,508)	$ 47,534,491
Furniture and equipment	222,701	11,417	(7,054)	(57,641)	169,423
Computer hardware and software	128,628	35,963	(9,400)	57,641	212,832
Leasehold improvements	153,657	72,187	--	--	225,844
Capital assets not being depreciated:					
WIP solar lease equipment	6,014,560	18,206,739	(11,067,035)	(1,222,525)	11,931,739
Construction in progress	7,141	23,090	(25,729)	--	4,502
	27,538,519	47,589,563	(11,109,218)	(3,940,033)	60,078,831
Less accumulated depreciation and amortization:					
Solar lease equipment	319,144	1,532,052	--	--	1,851,196
Furniture and equipment	122,149	60,653	(4,125)	(75,598)	103,079
Computer hardware and software	50,906	26,124	(1,055)	75,598	151,573
Leasehold improvements	75,232	33,964	--	--	109,196
	567,431	1,652,793	(5,180)	--	2,215,044
Capital assets, net	$ 26,971,088	$ 45,936,770	$ (11,104,038)	$ (3,940,033)	$ 57,863,787

2015	Balance, July 1, 2014	Additions	Deletions	Adjustments	Balance, June 30, 2015
Capital assets being depreciated:					
Solar lease equipment	$ 1,035,159	$ 22,753,915	$ --	$ (2,777,242)	$ 21,011,832
Furniture and equipment	338,938	18,353	(134,590)	--	222,701
Computer hardware and software	88,337	57,480	(17,189)	--	128,628
Leasehold improvements	139,682	13,975	--	--	153,657
Capital assets not being depreciated:					
WIP solar lease equipment	1,759,111	4,847,060	--	(591,611)	6,014,560
Construction in progress	7,141	--	--	--	7,141
	3,368,368	27,690,783	(151,779)	(3,368,853)	27,538,519
Less accumulated depreciation and amortization:					
Solar lease equipment	9,865	309,279	--	--	319,144
Furniture and equipment	205,820	50,919	(134,590)	--	122,149
Computer hardware and software	33,845	34,250	(17,189)	--	50,906
Leasehold improvements	44,501	30,731	--	--	75,232
	294,031	425,179	(151,779)	--	567,431
Capital assets, net	$ 3,074,337	$ 27,265,604	$ --	$ (3,368,853)	$ 26,971,088

NOTE 14 – GRANT PROGRAMS

CGB, the primary government, recognizes grant revenue based on expenditures or fulfillment of program requirements. For the year ended June 30, 2016 and 2015, CGB recognized related grant revenue of $589,917 and $143,615, respectively under Department of Energy programs.

NOTE 15 – COMMITMENTS AND LOAN GUARANTEES

As of June 30, 2016 and 2015, the Board of Directors designated a portion of CGB's unrestricted net position to fund financial incentives for specific commercial and residential projects in the following areas:

Commitments:

	2016	2015
Solar PV	$ 56,457,195	$ 45,017,128
AD/CHP programs	15,462,247	14,462,247
CPACE	11,563,681	15,178,559
Multifamily/LMI Solar PV and energy efficiency programs	9,510,841	12,000,000
Energy efficiency programs	1,130,000	277,763
Education and outreach	706,900	694,120
Other technologies	271,795	271,795
Alpha and operational demonstration programs	165,000	465,000
Wind	--	1,102,888
	$ 95,267,659	$ 89,469,500

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.

Loan Guarantees:
(to be updated)

NOTE 16 – PENSION PLAN

All employees of the CGB participate in the State Employees' Retirement System (SERS), which is administered by the State Employees' Retirement Commission. The CGB has no liability for pension costs other than the annual contribution. The latest actuarial study was performed on the plan as a whole, as of June 30, 2012, and does not separate information for employees of the CGB. Therefore, certain pension disclosures pertinent to CGB otherwise required pursuant to accounting principles generally accepted in the United States of America are omitted. Based upon the 2012 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 8% (previously 8.25%); (2) price inflation of 2.75% (previously 3%) for cost of living adjustments; (3) projected salary increases of 4% to 20%, Social Security wage base increases of 3.50% per annum; (4) payroll growth of 3.75% per annum; and (5) the 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 three tiers. Tier I and Tier IIA 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.

NOTE 16 – PENSION PLAN (CONTINUED)

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.

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 CGB covered by SERS for the years ended June 30, 2016 and 2015 was $4,695,647 and $4,013,411, respectively.

CONTRIBUTIONS MADE

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

	2016	2015	2014	2013
Contributions made:				
By employees	$ 208,516	$ 171,260	$ 139,217	$ 104,214
Percent of current year covered payroll	4.4%	4.3%	4.5%	4.1%
Percent of required contributions	100.0%	100.0%	100.0%	100.0%
By CGB	$ 2,474,182	$ 1,974,507	$ 1,669,961	$ 1,125,649
Percent of current year covered payroll	52.7%	49.2%	53.5%	44.7%
Percent of required contributions	100.0%	100.0%	100.0%	100.0%

CGB has contributed the required amount for each of the past three years.

NOTE 17 – PENSION LIABILITIES, PENSION EXPENSE, DEFERRED OUTFLOWS OF RESOURCES, AND DEFERRED INFLOWS OF RESOURCES

The implementation of GASB 68 resulted in CGB reporting an initial net pension liability for fiscal year 2015. The Statement required CGB 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 Pension (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.

At June 30, 2016 and 2015, CGB reported a liability of $16,096,113 and $14,899,766, respectively for its proportionate share of the net pension liability. The net pension liability as of June 30, 2016 was measured as of June 30, 2015, 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. CGB's allocation of the net pension liability was based on the 2015 covered payroll multiplied by the SERS 2015 contribution rate of 37.91 percent. As of June 30, 2016 and 2015, CGB's proportion was 0.09741 percent and 0.09304 percent respectively.

For the years ended June 30, 2016 and 2015, CGB recognized pension expense of $1,399,477 and $1,431,032, respectively. Pension expense is reported in CGB's financial statements as part of general and administration expense and grant and program expenditures. At June 30, 2016 and 2015, CGB reported deferred outflows of resources and deferred inflows of resources related to pension from the following sources:

As of June 30, 2016:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Net Difference between projected and actual earnings on pension plan investments	$ -	$ (2,535)
CGB Contributions subsequent to the measurement date	2,552,833	-
	$ 2,552,833	$ (2,535)

As of June 30, 2015:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Net Difference between projected and actual earnings on pension plan investments	$ -	$ (532,135)
CGB Contributions subsequent to the measurement date	1,669,961	-
	$ 1,669,961	$ (532,135)

NOTE 17 – PENSION LIABILITIES, PENSION EXPENSE, DEFERRED OUTFLOWS OF RESOURCES, AND DEFERRED INFLOWS OF RESOURCES (CONTINUED)

The amount recognized as deferred inflows of resources, representing the net difference between projected and actual earnings, 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 (2017)	$	92,310
Year 2 (2018)		92,310
Year 3 (2019)		92,308
Year 4 (2020)		231,591
Year 5 (2021)		92,342
	$	600,861

ACTUARIAL METHODS AND ASSUMPTION

The total pension liability in the June 30, 2014 actuarial valuation was determined based on the results of an actuarial experience study for the period July 1, 2007 through June 30, 2011. The key actuarial assumptions are summarized below:

Inflation:	2.75%
Salary increase:	4.00% -20% including inflation
Investment rate of return:	8%, net of pension plan investment expense, Including inflation
Cost of living adjustment:	2.30%-3.60% for certain tiers

Mortality rates were based on the RP-2000 Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on Scale AA.

Discount rate

The discount rate used to measure the total pension liability at June 30, 2015 was the long term expected rate of return, 8.00 percent. 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 2015.

NOTE 17 – PENSION LIABILITIES, PENSION EXPENSE, DEFERRED OUTFLOWS OF RESOURCES, AND DEFERRED INFLOWS OF RESOURCES (CONTINUED)

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%
TIPS	5.0%	1.0%
Cash	4.0%	0.4%

Sensitivity of CGB proportionate share of the net pension liability to changes in the discount rates

The following presents CGB's proportionate share of the net pension liability calculated using the discount rate of 8.00 percent, as well as the proportionate share of the net pension liability using a 1.00 percent increase or decrease from the current discount rate.

	1% Decrease	Discount Rate	1% Increase
	7.0%	8.0%	9.0%
CGB's proportionate share of the net pension liability	$ 19,146,790	$ 16,096,113	$ 13,525,960

NOTE 18 – RESTRICTED NET POSITION

Restricted net position at June 30, 2016 and 2015 consisted of the following:

	2016	2015
Primary Government		
Non-Expendable		
Connecticut Innovations, Inc. equity interest	$ 1,000	$ 1,000
Energy Programs		
CGB		
Assets restricted for maintaining loan loss and interest rate buydown reserves	3,748,793	3,999,005
Assets restricted by contractual obligations for maintaining pledge accounts for loan guarantees	1,200,346	--
CT Solar Loan I LLC		
Assets restricted by contractual obligations for maintaining loan loss reserve	300,844	300,000
	5,249,983	4,299,005
Discretely Presented Component Units		
CT Solar Lease 2 LLC		
Assets restricted for maintaining loan loss reserve	3,500,000	3,500,000
Assets restricted for operating and maintenance reserve	1,000,000	1,000,000
	$ 9,749,983	$ 8,799,005

NOTE 19 – RISK MANAGEMENT

CGB 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.

NOTE 20 – RENEWABLE ENERGY CREDITS (PRIMARY GOVERNMENT)

CGB owns Class 1 Renewable Energy Credits (RECs) that are generated by certain commercial renewable energy facilities for which CGB provided the initial funding. Through its Residential Solar Incentive Program, CGB owns the rights to future RECs generated by facilities installed on residential properties. On March 23, 2015 CGB entered into a contract to sell a total of 98,553 RECs generated during the period 2014 to 2016. For the year ended June 30, 2016 CGB sold its contractual obligation of 30,000 RECs. For the year ended June 30, 2015 CGB sold its contractual obligation of 23,553 RECs. CGB's remaining obligation is to sell 45,000 RECs generated or to be generated in 2016 for $49.50 per REC. Based on historical performance, management believes that the RECs it will receive from funded commercial facilities and residential facilities will exceed the commitments to sell RECs under this agreement.

RECs trade on the New England Power Pool (NEPOOL) market. The market price of Connecticut Class 1 RECs as of June 30, 2016 ranged from $35.00 to $37.50. CGB's inventory as of June 30, 2016 has been priced at its cost.

CONNECTICUT GREEN BANK
REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF GREEN BANK'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

FOR THE YEAR ENDED JUNE 30, 2016

As of June 30,	2016	2015
Green Bank's portion of the net pension liability	0.97410%	0.09304%
Green Bank's proportionate share of the net pension liability	$ 16,096,113	$ 14,899,766
Green Bank's covered employee payroll	$ 4,695,647	$ 4,013,411
Green Bank's proportionate share of the net pension liability as a percentage of its covered-employee payroll	342.79%	371.25%
Plan fiducuary ner position as a percentage of the total pension liabilty	39.23%	39.54%

CONNECTICUT GREEN BANK
REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF GREEN BANK'S PROPORTIONATE CONTRIBUTIONS TO THE STATE EMPLOYEES' RETIREMENT SYSTEM (SERS)

FOR THE YEAR ENDED JUNE 30, 2016

	2016	2015	2014	2013	2012	2011	2010
Contractually required contribution	$2,474,182	$1,974,507	$1,669,961	$1,125,649	$ 601,014	N/A*	N/A*
Contributions in relatio to the contractually rerequired contribution	$2,474,182	$1,974,507	$1,669,961	$1,125,649	$ 601,014	N/A*	N/A*
Contribution deficency (excess)	$ -	$ -	$ -	$ -	$ -	N/A*	N/A*
Green Bank's covered employee payroll	$4,695,647	$4,013,411	$3,121,583	$2,517,190	$1,541,308	N/A*	N/A*
Contributions as a percentage of covered-employee payroll	52.70%	49.20%	53.50%	44.72%	38.99%	N/A*	N/A*

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

STATISTICAL SECTION
(unaudited)

FINANCIAL STATISTICS

CONNECTICUT GREEN BANK

STATISTICAL SECTION INTRODUCTION

This part of the Connecticut Green Bank's (CGB) 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

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Financial Trends 71

These schedules contain trend information to help the reader understand how CGB's financial performance and well-being have changed over time.

Revenue Capacity 75

These schedules contain information to help the reader assess CGB's most significant local revenue sources.

Debt Capacity 77

These schedules present information to help the reader assess the affordability of the government's current level of outstanding debt and the CGB's ability to issue additional debt in the future.

Demographic and Economic Information 78

These schedules offer demographic and economic indicators to help the reader understand the environment within which CGB's financial activities take place.

Operating Information 80

These schedules contain service and infrastructure data to help the reader understand how the information in CGB's financial report relates to the services CCB provides and the activities it performs.

CONNECTICUT GREEN BANK

NET POSITION BY COMPONENT
Last Five Fiscal Years

	Year Ended June 30,				
	2016	2015	2014	2013	2012
Primary Government					
Invested in capital assets, net of related debt	$ 248,752	$ 263,839	$ 289,932	$ 362,505	$ 91,329
Restricted Net Position					
Non-expendable	1,000	1,000	1,000	1,000	--
Restricted - energy programs	5,249,983	4,299,005	4,595,715	5,036,656	176,974
Unrestricted	116,624,244	104,881,783	97,754,765	93,717,230	80,920,002
	122,123,978	109,445,626	102,641,412	99,117,391	81,188,305
CT Solar Lease 2 LLC					
Invested in capital assets, net of related debt	65,678,491	30,830,671	3,538,975	--	--
Restricted Net Position					
Non-expendable	17,482,892	8,007,153	1,294,801	100	--
Restricted - energy programs	4,500,000	4,500,000	4,500,000	4,500,000	--
Unrestricted (deficit)	(53,701,650)	(28,210,286)	(5,741,703)	(1,616,886)	--
	33,959,733	15,127,539	3,592,073	2,883,214	--
CEFIA Solar Services, Inc.					
Restricted Net Position					
Non-expendable	100	100	100	100	--
Restricted - energy programs	--	--	--	--	--
Unrestricted (deficit)	346,280	224,654	109,123	--	--
	346,380	224,754	109,223	100	--
Eliminations	(29,046,448)	(15,630,676)	(5,549,471)	(3,500,100)	--
Total Net Position	$ 127,383,643	$ 109,167,243	$ 100,793,237	$ 98,500,605	$ 81,188,305

CONNECTICUT GREEN BANK

CHANGES IN NET POSITION
Last Five Fiscal Years

	Year Ended June 30,				
	2016	2015	2014	2013	2012
Primary Government					
Operating Revenues	$ 69,250,883	$ 72,038,472	$ 52,301,283	$ 43,343,093	$ 39,753,684
Operating Expenses					
Cost of Goods Sold	28,826,976	22,526,874	2,794,270	--	--
Grants and program expenditures	25,261,516	21,111,751	22,948,676	23,634,465	31,122,355
General and administrative expenses	4,445,648	2,984,178	2,408,715	1,811,227	1,387,854
Total Operating Expenses	58,534,141	46,622,802	28,151,661	25,445,692	32,510,209
Operating Income (Loss)	10,716,743	25,415,669	24,149,622	17,897,401	7,243,475
Non-Operating Revenue and (Expenses)					
Interest on solar lease notes	2,895,503	2,217,368	1,034,953	583,575	589,007
Interest on short-term investments	92,536	83,761	98,383	103,928	140,786
Interest income	60,127	58,511	57,407	--	--
Interest expense	(61,795)	(26,985)	--	--	--
Realized gain (loss) on investments	(2,936)	(1,180,285)	(350,000)	(1,034,605)	--
Unrealized gain (loss) on investments	--	--	349,999	378,059	434,702
Provision for loan losses	(1,021,826)	(563,825)	(1,310,933)	--	--
Net Non-Operating Revenues	1,961,609	588,545	(120,191)	30,957	1,164,495
Income (Loss) Before Transfers, Capital Contributions and Member (Distributions)	12,678,352	26,004,215	24,029,431	17,928,358	8,407,970
Capital Contributions	--	--	--	1,000	--
Transfers to State of Connecticut	--	(19,200,000)	(6,200,000)	--	--
Increase in Net Position	$ 12,678,352	$ 6,804,215	$ 17,829,431	$ 17,929,358	$ 8,407,970

CONNECTICUT GREEN BANK

CHANGES IN NET POSITION (CONTINUED)
Last Five Fiscal Years

	Year Ended June 30,				
	2016	2015	2014	2013	2012
CT Solar Lease 2 LLC					
Operating Revenues	$ 2,416,595	$ 210,869	$ 1,770	$ --	$ --
Operating Expenses					
Grants and program expenditures	3,078,633	1,201,123	600,186	--	--
General and administrative expenses	305,217	124,748	127,511	853,480	--
Total Operating Expenses	3,383,850	1,325,871	727,697	853,480	--
Operating Loss	(967,254)	(1,115,002)	(725,927)	(853,480)	--
Non-Operating Revenue and (Expenses)					
Interest on short-term investments	27,777	9,207	8,642	--	--
Interest expense	(729,170)	(150,871)	(57,407)	--	
Unrealized gain (loss) on investments	(967,791)	(660,073)	--	--	--
Net Non-Operating Revenues	(1,669,184)	(801,737)	(48,765)	--	--
Income (Loss) Before Transfers, Capital Contributions and Member (Distributions)	(2,636,439)	(1,916,739)	(774,692)	(853,480)	--
Capital Contributions	21,770,182	13,556,783	1,496,135	3,736,694	--
Distributions to Members	(301,548)	(104,579)	(12,584)	--	--
Increase in Net Position	$ 18,832,195	$ 11,535,465	$ 708,859	$ 2,883,214	$ --

CONNECTICUT GREEN BANK

CHANGES IN NET POSITION (CONTINUED)
Last Five Fiscal Years

	Year Ended June 30,				
	2016	2015	2014	2013	2012
CEFIA Solar Services, Inc.					
Operating Revenues	$ 126,075	$ 123,000	$ 120,000	$ --	$ --
Operating Expenses					
General and administrative expenses	4,750	8,450	10,877	--	--
Total Operating Expenses	4,750	8,450	10,877	--	--
Operating Loss	121,325	114,550	109,123	--	--
Non-Operating Revenue and (Expenses)					
Interest on short-term investments	300	981	--	--	--
Net Non-Operating Revenues	300	981	--	--	--
Income (Loss) Before Transfers, Capital Contributions and Member (Distributions)	121,625	115,531	109,123	--	--
Capital Contributions	--	--	--	100	--
Increase in Net Position	$ 121,625	$ 115,531	$ 109,123	$ 100	$ --

CONNECTICUT GREEN BANK

OPERATING REVENUE BY SOURCE
Last Five 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													
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 %	$ 387,320	0.6 %
2015	72,038,472	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													
2016	$ 2,416,595	$ --	-- %	$ --	-- %	$ --	-- %	$ --	-- %	$ 233,793	9.7 %	$ 2,182,803	90.3 %
2015	210,869	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %	210,869	100.0 %
2014	1,770	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %	1,770	100.0 %
2013	--	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %
2012	--	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %
CEFIA Solar Services, Inc.													
2016	$ 126,075	$ --	-- %	$ --	-- %	$ --	-- %	$ --	-- %	$ --	-- %	$ 126,075	100.0 %
2015	123,000	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %	123,000	100.0 %
2014	120,000	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %	120,000	100.0 %
2013	--	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %
2012	--	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %	--	-- %
Eliminations													
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													
2016	$ 37,788,234	$ 26,605,084	70.4 %	$ 6,481,562	17.2 %	$ 589,917	1.6 %	$ --	-- %	$ 2,653,783	7.0 %	$ 1,457,887	3.9 %
2015	46,294,417	27,233,987	58.8 %	16,583,545	35.8 %	192,274	0.4 %	16,688	0.0 %	1,474,488	3.2 %	793,435	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

SIGNIFICANT SOURCES OF OPERATING REVENUE
Last Five Fiscal Years

	Year Ended June 30,									
	2016		2015		2014		2013		2012	
	Revenue	% of Total	Revenue	% of Total	Revenue	% of Total	Revenue	% of Total	Revenue	% of Total
Utility Remittances*										
Eversource	$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	5,381,507	20.2 %	5,334,446	19.6 %	5,457,245	19.6 %	5,477,316	19.8 %	4,987,317	18.5 %
Total	$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 #										
Renewables	$ 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	$ 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	589,917	100.0 %	143,614	74.7 %	321,642	100.0 %	1,622,569	16.2 %	1,645,525	15.8 %
Private Foundation	--	-- %	48,660	25.3 %	--	-- %	36,000	0.4 %	50,000	0.5 %
Total	$ 589,917	100.0 %	$ 192,274	100.0 %	$ 321,642	100.0 %	$10,035,250	100.0 %	$10,434,251	100.0 %

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

\# *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.*

CONNECTICUT GREEN BANK

OUTSTANDING DEBT BY TYPE
Last Five Fiscal Years

	Primary Government		CT Solar Lease 2 LLC		CEFIA Solar Services, Inc.		Total Reporting Entity	
Fiscal Year	Line of Credit Advances	Line of Credit Available	Line of Credit Advances	Line of Credit Available	Line of Credit Advances	Line of Credit Available	Line of Credit Advances	Line of Credit Available
2016	$ 2,510,837	$ -	$ 15,000,000	$ -	$ -	$ -	$ 17,510,837	$ 6,000,000
2015	$ 853,525	$ -	$ 3,000,000	$ 23,700,000	$ -	$ -	$ 3,853,525	$ 23,700,000
2014	$ 126,088	$ 3,873,912	$ -	$ 26,700,000	$ -	$ -	$ 126,088	$ 30,573,912
2013	$ -	$ -	$ -	$ 26,700,000	$ -	$ -	$ -	$ 26,700,000
2012	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

CONNECTICUT GREEN BANK

DEMOGRAPHIC AND ECONOMIC INFORMATION
Last Five Fiscal Years

Fiscal Year	Population [1]	Median Age [1]	Per Capita Income [1]	Median Household Income [1]	Population 3 Years and Over Enrolled in Public School [1]	Unemployment Rate [2]
2016	n/a	n/a	n/a	n/a	n/a	5.8%
2015	3,590,886	40.6	39,430	$ 71,346	729,896	5.5%
2014	3,592,053	40.3	39,373	70,048	733,997	6.5%
2013	3,583,561	40.2	37,726	67,098	751,831	7.7%
2012	3,572,213	40.0	36,891	67,276	759,755	8.5%

Sources: (1) US Census Bureau
(2) US Department of Labor

CONNECTICUT GREEN BANK

PRINCIPAL EMPLOYERS – FOR THE STATE OF CONNECTICUT
Last Three Calendar Years

	2015			2014			2013		
Employer [1]	Employees	Rank	Percentage of Total State Employment [2]	Employees	Rank	Percentage of Total State Employment [2]	Employees	Rank	Percentage of Total State Employment [2]
State of Connecticut	51,646	1	2.89%	54,230	1	3.05%	53,951	1	3.10%
United Technologies	24,000	2	1.34	25,000	2	1.40	27,000	2	1.55
Yale New Haven Health System	20,071	3	1.12	18,869	3	1.06	18,639	3	1.07
Hartford Healthcare	18,107	4	1.01	18,597	4	1.05	16,951	4	0.98
Yale University	14,787	5	0.83	14,787	5	0.83	14,750	5	0.85
General Dynamics Electric Boat	9,583	6	0.54	8,896	7	0.50	8,817	6	0.51
Wal-Mart Stores Inc.	8,800	7	0.49	9,289	6	0.52	8,761	7	0.50
The Travelers Cos. Inc.	7,300	8	0.41	7,400	9	0.42	7,400	9	0.43
The Hartford Financial Services Group	7,000	9	0.39	7,000	11	0.39	7,700	11	0.44
Mohegan Sun	6,900	10	0.39	7,300	10	0.41	7,300	10	0.42
Foxwoods Resort Casino	5,301	14	0.30	7,600	8	0.43	7,667	8	0.44

CONNECTICUT GREEN BANK

FTEs BY FUNCTION
Last Five Fiscal Years

	Year Ended June 30,				
	2016	2015	2014	2013	2012
Program Services					
Statutory & Infrastructure	9.00	8.00	7.00	7.00	9.00
Residential	6.00	6.00	5.00	3.00	1.00
Commercial & Industrial	4.00	2.00	4.00	2.00	--
Institutional	--	1.00	1.00	1.00	1.00
Subtotal Program Services	19.00	17.00	17.00	13.00	11.00
Administrative & Support					
Executive	4.00	4.00	4.00	4.00	4.00
Finance	6.00	5.00	4.00	3.00	1.00
Accounting	6.00	5.30	3.50	2.75	2.20
Legal & Policy	3.00	3.00	2.00	2.00	2.00
Marketing	6.00	6.00	5.00	5.00	5.00
Operations	3.90	3.50	3.80	4.00	3.85
Subtotal Administrative & Support	28.90	26.80	22.30	20.75	18.05
Total FTEs by Function	47.90	43.80	39.30	33.75	29.05

CONNECTICUT GREEN BANK

OPERATING INDICATORS BY FUNCTION
Last Five Fiscal Years

	Year Ended June 30,				
	2016	2015	2014	2013	2012
Clean Energy Investment *($s in Millions)*					
CGB Dollars Invested	$ 48.0	$ 55.7	$ 37.8	$ 18.6	$ 4.8
Private Dollars Invested	268.3	281.9	102.8	92.7	10.2
Total Project Investment	314.1	335.5	140.2	111.1	15.0
Number of Clean Energy Projects	8,271	6,543	2,422	1,118	417
Annual Energy Savings of Clean Energy *(MMBtu)*	419,219	1,086,544	378,877	59,481	9,334
Installed Capacity of Clean Energy *(MW)*					
Anaerobic Digesters	1.0	3.0	3.2	--	--
Biomass	--	0.6	--	--	--
CHP	2.5	0.9	3.0	0.7	--
Fuel Cell	--	--	--	14.8	--
Geothermal	--	--	--	--	--
Hydro	--	0.5	--	--	--
Solar PV	70.9	55.4	19.9	8.0	2.9
Wind	--	5.0	--	--	--
Total	74.4	65.5	26.1	23.5	2.9
Lifetime Production of Clean Energy *(MWh)*					
Anaerobic Digesters	82,283	244,404	260,698	--	--
Biomass	--	14,257	--	--	--
CHP	229,129	86,611	274,955	62,781	--
Fuel Cell	--	--	--	1,166,832	--
Geothermal	295	38	84	--	--
Hydro	--	43,898	--	--	--
Solar PV	1,683,858	1,317,343	471,912	189,733	68,388
Wind	--	118,260	--	--	--
Total	1,995,564	1,824,810	1,007,648	1,419,346	68,388
Jobs Created by Year					
Direct Jobs *(# of Jobs)*	1,703	1,455	550	559	88
Indirect and Induced Jobs *(# of Jobs)*	2,740	2,340	885	1,132	142
Lifetime CO2 Emission Reductions					
Emission Reductions *(Tons)*	885,103	815,600	271,179	178,437	35,459
Home Equivalents *(# of Homes)*	10,491	10,116	6,499	15,293	326
Cars Off the Road Equivalents *(# of Cars)*	5,816	5,432	1,630	1,967	236
Acres of Trees Planted Equivalents *(# of Acres)*	11,643	10,875	3,263	3,937	473

	Year Ended June 30,				
	2016	2015	2014	2013	2012
Capital assets being depreciated:					
Solar lease equipment	$ 47,534,491	$ 21,011,832	$ 1,035,159	$ --	$ --
Furniture and equipment	169,423	222,701	338,938	335,744	13,049
Computer hardware and software	212,832	128,628	88,337	136,659	28,460
Leasehold improvements	225,844	153,657	139,682	71,470	56,224
Capital assets not being depreciated:					
WIP solar lease equipment	11,931,739	6,014,560	1,759,111	--	--
Construction in progress	4,502	7,141	7,141	--	--
	60,078,831	27,538,519	3,368,368	543,873	97,733
Less accumulated depreciation and amortization:					
Solar lease equipment	1,851,196	319,144	9,865	--	--
Furniture and equipment	103,079	122,149	205,820	146,560	626
Computer hardware and software	151,573	50,906	33,845	18,093	3,807
Leasehold improvements	109,196	75,232	44,501	16,715	1,971
	2,215,044	567,432	294,031	181,368	6,404
Capital assets, net	$ 57,863,787	$ 26,971,087	$ 3,074,337	$ 362,505	$ 91,329

NON-FINANCIAL STATISTICS

CONNECTICUT GREEN BANK

NON-FINANCIAL STATISTICS INTRODUCTION

This part of the Connecticut Green Bank's (CGB) comprehensive annual financial report presents detailed non-financial information as a context for understanding the methods management uses to measure CGB's success and CGB's efforts to transform the clean energy market in using its financial resources.

NON-FINANCIAL STATISTICS

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This narrative provides a summary of and commentary on the information included in the Background and Market, Measures of Success, and Market Transformation sections.

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CONNECTICUT GREEN BANK

1. STATEMENT OF THE CONNECTICUT GREEN BANK

October XX, 2016

Re: Statement of the Connecticut Green Bank on the Non-Financial Statistics Contents of the Comprehensive Annual Financial Report for FY 2016 – 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 2016.

In this section, you will find the following information:

- **Background and Market** – an overview of the organization's governance, including engagement of its members at the board and committee levels, along with ethics compliance and financial interest disclosure requirements. You will also be able to see the level of investment, deployment and public benefits that are being created within our local communities, including distressed communities and low income census tracts. And last, you will see how the organization has made steady progress in terms of ensuring that Connecticut's small businesses and minority enterprises have an opportunity to bid on a portion of the purchases of goods and services that the organization procures.

- **Measures of Success** – as outlined in the organization's Comprehensive Plan,[13] we are reporting on the following measures of success:

    - **Attract & Deploy Capital** – how we are sourcing projects (as illustrated by projects in statuses from approved to completed), level of investment by both the Connecticut Green Bank and the end-use consumer or private investor, and the private to public leverage ratio being achieved by sector.

    - **Energy Saved and Generated** – how we are quantifying the energy generated and/or saved by each project. This includes the amount of clean energy deployed (i.e., MW), estimate of clean energy produced over the life of the projects (i.e., MWh), estimate of the annual amount of energy savings (i.e., MMBtu), and the variety of renewable energy technologies we have invested in by sector.

    - **Green Bank** – how we are building a balance sheet as a result of our financing focus in terms of asset management (i.e., current vs. non-current assets), ratio of public funds invested in grants and subsidies versus credit enhancements, loans, and leases, and the general credit quality of residential borrowers in our financing programs.

    - **Public Benefits** – how our investment activities are resulting in economic development (i.e., jobs) and environmental protection (i.e., GHG emission reductions and equivalencies) benefits.

[13] http://goo.gl/GhRL9t

- **Market Transformation** – an overview of the program logic model for the organization in terms of its goals:

    - **Attract and Deploy** – to attract and deploy capital to finance the clean energy policy goals for Connecticut;

    - **Affordable and Accessible** – to develop and implement strategies that bring down the cost of clean energy to make it more accessible and affordable to consumers; and

    - **From Reliance to Markets** – to reduce the market's reliance on grants, rebates, and other subsidies and move it towards innovative low-cost financing of clean energy deployment.

  The program logic model serves as a foundation for evaluating clean energy deployment through subsidy and financing programs of the Connecticut Green Bank. As we begin to evaluate our programs, the reader will see that we have applied the program logic model to the subsidy (i.e., Residential Solar Investment Program) and financing (i.e., CT Solar Loan, CT Solar Lease, Smart-E Loan, and C-PACE) programs.

The assembly of the "Non-Financial Statistics" section of the Comprehensive Annual Financial Report is a process of continuous improvement. For example, the reader can compare FY 2015 with FY 2016 to see that more information is being disclosed to better communicate the level of impact the Connecticut Green Bank is making.

[Paragraph here on findings from Marcum LLP assessment of the Non-Financial Statistics section of the CAFR – data collection systems, project status, and project reporting.]

CONNECTICUT GREEN BANK

2. BACKGROUND AND MARKET – 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 by eleven voting and one non-voting member each with knowledge and expertise in matters related to the purpose of the organization (see Table 2).

Table 2. Composition of the Board of Directors of the Connecticut Green Bank for FY 2016

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 Ferguson	Ex Officio	Yes
Finance of Renewable Energy	Reed Hundt	Appointed	Yes
Finance of Renewable Energy	Kevin Walsh	Appointed	Yes
Labor Organization	John Harrity	Appointed	Yes
R&D or Manufacturing	Mun Choi	Appointed	Yes
Investment Fund Management	Norma Glover	Appointed	Yes
Environmental Organization	Matthew Ranelli	Appointed	Yes
Finance or Deployment	Tom Flynn	Appointed	Yes
Residential or Low Income	Pat Wrice	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 and Ethical Conduct Policy, Resolutions of Purposes, Bylaws, Joint Committee Bylaws, and Comprehensive Plan. The Comprehensive Plan for the Connecticut Green Bank provides a multiyear 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 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.

The Board of Directors of the Connecticut Green Bank is comprised of eleven (11) ex officio and appointed voting members, and one (1) ex officio non-voting member. 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)

For FY 2016, the Board of Directors of the Connecticut Green Bank met nine (9) times, including six (6) regularly scheduled meetings and three (3) special meetings. There was an attendance rate

of 76% by the Board of Directors and 49 approved resolutions. For a link to the materials from the Board of Directors meetings that is publicly accessible – click here.

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 Audit, Compliance and Governance Committee (ACG Committee) of the Connecticut Green Bank 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**[14] – John Harrity and Pat Wrice (designated as a member of the Committee by Catherine Smith)

For FY 2016, the ACG 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 83% by the Audit, Compliance and Governance Committee and 5 approved resolutions. For a link to the materials from the ACG Committee meetings that is publicly accessible – click here.

Budget and Operations Committee

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

- **Chair** – Rob Klee, Commissioner of DEEP (designated as the Chair by Catherine Smith)
- **Members**[15] – Mun Choi and Norma Glover (designated as a member of the Committee by Catherine Smith)

For FY 2016, the B&O Committee of the Connecticut Green Bank met three (3) times, including three (3) regularly scheduled meetings and no special meetings. There was an attendance rate of 77% by the Budget and Operations Committee and 2 approved resolutions. For a link to the materials from the B&O Committee meetings that is publicly accessible – click here.

Deployment Committee

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

[14] 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

[15] 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

- **Chair**[16] – Reed Hundt, CEO of the Coalition for Green Capital (designated as the Chair by Catherine Smith)
- **Members**[17] – Bettina Ferguson (ex officio per bylaws), Matthew Ranelli, and Pat Wrice (designated as a member of the Committee by Catherine Smith)

For FY 2016, the Deployment Committee of the Connecticut Green Bank met five (5) times, including two (2) regularly scheduled meetings and three (3) special meetings. There was an attendance rate of 85% by the Deployment Committee and 16 approved resolutions. For a link to the materials from the Deployment Committee meetings that is publicly accessible – click here.

Joint Committee

Pursuant to Section 16-245m(d)(2) of the Connecticut General Statutes, there is hereby created a Joint Committee of the Energy Efficiency Board (EEB) and the Connecticut Green Bank. Per bylaws established and approved by the EEB and the 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)
- **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**[18] – Bryan Garcia (non-voting), Norma Glover, Bert Hunter (non-voting), and John Harrity (designated as members of the Committee by Catherine Smith)

For FY 2016, the Joint Committee of the EEB and 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 95% by the Joint Committee and 3 approved resolutions. For a link to the materials from the Joint Committee meetings that is publicly accessible – click here.

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

[16] Matthew Ranelli, Partner and Shipman and Goodwin for 11/14/14 & 11/21/14 only*

[17] Bettina Ferguson, Reed Hundt, Rob Klee, Patricia Wrice, & Catherine Smith for 11/14/14 & 11/21/14 only*

[18] Note – these members are representatives from the Connecticut Green Bank.

> 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 and a list of all real property as well as any 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 2016 SFI filing – required by May 2, 2016 – the Connecticut Office of State Ethics received the following from the Connecticut Green Bank (see Table 3):

Table 3. Summary of State of Financial Interest Filings with the Office of State Ethics for FY 2016

	Number of SFIs Submitted	% Submitted on Time
Senior Staff	10	100%
Board of Directors	7	100%

The Connecticut Green Bank received a Certificate of Excellence Ethics Compliance from the Connecticut Office of State Ethics.

2. BACKGROUND AND MARKET – COMMUNITIES

Fiscal Year 2016 Approved/Closed/Completed Projects

Communities across Connecticut are demonstrating leadership in their support of green 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 green energy deployment across the state, and we have assembled the "Top 5" in energy, environment, and economy for both FY 2016 as well as FY 2012 through FY 2016.

Table 4. The "Top 5" Energy, Environment, and Economy Metrics for FY 2016[19]

Municipality	Watts/ Capita
Canaan	171.8
Kent	165.4
Windsor	90.3
Bloomfield	85.9
Orange	72.4

Municipality	Lifetime CO2 Emissions (tons)
Bridgeport	29,949
Manchester	24,760
Bloomfield	21,685
Milford	20,802
Waterbury	19,596

Municipality	Investment/ Capita
Canaan	$777.61
Kent	$498.93
Southington	$358.57
Windsor	$346.60
Chester	$326.25

Table 5. Clean Energy Performance by Municipality (FY 2016)

Municipality	# Projects	Average Investment (Project Cost)	Median Investment (Project Cost)	Total Investment (Project Cost)	Investment /Capita	MW	Watts/ Capita	Annual MMBTU	Total Job Years	Lifetime CO2 Emissions (tons)
Andover	5	$43,707	$37,128	$218,534	$66.16	0.0	15.1	173	3	615
Ansonia	50	$30,368	$27,000	$1,518,394	$78.88	0.4	18.9	1,181	23	4,474
Ashford	21	$31,493	$31,618	$661,347	$153.20	0.1	32.9	464	10	1,749
Avon	35	$32,430	$35,490	$1,135,042	$62.72	0.3	15.4	978	18	3,432
Barkhamsted	17	$35,580	$34,627	$604,867	$159.22	0.2	41.4	510	9	1,936
Beacon Falls	7	$30,049	$27,300	$210,345	$34.77	0.1	8.5	167	3	636
Berlin	47	$32,806	$30,240	$1,541,875	$77.61	0.4	18.2	1,190	24	4,444
Bethany	15	$34,207	$36,855	$513,106	$92.24	0.1	22.6	408	8	1,552
Bethel	41	$34,899	$31,942	$1,430,846	$76.99	0.3	17.6	1,063	22	4,040
Bethlehem	15	$29,877	$29,016	$448,148	$124.24	0.1	26.5	310	7	1,177
Bloomfield	103	$49,138	$22,155	$5,061,227	$247.06	1.8	85.9	5,713	61	21,685
Bolton	28	$28,336	$30,776	$793,412	$159.32	0.2	45.3	768	12	2,777
Branford	65	$33,724	$31,395	$2,192,068	$78.22	0.5	17.6	1,618	34	6,068
Bridgeport	316	$34,114	$27,000	$10,779,927	$74.74	2.3	15.8	9,486	142	29,949
Bridgewater	7	$44,624	$39,028	$312,369	$180.87	0.1	37.8	212	5	805
Bristol	167	$36,867	$31,395	$6,156,742	$101.80	1.4	23.3	4,590	92	17,381
Brookfield	26	$39,157	$35,870	$1,018,073	$61.88	0.2	14.3	764	15	2,901
Brooklyn	42	$27,446	$25,636	$1,152,742	$140.41	0.3	36.9	982	18	3,729
Burlington	31	$68,606	$40,950	$2,126,799	$228.66	0.6	62.1	1,915	27	7,120
Canaan	15	$63,971	$39,312	$959,570	$777.61	0.2	171.8	815	13	3,045
Canterbury	21	$41,368	$32,604	$868,726	$169.28	0.2	39.2	652	13	2,478
Canton	8	$42,236	$38,753	$337,887	$32.83	0.1	8.0	286	5	1,010

[19] It should be noted that both Bridgeport and Colebrook are in the "Top 5" in several categories as a result of large investments in the Dominion Bridgeport Fuel Cell Park and Colebrook Wind Project respectively.

Municipality	# Projects	Average Investment (Project Cost)	Median Investment (Project Cost)	Total Investment (Project Cost)	Investment /Capita	MW	Watts/ Capita	Annual MMBTU	Total Job Years	Lifetime CO2 Emissions (tons)
Chaplin	3	$37,573	$40,950	$112,718	$48.90	0.0	9.3	70	2	265
Cheshire	59	$34,510	$31,000	$2,036,063	$69.58	0.5	17.3	1,737	33	6,237
Chester	16	$81,441	$36,855	$1,303,059	$326.25	0.1	30.4	406	9	1,498
Clinton	39	$48,406	$32,760	$1,887,829	$142.37	0.5	35.8	1,551	25	5,844
Colchester	46	$38,424	$36,375	$1,767,515	$110.00	0.4	25.1	1,338	27	4,963
Colebrook	4	$41,606	$40,159	$166,425	$112.07	0.0	26.5	128	3	485
Columbia	9	$34,120	$40,065	$307,080	$55.99	0.1	12.9	229	5	871
Cornwall	5	$24,128	$25,935	$120,640	$84.96	0.0	20.2	93	2	353
Coventry	36	$32,319	$29,090	$1,163,477	$93.56	0.3	22.1	891	18	3,384
Cromwell	50	$32,915	$30,043	$1,645,742	$117.51	0.4	29.4	1,334	25	5,068
Danbury	80	$37,629	$36,087	$3,010,357	$37.21	0.7	8.4	2,217	46	8,421
Darien	6	$32,244	$28,002	$193,463	$9.33	0.0	2.2	149	3	565
Deep River	22	$34,214	$27,983	$752,713	$162.61	0.1	32.4	504	12	1,846
Derby	34	$31,194	$30,823	$1,060,581	$82.20	0.3	20.9	874	16	3,319
Durham	20	$44,394	$44,145	$887,879	$120.18	0.2	27.2	651	14	2,473
East Granby	20	$37,814	$38,679	$756,283	$146.91	0.1	28.1	480	12	1,780
East Haddam	24	$33,491	$30,608	$803,783	$88.08	0.2	19.8	586	12	2,228
East Hampton	39	$36,502	$35,490	$1,423,582	$109.85	0.3	24.7	1,058	22	3,950
East Hartford	222	$24,024	$21,960	$5,333,228	$104.06	1.4	26.7	4,630	83	16,862
East Haven	117	$28,236	$27,225	$3,303,651	$112.92	0.8	26.5	2,615	52	9,545
East Lyme	51	$33,574	$30,340	$1,712,290	$89.37	0.4	20.0	1,241	26	4,716
East Windsor	33	$47,442	$35,490	$1,565,578	$140.26	0.3	25.8	939	25	3,517
Eastford	6	$38,334	$40,268	$230,003	$131.51	0.1	36.9	209	4	794
Easton	8	$45,211	$43,816	$361,689	$48.29	0.1	9.7	347	5	897
Ellington	53	$38,488	$35,490	$2,039,878	$130.74	0.5	30.3	1,534	31	5,829
Enfield	66	$25,678	$24,570	$1,694,775	$37.95	0.4	8.3	1,215	26	4,541
Essex	16	$37,160	$37,538	$594,564	$88.97	0.1	18.5	400	9	1,520
Fairfield	116	$35,681	$30,748	$4,138,963	$69.67	1.0	17.3	3,359	61	12,644
Farmington	39	$31,400	$27,030	$1,224,594	$48.33	0.3	11.1	928	19	3,466
Franklin	7	$34,426	$27,269	$240,981	$125.38	0.1	28.5	177	4	674
Glastonbury	76	$31,919	$32,000	$2,425,863	$70.46	0.6	18.0	2,091	38	7,664
Goshen	5	$32,617	$32,130	$163,083	$54.80	0.0	13.1	126	3	479
Granby	23	$34,286	$30,030	$788,588	$69.90	0.2	17.3	634	12	2,408
Greenwich	24	$37,528	$29,282	$900,674	$14.72	0.2	3.3	686	14	2,461
Griswold	79	$36,193	$32,760	$2,859,267	$239.25	0.7	54.6	2,158	44	8,040
Groton	10	$141,438	$37,360	$1,414,385	$35.26	0.1	1.3	5,313	26	680
Guilford	69	$35,784	$33,768	$2,469,078	$110.35	0.6	26.4	1,972	38	7,284
Haddam	32	$42,828	$37,529	$1,370,506	$164.21	0.3	37.1	1,082	21	3,810
Hamden	170	$28,647	$27,150	$4,870,068	$79.89	1.1	18.2	3,630	76	13,670
Hampton	6	$38,553	$41,362	$231,318	$124.16	0.1	32.1	194	4	738
Hartford	117	$38,552	$19,110	$4,510,554	$36.15	1.1	8.6	5,758	67	19,514
Hartland	6	$36,504	$28,665	$219,023	$103.61	0.0	21.8	150	3	569
Harwinton	32	$35,338	$32,405	$1,130,811	$200.43	0.3	50.4	955	17	3,506
Hebron	29	$37,998	$38,220	$1,101,947	$113.77	0.3	27.2	854	17	3,246
Kent	11	$135,119	$48,195	$1,486,311	$498.93	0.5	165.4	1,598	16	6,070
Killingly	78	$34,808	$26,147	$2,714,986	$156.30	0.7	40.3	2,285	40	8,644
Killingworth	23	$33,552	$30,533	$771,688	$118.27	0.2	30.9	666	12	2,486
Lebanon	19	$32,218	$24,570	$612,147	$83.76	0.2	20.8	494	9	1,877
Ledyard	57	$31,462	$28,109	$1,793,320	$119.15	0.4	29.7	1,565	28	5,499
Lisbon	14	$34,476	$34,808	$482,670	$111.27	0.1	23.0	323	7	1,228
Litchfield	19	$28,501	$28,080	$541,528	$63.97	0.1	17.2	472	8	1,792
Lyme	5	$36,442	$40,308	$182,208	$75.73	0.0	15.8	123	3	468
Madison	24	$36,736	$35,295	$881,659	$48.26	0.2	11.0	705	14	2,534
Manchester	108	$62,626	$24,063	$6,763,588	$116.13	2.0	34.1	6,585	82	24,760

CONNECTICUT GREEN BANK

2. BACKGROUND AND MARKET – COMMUNITIES

Municipality	# Projects	Average Investment (Project Cost)	Median Investment (Project Cost)	Total Investment (Project Cost)	Investment /Capita	MW	Watts/ Capita	Annual MMBTU	Total Job Years	Lifetime CO2 Emissions (tons)
Mansfield	30	$34,481	$32,630	$1,034,444	$38.97	0.2	9.1	785	16	2,982
Marlborough	8	$39,727	$40,365	$317,818	$49.63	0.1	11.6	242	5	918
Meriden	132	$31,889	$28,639	$4,209,327	$69.16	1.0	16.4	3,244	65	12,306
Middlebury	8	$39,056	$35,984	$312,444	$41.25	0.1	10.5	259	5	982
Middlefield	26	$33,701	$31,497	$876,234	$198.02	0.2	52.1	747	13	2,839
Middletown	127	$41,125	$32,760	$5,222,895	$109.61	1.3	26.4	4,158	76	15,527
Milford	223	$32,485	$28,080	$7,244,229	$137.31	1.7	32.0	5,642	110	20,802
Monroe	36	$44,563	$43,290	$1,604,267	$82.36	0.4	18.7	1,183	25	4,496
Montville	78	$35,342	$32,786	$2,756,651	$140.85	0.6	31.6	2,042	43	7,612
Morris	6	$39,229	$34,058	$235,373	$98.56	0.0	20.5	159	4	604
Naugatuck	119	$31,982	$30,056	$3,805,881	$119.45	0.9	29.7	3,095	59	11,640
New Britain	127	$65,851	$23,205	$8,363,077	$114.24	3.3	45.3	121,401	52	10,033
New Canaan	10	$53,201	$47,901	$532,010	$26.95	0.1	5.6	357	8	1,357
New Fairfield	23	$47,524	$47,775	$1,093,061	$78.75	0.2	16.7	753	17	2,859
New Hartford	18	$36,214	$34,605	$651,851	$93.52	0.2	23.5	532	10	2,022
New Haven	112	$33,292	$24,661	$3,728,701	$28.73	0.8	6.5	3,599	55	10,419
New London	45	$26,511	$20,475	$1,192,999	$43.19	0.3	9.6	939	20	3,263
New Milford	68	$40,312	$35,198	$2,741,210	$97.41	0.6	21.3	1,947	42	7,397
Newington	107	$30,334	$24,570	$3,245,746	$106.20	0.8	27.1	2,733	48	10,220
Newtown	37	$119,927	$36,173	$4,437,281	$161.00	0.7	25.6	5,537	47	8,823
Norfolk	5	$38,996	$38,919	$194,979	$114.09	0.0	26.4	146	3	556
North Branford	15	$39,660	$40,950	$594,893	$41.29	0.1	8.8	411	9	1,560
North Canaan	2	$59,725	$59,725	$119,450	$36.03	0.0	7.5	81	2	306
North Haven	126	$33,454	$30,202	$4,215,176	$174.95	1.1	46.4	3,626	65	13,775
North Stonington	20	$52,305	$37,253	$1,046,109	$197.49	0.3	55.0	1,008	14	3,804
Norwalk	109	$26,658	$24,692	$2,905,716	$33.94	0.8	9.4	2,645	45	9,866
Norwich	25	$11,570	$10,175	$289,254	$7.14	0.0	0.0	305	9	0
Old Lyme	35	$32,793	$32,760	$1,147,752	$150.96	0.3	34.9	872	18	3,267
Old Saybrook	42	$31,617	$29,060	$1,327,929	$129.66	0.3	28.8	958	20	3,640
Orange	53	$66,574	$31,824	$3,528,429	$252.83	1.0	72.4	3,338	42	12,450
Oxford	34	$42,329	$35,997	$1,439,193	$113.47	0.3	27.1	1,116	22	4,240
Plainfield	60	$33,181	$32,760	$1,990,859	$129.23	0.4	29.0	1,447	31	5,496
Plainville	67	$40,337	$29,172	$2,702,555	$152.55	0.7	41.0	2,494	37	9,297
Plymouth	60	$41,162	$35,768	$2,469,727	$201.73	0.5	42.2	1,675	37	6,363
Pomfret	19	$36,402	$33,278	$691,632	$162.85	0.2	40.1	560	11	2,098
Portland	12	$31,728	$29,249	$380,731	$40.04	0.1	11.6	370	6	1,360
Preston	21	$36,981	$34,125	$776,594	$164.32	0.2	38.1	604	12	2,221
Prospect	23	$36,608	$34,808	$841,988	$89.53	0.2	19.0	653	13	2,207
Putnam	46	$32,719	$28,822	$1,505,077	$157.04	0.4	41.8	1,304	23	4,933
Redding	13	$52,799	$42,000	$686,381	$74.95	0.1	13.4	399	11	1,517
Ridgefield	21	$48,609	$45,045	$1,020,779	$41.43	0.2	8.4	677	16	2,554
Rocky Hill	54	$34,664	$30,498	$1,871,857	$94.97	0.4	21.0	1,342	29	5,097
Roxbury	5	$40,790	$34,125	$203,950	$90.16	0.0	21.7	159	3	605
Salem	27	$41,514	$36,855	$1,120,876	$270.03	0.2	56.3	771	17	2,878
Salisbury	13	$31,473	$24,570	$409,155	$109.37	0.1	26.6	322	6	1,225
Scotland	4	$46,269	$39,741	$185,075	$107.23	0.0	24.9	140	3	530
Seymour	33	$28,134	$22,100	$928,430	$56.13	0.2	15.0	816	15	3,057
Sharon	3	$82,392	$48,600	$247,176	$88.85	0.1	20.6	186	4	705
Shelton	118	$35,005	$32,587	$4,130,618	$104.42	1.0	25.1	3,215	64	12,215

CONNECTICUT GREEN BANK

2. BACKGROUND AND MARKET – COMMUNITIES

Municipality	# Projects	Average Investment (Project Cost)	Median Investment (Project Cost)	Total Investment (Project Cost)	Investment /Capita	MW	Watts/ Capita	Annual MMBTU	Total Job Years	Lifetime CO2 Emissions (tons)
Sherman	9	$37,408	$36,855	$336,669	$94.02	0.1	20.4	237	5	902
Simsbury	15	$39,350	$38,363	$590,255	$25.11	0.1	5.0	378	9	1,435
Somers	18	$41,849	$39,418	$753,288	$65.82	0.2	14.8	564	12	2,087
South Windsor	96	$31,294	$31,142	$3,004,268	$116.86	0.8	30.7	2,563	45	9,737
Southbury	45	$37,309	$33,885	$1,678,907	$84.35	0.5	22.8	1,472	26	5,591
Southington	147	$105,057	$32,760	$15,443,413	$358.57	2.2	51.7	48,977	77	14,970
Sprague	12	$43,127	$44,796	$517,529	$173.43	0.1	35.9	359	8	1,319
Stafford	29	$33,112	$30,030	$960,242	$79.44	0.2	18.2	714	15	2,712
Stamford	77	$76,021	$32,382	$5,853,634	$47.73	0.8	6.5	9,601	97	9,815
Sterling	14	$35,614	$38,558	$498,602	$130.18	0.1	27.6	342	8	1,300
Stonington	90	$33,751	$31,133	$3,037,598	$163.80	0.7	39.1	2,350	46	8,929
Stratford	207	$30,188	$27,000	$6,248,991	$121.61	1.4	27.7	5,118	96	19,491
Suffield	47	$36,090	$33,278	$1,696,230	$107.80	0.4	24.8	1,272	26	4,813
Thomaston	23	$32,479	$26,602	$747,008	$94.71	0.2	22.7	590	12	2,210
Thompson	41	$40,481	$25,500	$1,659,728	$175.48	0.5	50.5	1,568	22	5,880
Tolland	46	$33,673	$30,345	$1,548,935	$102.91	0.4	27.1	1,344	24	5,019
Torrington	53	$31,851	$28,550	$1,688,116	$46.40	0.4	10.9	1,284	26	4,877
Trumbull	86	$37,887	$34,125	$3,258,323	$90.46	0.7	20.6	2,447	49	9,158
Union	2	$20,389	$20,389	$40,777	$47.75	0.0	12.5	35	1	131
Vernon	95	$36,068	$26,887	$3,426,415	$117.43	0.9	30.6	2,998	49	11,009
Voluntown	17	$27,379	$28,080	$465,444	$178.81	0.1	50.5	426	7	1,620
Wallingford	2	$19,925	$19,925	$39,850	$0.88	0.0	0.0	56	1	0
Warren	8	$44,237	$43,567	$353,894	$242.23	0.1	64.7	306	5	1,164
Washington	11	$42,166	$31,224	$463,824	$129.63	0.1	29.7	345	7	1,310
Waterbury	207	$34,121	$28,270	$7,062,995	$64.00	1.6	14.4	5,241	112	19,596
Waterford	92	$33,592	$29,389	$3,090,426	$158.35	0.7	37.9	2,484	48	9,102
Watertown	64	$37,147	$34,125	$2,377,404	$105.60	0.5	23.8	1,740	37	6,610
West Hartford	145	$27,928	$24,383	$4,049,535	$64.01	1.0	15.3	3,185	62	11,905
West Haven	182	$28,842	$26,559	$5,249,261	$94.47	1.3	23.7	4,282	81	16,204
Westbrook	20	$41,956	$40,440	$839,122	$120.95	0.2	27.1	609	13	2,315
Weston	11	$39,682	$33,768	$436,506	$42.88	0.1	9.6	384	7	1,202
Westport	22	$48,344	$40,446	$1,063,572	$40.30	0.2	9.5	1,205	17	3,102
Wethersfield	81	$36,224	$28,330	$2,934,176	$110.03	0.8	28.6	2,541	42	9,387
Willington	21	$36,373	$35,960	$763,838	$126.44	0.2	30.1	589	12	2,237
Wilton	40	$40,322	$38,450	$1,612,899	$89.30	0.4	22.7	1,408	25	5,053
Winchester	16	$24,279	$22,170	$388,457	$34.55	0.1	9.5	348	6	1,322
Windham	44	$28,527	$25,486	$1,255,200	$49.68	0.3	12.5	995	19	3,780
Windsor	152	$28,499	$24,660	$4,331,842	$346.60	1.1	90.3	3,700	67	13,906
Windsor Locks	70	$32,260	$21,799	$2,258,231	$77.75	0.6	21.5	2,180	31	7,892
Wolcott	66	$37,779	$34,808	$2,493,426	$149.49	0.5	32.3	1,846	39	6,641
Woodbridge	37	$52,064	$32,634	$1,926,384	$214.28	0.6	66.0	1,935	26	7,306
Woodbury	13	$37,278	$38,936	$484,615	$48.58	0.1	11.7	378	7	1,437
Woodstock	25	$31,611	$35,316	$790,284	$99.23	0.2	24.5	664	12	2,403
Unknown	4	$305,400	$300,640	$1,221,600	-	0.2	0	609	5	2,315
Total	8,271	$37,974	$29,172	$314,086,243	$87.94	74.4	20.8	419,219	4,444	885,103

2. BACKGROUND AND MARKET – COMMUNITIES

Approved/Closed/Completed Projects Fiscal Year 2012 - 2016

Table 6. The "Top 5" Energy, Environment, and Economy Metrics for FY 2012 - 2016[20]

Municipality	Watts/ Capita
Colebrook	3,426.9
Canaan	249.5
Woodbridge	213.7
Hampton	208.9
Durham	187.6

Municipality	Lifetime CO2 Emissions (tons)
Bridgeport	127,288
Colebrook	62,532
Putnam	57,622
Middletown	48,781
Bristol	42,312

Municipality	Investment/ Capita
Colebrook	$15,426.21
Canaan	$1,188.07
Southington	$1,022.74
Bridgeport	$1,010.29
Windsor	$856.09

Table 7. Clean Energy Performance by Municipality (FY 2012-2016)

Municipality	# Projects	Average Investment (Project Cost)	Median Investment (Project Cost)	Total Investment (Project Cost)	Investment /Capita	MW	Watts/ Capita	Annual MMBTU	Total Job Years	Lifetime CO2 Emissions (tons)
Andover	19	$36,684	$36,507	$697,003	$211.02	0.2	45.6	516	11	1,855
Ansonia	84	$34,616	$26,816	$2,907,745	$151.06	0.7	34.2	2,245	43	8,352
Ashford	86	$39,947	$32,664	$3,435,428	$795.79	0.8	185.0	2,613	50	9,838
Avon	96	$49,328	$37,063	$4,735,447	$261.66	1.0	53.0	5,393	74	11,898
Barkhamsted	33	$34,278	$32,898	$1,131,158	$297.75	0.3	72.7	896	17	3,404
Beacon Falls	28	$31,730	$30,585	$888,435	$146.87	0.2	33.4	655	14	2,489
Berlin	127	$33,794	$33,600	$4,291,814	$216.04	0.9	46.8	3,117	66	11,454
Bethany	53	$35,965	$35,000	$1,906,147	$342.65	0.4	76.7	1,408	30	5,258
Bethel	85	$33,132	$31,590	$2,816,242	$151.54	0.6	33.7	2,031	43	7,716
Bethlehem	35	$32,795	$29,453	$1,147,825	$318.22	0.2	66.4	776	18	2,950
Bloomfield	179	$41,037	$25,074	$7,345,671	$358.57	2.3	110.8	7,385	96	27,957
Bolton	56	$32,753	$30,776	$1,834,150	$368.30	0.5	92.2	1,526	28	5,660
Branford	111	$33,660	$31,395	$3,736,217	$133.31	0.8	30.0	2,769	58	10,364
Bridgeport	448	$325,252	$27,000	$145,713,095	$1,010.29	20.9	145.2	838,304	1,398	127,288
Bridgewater	9	$41,193	$38,680	$370,737	$214.67	0.1	44.0	246	6	935
Bristol	356	$40,287	$30,488	$14,342,157	$237.15	3.4	56.5	11,196	204	42,312
Brookfield	101	$54,867	$37,118	$5,541,613	$336.84	1.0	61.6	6,287	80	15,593
Brooklyn	96	$32,024	$30,000	$3,074,328	$374.46	0.7	89.2	2,394	47	9,018
Burlington	123	$46,271	$37,750	$5,691,360	$611.91	1.4	153.6	4,674	82	17,604
Canaan	28	$52,360	$37,729	$1,466,084	$1,188.07	0.3	249.5	1,125	21	4,226
Canterbury	52	$38,945	$32,719	$2,025,128	$394.61	0.4	87.7	1,459	31	5,543
Canton	73	$33,845	$29,400	$2,470,718	$240.06	0.6	58.0	2,033	38	7,356
Chaplin	29	$31,753	$29,168	$920,823	$399.49	0.2	91.0	680	14	2,584
Cheshire	194	$34,578	$33,445	$6,708,084	$229.25	1.6	55.4	5,384	105	19,983
Chester	37	$51,915	$31,200	$1,920,864	$480.94	0.3	65.8	863	18	3,236
Clinton	86	$39,630	$32,845	$3,408,152	$257.03	0.8	62.4	2,698	49	10,199
Colchester	114	$36,764	$33,480	$4,191,041	$260.83	0.9	53.9	2,875	65	10,666
Colebrook	11	$2,082,538	$36,464	$22,907,918	$15,426.21	5.1	3,426.9	288	6	62,532
Columbia	71	$32,536	$32,130	$2,310,077	$421.16	0.5	95.1	1,713	35	6,430
Cornwall	17	$28,676	$28,286	$487,498	$343.31	0.1	76.7	353	8	1,341
Coventry	129	$46,107	$31,395	$5,947,788	$478.31	1.5	120.7	4,882	79	18,517
Cromwell	117	$49,555	$30,240	$5,797,968	$413.99	0.9	62.0	6,904	97	10,709

[20] Ibid

CONNECTICUT GREEN BANK

2. BACKGROUND AND MARKET – COMMUNITIES

Municipality	# Projects	Average Investment (Project Cost)	Median Investment (Project Cost)	Total Investment (Project Cost)	Investment /Capita	MW	Watts/ Capita	Annual MMBTU	Total Job Years	Lifetime CO2 Emissions (tons)
Danbury	196	$37,072	$35,464	$7,266,156	$89.82	1.5	19.0	5,870	113	18,971
Darien	25	$41,263	$39,592	$1,031,567	$49.76	0.2	9.8	659	16	2,503
Deep River	39	$52,780	$31,244	$2,058,418	$444.68	0.5	107.9	1,760	27	6,152
Derby	57	$30,574	$29,451	$1,742,694	$135.07	0.4	32.5	1,375	27	5,172
Durham	165	$34,032	$31,500	$5,615,243	$760.05	1.4	187.6	4,495	86	17,077
East Granby	68	$36,923	$36,334	$2,510,747	$487.71	0.5	103.2	1,779	39	6,543
East Haddam	60	$45,131	$31,735	$2,707,849	$296.72	0.6	70.7	2,110	37	7,859
East Hampton	91	$37,080	$35,490	$3,374,322	$260.38	0.7	55.7	2,358	52	8,887
East Hartford	317	$25,469	$24,098	$8,073,769	$157.53	1.9	37.8	6,493	125	23,863
East Haven	175	$27,775	$26,774	$4,860,704	$166.14	1.1	38.8	3,871	76	13,970
East Lyme	135	$35,052	$33,885	$4,731,982	$246.98	1.0	53.8	3,406	72	12,961
East Windsor	82	$58,965	$34,902	$4,835,110	$433.18	1.1	103.0	4,015	65	14,848
Eastford	19	$34,441	$30,791	$654,375	$374.14	0.2	97.3	552	10	2,096
Easton	54	$50,773	$33,885	$2,741,742	$366.05	0.7	97.5	2,516	36	8,997
Ellington	118	$40,822	$35,121	$4,817,046	$308.75	1.1	70.3	3,903	72	14,312
Enfield	240	$31,891	$27,338	$7,653,765	$171.40	1.7	38.5	5,860	113	21,752
Essex	45	$31,372	$28,560	$1,411,726	$211.24	0.3	47.0	1,018	22	3,867
Fairfield	288	$35,778	$30,015	$10,304,046	$173.46	2.5	41.3	8,149	163	30,205
Farmington	162	$31,868	$30,725	$5,162,681	$203.74	1.2	49.1	4,093	80	15,357
Franklin	19	$35,970	$31,044	$683,428	$355.58	0.2	81.2	506	11	1,924
Glastonbury	212	$33,721	$29,761	$7,148,914	$207.65	1.7	49.2	5,874	107	21,969
Goshen	17	$37,354	$41,000	$635,023	$213.38	0.1	47.9	462	10	1,756
Granby	72	$33,202	$31,257	$2,390,576	$211.89	0.5	47.5	1,740	37	6,609
Greenwich	103	$30,672	$27,895	$3,159,165	$51.64	0.7	11.3	2,273	49	8,490
Griswold	166	$36,630	$33,953	$6,080,617	$508.80	1.3	111.4	4,369	94	16,398
Groton	25	$76,212	$32,785	$1,905,304	$47.50	0.1	3.6	5,600	34	1,770
Guilford	150	$35,799	$34,199	$5,369,828	$239.99	1.2	54.5	4,011	82	15,032
Haddam	159	$33,762	$31,590	$5,368,236	$643.21	1.3	161.3	4,538	82	16,585
Hamden	360	$27,937	$26,316	$10,057,186	$164.98	2.3	37.1	7,566	157	27,893
Hampton	34	$43,352	$29,458	$1,473,974	$791.18	0.4	208.9	1,285	20	4,795
Hartford	175	$42,638	$19,854	$7,461,708	$59.80	1.5	12.3	8,295	113	25,605
Hartland	21	$31,654	$30,030	$664,728	$314.44	0.2	72.1	513	10	1,878
Harwinton	60	$33,973	$33,274	$2,038,384	$361.29	0.5	87.4	1,640	32	6,079
Hebron	77	$34,891	$34,091	$2,686,591	$277.37	0.6	63.2	1,985	41	7,543
Kent	18	$95,354	$33,808	$1,716,376	$576.16	0.5	183.5	1,772	20	6,734
Killingly	142	$33,235	$29,226	$4,719,429	$271.70	1.2	67.4	3,833	71	14,446
Killingworth	95	$41,608	$37,050	$3,952,751	$605.79	1.0	157.7	3,434	59	12,674
Lebanon	83	$31,188	$30,038	$2,588,627	$354.22	0.6	84.6	2,027	40	7,613
Ledyard	112	$32,813	$30,236	$3,675,039	$244.17	0.8	55.7	2,888	57	10,338
Lisbon	40	$36,133	$35,295	$1,445,317	$333.18	0.3	70.4	1,002	22	3,762
Litchfield	41	$32,001	$33,885	$1,312,030	$154.98	0.3	37.9	1,040	20	3,949
Lyme	17	$34,663	$32,881	$589,270	$244.92	0.1	59.0	460	9	1,748
Madison	83	$33,583	$31,962	$2,787,401	$152.58	0.6	34.5	2,100	43	7,831
Manchester	260	$44,037	$25,707	$11,449,653	$196.59	3.2	54.1	10,485	149	39,426
Mansfield	152	$30,896	$28,835	$4,696,166	$176.93	1.1	39.6	3,407	72	12,943
Marlborough	26	$37,722	$32,641	$980,774	$153.15	0.2	33.8	701	15	2,663
Meriden	241	$40,151	$28,665	$9,676,504	$158.98	1.8	29.7	12,497	158	35,448
Middlebury	26	$37,240	$36,172	$968,235	$127.82	0.2	28.6	731	15	2,672
Middlefield	54	$35,625	$33,323	$1,923,742	$434.74	0.5	102.2	1,467	30	5,573
Middletown	282	$63,089	$32,060	$17,791,132	$373.39	3.8	80.3	44,930	211	48,781
Milford	394	$89,866	$28,793	$35,407,071	$671.11	5.8	109.4	142,849	191	34,155

CONNECTICUT GREEN BANK

2. BACKGROUND AND MARKET – COMMUNITIES

Municipality	# Projects	Average Investment (Project Cost)	Median Investment (Project Cost)	Total Investment (Project Cost)	Investment /Capita	MW	Watts/ Capita	Annual MMBTU	Total Job Years	Lifetime CO2 Emissions (tons)
Monroe	83	$39,782	$39,015	$3,301,899	$169.51	0.7	37.8	2,390	51	9,078
Montville	180	$34,127	$32,786	$6,142,821	$313.87	1.4	69.9	4,631	96	16,846
Morris	17	$38,777	$36,720	$659,208	$276.05	0.1	53.8	416	10	1,582
Naugatuck	190	$34,312	$30,066	$6,519,282	$204.61	1.4	43.9	4,674	103	17,239
New Britain	233	$57,925	$23,205	$13,496,533	$184.36	4.9	66.9	127,472	115	32,357
New Canaan	51	$41,567	$39,102	$2,119,899	$107.40	0.4	22.1	1,418	33	5,375
New Fairfield	76	$42,073	$38,738	$3,197,582	$230.36	0.7	48.6	2,187	49	8,308
New Hartford	70	$35,625	$33,908	$2,493,753	$357.78	0.6	84.6	1,944	39	7,268
New Haven	200	$30,201	$24,661	$6,040,290	$46.54	1.3	10.2	5,193	91	16,299
New London	80	$54,013	$23,352	$4,321,046	$156.45	1.1	40.9	3,980	55	15,192
New Milford	136	$41,282	$37,743	$5,614,403	$199.50	1.2	42.4	3,867	86	14,692
Newington	219	$33,848	$27,300	$7,412,730	$242.55	1.8	57.4	5,837	110	21,885
Newtown	123	$62,027	$34,400	$7,629,349	$276.83	1.5	53.5	8,113	96	18,304
Norfolk	19	$38,214	$34,475	$726,069	$424.85	0.2	91.6	508	11	1,929
North Branford	49	$36,540	$34,503	$1,790,467	$124.28	0.4	27.9	1,303	28	4,951
North Canaan	7	$40,761	$34,644	$285,324	$86.07	0.1	18.0	193	4	734
North Haven	227	$33,527	$31,434	$7,610,695	$315.89	1.9	77.9	6,122	118	23,116
North Stonington	44	$44,657	$38,360	$1,964,925	$370.95	0.5	91.6	1,637	28	6,192
Norwalk	173	$69,347	$26,950	$11,996,993	$140.15	4.3	50.7	147,247	86	17,839
Norwich	126	$13,055	$9,350	$1,644,978	$40.62	0.2	4.1	2,260	44	2,090
Old Lyme	83	$35,623	$33,885	$2,956,737	$388.89	0.7	90.0	2,250	46	8,433
Old Saybrook	104	$32,066	$30,853	$3,334,875	$325.61	0.7	70.0	2,333	51	8,834
Orange	105	$51,254	$33,614	$5,381,697	$385.62	1.4	100.6	4,636	71	17,291
Oxford	70	$41,431	$37,850	$2,900,149	$228.66	0.7	52.7	2,168	45	8,237
Plainfield	139	$33,002	$32,016	$4,587,230	$297.78	1.0	66.9	3,343	71	12,701
Plainville	163	$48,302	$29,936	$7,873,293	$444.42	2.0	114.8	7,818	106	26,443
Plymouth	126	$38,762	$34,172	$4,883,979	$398.92	1.0	83.9	3,333	75	12,662
Pomfret	57	$32,299	$30,561	$1,841,022	$433.49	0.4	104.4	1,446	28	5,465
Portland	87	$31,128	$28,800	$2,708,097	$284.82	0.7	69.7	2,161	41	8,166
Preston	45	$37,278	$32,868	$1,677,502	$354.95	0.4	80.4	1,251	26	4,679
Prospect	54	$34,214	$32,125	$1,847,553	$196.44	0.4	43.1	1,387	28	4,995
Putnam	86	$55,469	$27,720	$4,770,301	$497.74	1.2	125.7	11,410	87	57,622
Redding	38	$45,706	$43,493	$1,736,827	$189.65	0.3	37.6	1,117	28	4,242
Ridgefield	64	$43,696	$40,832	$2,796,553	$113.51	0.6	23.9	1,916	43	7,261
Rocky Hill	118	$32,951	$30,874	$3,888,169	$197.28	0.9	43.4	2,781	60	10,547
Roxbury	28	$35,799	$33,580	$1,002,359	$443.13	0.3	114.8	842	15	3,199
Salem	50	$38,948	$35,741	$1,947,394	$469.14	0.4	97.9	1,350	30	5,007
Salisbury	38	$32,963	$30,327	$1,252,601	$334.83	0.3	69.7	882	19	3,212
Scotland	9	$37,714	$33,987	$339,426	$196.65	0.1	45.8	259	5	974
Seymour	67	$27,589	$26,458	$1,848,477	$111.76	0.4	26.9	1,457	29	5,490
Sharon	25	$45,492	$38,250	$1,137,312	$408.81	0.2	86.1	777	18	2,953
Shelton	230	$35,878	$31,826	$8,252,015	$208.60	1.8	46.4	6,609	129	22,624
Sherman	23	$36,210	$36,855	$832,835	$232.57	0.2	48.1	572	13	2,121
Simsbury	130	$39,035	$31,797	$5,074,608	$215.84	1.0	41.7	4,032	79	12,089
Somers	51	$56,387	$35,414	$2,875,740	$251.29	0.7	59.7	2,109	38	7,919
South Windsor	222	$32,380	$32,065	$7,188,374	$279.61	1.7	65.9	5,605	110	20,862
Southbury	91	$38,468	$36,926	$3,500,622	$175.88	0.8	42.2	2,725	54	10,353
Southington	325	$135,534	$33,885	$44,048,596	$1,022.74	5.3	123.6	125,133	176	33,914

CONNECTICUT GREEN BANK

2. BACKGROUND AND MARKET – COMMUNITIES

Municipality	# Projects	Average Investment (Project Cost)	Median Investment (Project Cost)	Total Investment (Project Cost)	Investment /Capita	MW	Watts/ Capita	Annual MMBTU	Total Job Years	Lifetime CO2 Emissions (tons)
Sprague	28	$36,905	$35,807	$1,033,330	$346.29	0.2	75.7	745	16	2,785
Stafford	110	$31,736	$31,020	$3,490,922	$288.82	0.8	66.0	2,636	54	9,827
Stamford	175	$56,381	$29,438	$9,866,644	$80.45	1.5	12.5	15,919	159	18,761
Sterling	40	$34,838	$33,013	$1,393,533	$363.85	0.3	80.1	994	21	3,778
Stonington	193	$33,009	$31,752	$6,370,823	$343.53	1.5	80.8	4,876	96	18,453
Stratford	348	$29,852	$27,000	$10,388,474	$202.17	2.3	45.4	8,149	159	30,703
Suffield	153	$37,945	$38,085	$5,805,627	$368.96	1.3	82.5	4,304	89	15,987
Thomaston	47	$33,615	$32,130	$1,579,889	$200.32	0.4	44.8	1,153	25	4,352
Thompson	85	$36,654	$26,263	$3,115,549	$329.41	0.8	85.2	2,634	44	9,928
Tolland	141	$36,613	$33,885	$5,162,466	$342.98	1.2	79.4	3,900	80	14,728
Torrington	157	$34,049	$31,044	$5,345,747	$146.93	1.2	31.7	3,855	83	14,203
Trumbull	200	$39,869	$31,872	$7,973,804	$221.38	1.8	51.1	6,304	116	23,551
Union	14	$29,287	$29,793	$410,024	$480.12	0.1	113.1	325	6	1,190
Vernon	183	$33,480	$27,541	$6,126,848	$209.97	1.5	51.3	4,972	90	18,445
Voluntown	33	$49,589	$30,188	$1,636,452	$628.68	0.5	175.4	1,481	21	5,626
Wallingford	3	$25,274	$25,275	$75,822	$1.68	0.0	0.2	86	2	115
Warren	16	$38,302	$31,603	$612,836	$419.46	0.1	101.2	479	9	1,821
Washington	26	$36,330	$30,627	$944,585	$264.00	0.2	57.9	671	15	2,551
Waterbury	369	$36,804	$27,885	$13,580,579	$123.05	3.1	28.0	10,364	209	38,670
Waterford	168	$34,294	$31,398	$5,761,323	$295.20	1.3	67.2	4,400	88	16,158
Watertown	141	$41,100	$35,029	$5,795,125	$257.40	1.4	60.1	4,592	84	17,191
West Hartford	380	$27,737	$23,799	$10,540,100	$166.59	2.4	37.3	7,864	166	29,084
West Haven	298	$29,152	$25,983	$8,687,337	$156.35	2.1	37.8	6,852	134	26,312
Westbrook	45	$34,686	$32,175	$1,560,872	$224.97	0.4	50.6	1,177	24	4,321
Weston	57	$44,929	$42,984	$2,560,967	$251.59	0.6	57.5	1,986	40	7,211
Westport	116	$39,924	$29,316	$4,631,230	$175.49	0.9	34.9	3,382	72	11,373
Wethersfield	159	$33,553	$28,675	$5,334,988	$200.05	1.3	48.3	4,314	80	15,882
Willington	40	$39,423	$38,906	$1,576,902	$261.03	0.4	58.7	1,154	24	4,382
Wilton	62	$38,863	$38,105	$2,409,505	$133.40	0.6	32.6	1,987	37	7,251
Winchester	39	$30,828	$27,200	$1,202,292	$106.95	0.3	23.5	857	18	3,257
Windham	115	$33,132	$25,740	$3,810,211	$150.79	0.8	33.6	3,228	55	10,349
Windsor	272	$39,336	$27,352	$10,699,403	$856.09	2.0	163.4	10,241	169	24,602
Windsor Locks	143	$32,668	$28,080	$4,671,505	$160.84	1.1	39.4	3,941	69	14,303
Wolcott	133	$39,053	$34,808	$5,194,009	$311.39	1.1	66.7	3,706	81	13,705
Woodbridge	78	$78,392	$33,885	$6,114,606	$680.16	1.9	213.7	6,279	72	23,668
Woodbury	36	$38,223	$35,629	$1,376,032	$137.95	0.3	30.6	1,058	21	3,765
Woodstock	98	$38,655	$34,561	$3,788,219	$475.67	0.8	100.6	2,629	58	9,869
Unknown	4	$305,400	$300,640	$1,221,600	-	0.2	0	609	5	2,315
Total	18,771	$48,790	$30,188	$915,828,602	$256.43	192.3	53.9	1,953,454	11,594	2,185,779

2. BACKGROUND AND MARKET – COMMUNITIES

DISTRESSED COMMUNITIES[21]

Connecticut's "distressed communities" are particularly affected by the state's high energy prices. On average, Connecticut's neediest households owe $2,560 more in annual energy bills than they can afford[22]. CGB financing products and marketing efforts seek to bring lower and more predictable energy costs to homes and businesses in distressed communities.

Table 8. Overview of Distressed and Not Distressed Municipalities, Population, and Households in Connecticut

	Distressed %	Not Distressed	Distressed	Total
# Towns	15%	144	25	169
Population	33%	2,406,785	1,167,312	3,574,097
Households	33%	899,083	438,675	1,337,758

CGB has steadily increased its percentage of projects deployed each year in distressed municipalities. This has led to nearly $300 million in clean energy projects in these communities, creating over 3,600 jobs.

[21] Distressed Communities as defined by the Department of Economic and Community Development (DECD). DECD Methodology: Weighted components are summed to measure the rank of the 169 towns. For each component, every town is ranked from 1 to 169, with the best town scoring 1 and worst 169. The top 25 towns with highest total scores are designated distressed municipalities.

DECD's components and weights:

1. Per capita income for 2014, weight 1;
2. % of poverty in population for 2014, weight 1;
3. Unemployment rate for 2015, weight 2;
4. % change in population from 2000 to 2010, weight 1;
5. % change in employment from 2005 to 2015, weight 1;
6. % change in per capita income from 2000 to 2014, weight 1;
7. % of house stock built before 1939 in 2014, weight 1/3;
8. % population with high school degree and higher in 2014, weight 1; and
9. Per Capita Adjusted Equalized Net Grand List in 2016-2017, weight 1.

According to C.G.S. Section 32-9p, a distressed municipality should be based on "high unemployment and poverty, aging housing stock and low or declining rates of growth in job creation, population, and per capita income."

DECD additionally included 1) Level of Per Capita Income, 2) % of population with high school degree and higher and 3) Per Capita Adjusted Equalized Net Grand List (AENGL) to arrive at its ranking.

Data sources: Census 2000, Census 2010, 2010-2014 Census American Community Survey (ACS) 5-year Estimates, DOL, DOE
Prepared by DECD Research
August 18, 2016

http://www.ct.gov/ecd/cwp/view.asp?a=1105&q=251248

[22] Home Energy Affordability in Connecticut, http://www.operationfuel.org/wp-content/uploads/Connecticut-2014-HEAG-Final.pdf.

Table 9. Project Performance – Clean Energy Approved, Closed, and Completed Projects in Connecticut (FY 2016)[23]

	# Projects	Investment (Project Cost)	Investment /Capita*	MW	Watts /Capita*	Annual MMBTU	Total Job Years	Lifetime CO2 Emissions (tons)
Not Distressed	5,719	$226,847,885	$194.33	52.9	45.3	232,607	3,212	642,677
Distressed	2,548	$86,016,759	$35.74	21.3	8.9	186,002	1,227	240,111
Unknown	4	$1,221,600	-	0.2	-	609	5	2,315
Total	8,271	$314,086,243	$87.54	74.4	20.8	419,219	4,444	885,103
% Distressed	31%	27%		29%				

Table 10. Project Performance – Clean Energy Approved, Closed, and Completed Projects in Connecticut (FY 2012-2016)

	# Projects	Investment (Project Cost)	Investment /Capita*	MW	Watts /Capita*	Annual MMBTU)	Total Job Years	Lifetime CO2 Emissions (tons)
Not Distressed	14,039	$616,511,153	$528.15	135.1	115.8	863,166	7,933	1,573,531
Distressed	4,728	$298,095,849	$123.86	57.0	23.7	1,089,678	3,655	609,933
Unknown	4	$1,221,600	-	0.2	-	609	5	2,315
Total	18,771	$915,828,602	$255.90	192.3	53.8	1,953,454	11,594	2,185,779
% Distressed	25%	33%		30%				

* Calculated using the 2016 distressed community designations

[23] The Connecticut Green Bank tracks projects through three phases as they move through the pipeline to construction completion and operation – 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. Closed indicates all financial and legal documents have been executed and any additional funding has been secured. Completion indicates all construction and installation is complete and the project is operational.

CONNECTICUT GREEN BANK

2. BACKGROUND AND MARKET – INCOME

In addition to looking at funding and clean energy deployment in distressed municipalities, CGB works to ensure that low to moderate income (LMI) census tracts across the entire state are benefiting from its programs. CGB defines low to moderate income as 100% or less of area median income. Tables 11 through 12 group CGB's projects based upon the average income of their census tract.

Table 11. Projects by Area Median Income – Clean Energy Deployment in the Residential Sector (FY 2016)

	FY 2016			
Income Bands	**# Projects**	**Projects /1,000 Households**	**Installed Capacity (MW)**	**Watts /Household**
<60% AMI	633	2.8	6.4	28.4
60%-80% AMI	1,057	4.9	7.3	33.9
80%-100% AMI	1,477	6.4	11.7	50.5
100%-120% AMI	2,223	8.0	17.4	62.7
>120% AMI	2,672	6.6	22.4	55.2
Unknown	122	-	1.0	-
Total	8,184	6.0	66.2	48.8

Table 12. Projects by Area Median Income – Clean Energy Deployment in the Residential Sector (FY 2012-2016)

	FY 2012 -2016			
Income Bands	**# Projects**	**Projects /1,000 Households**	**Installed Capacity (MW)**	**Watts /Household**
<60% AMI	1,011	5.4	25.6	114.1
60%-80% AMI	1,906	8.8	13.2	61.1
80%-100% AMI	3,110	13.5	24.5	106.1
100%-120% AMI	5,004	18.0	45.6	164.1
>120% AMI	7,430	18.3	61.8	152.1
Unknown	125	-	1.0	-
Total	18,586	13.6	171.7	125.9

Through such products and initiatives as the LMI solar incentive, it's partnership with PosiGen, and its affordable multifamily housing energy financing products, CGB has focused on increasing its penetration in the LMI market. Tables 13 through 15 illustrate that CGB has made progress on this goal but still has work to do.

Table 13. Projects by Area Median Income – Number of Clean Energy Projects Above or Below 100% (FY 2012-2016)

# Projects	100% or Below AMI	Over 100% AMI	Total	100% or Below AMI
FY 2012	62	355	417	15%
FY 2013	184	934	1,118	16%
FY 2014	649	1,773	2,422	27%
FY 2015	1,995	4,545	6,540	31%
FY 2016	3,209	4,925	8,134	39%
Unknown AMI	-	-	140	-
Total	6,099	12,532	18,771	32%

Table 14. Deployment – Clean Energy Installed Capacity (MW) Above or Below 100% (FY 2012-2016)

MW	100% or Below AMI	Over 100% AMI	Total	100% or Below AMI
FY 2012	0.4	2.5	2.9	14%
FY 2013	16.6	6.9	23.5	71%
FY 2014	9.5	16.6	26.1	36%
FY 2015	17.1	48.3	65.5	26%
FY 2016	28.1	43.3	72.1	40%
Unknown AMI	-	-	2.4	-
Total	72.4	117.5	192.3	38%

Table 15. Investment – Clean Energy Investment Above or Below 100% Area Median Income (FY 2012-2016)

Investment (Project Cost)	100% or Below AMI	Over 100% AMI	Total	100% or Below AMI
FY 2012	$1,901,884	$13,087,685	$14,989,569	13.%
FY 2013	$79,017,723	$32,046,769	$111,064,486	71%
FY 2014	$69,598,876	$70,553,491	$140,152,366	50%
FY 2015	$113,254,360	$222,190,050	$335,444,411	34%
FY 2016	$125,461,942	$179,261,682	$304,723,625	41%
Unknown AMI	-	-	$9,454,145	-
Total	$389,234,786	$517,139,671	$915,828,602	38%

CONNECTICUT GREEN BANK

2. BACKGROUND AND MARKET
SMALL TO MINORITY OWNED 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 16. Small Business Procurement (FY 2012-2016)

Year	Small Business		
	Goal	Actual	Percentage
FY 2012	$ 59,775	$ 39,520	66%
FY 2013	$ 62,598	$ 59,340	95%
FY 2014	$ 135,320	$ 120,560	89%
FY 2015	$ 221,750	$ 251,980	113%
FY 2016	$ 238,550	$ 510,797	214%

Table 17. Minority Business Enterprise Procurement (FY 2012-2016)

Year	Minority Business Enterprises		
	Goal	Actual	Percentage
FY 2012	$ 14,944	$ 31,474	211%
FY 2013	$ 15,649	$ 52,308	334%
FY 2014	$ 33,830	$ 88,427	261%
FY 2015	$ 55,438	$ 153,319	277%
FY 2016	$ 59,638	$ 96,020	161%

CONNECTICUT GREEN BANK

3. MEASURES OF SUCCESS – ATTRACT AND DEPLOY CAPITAL

Project Status

The Connecticut Green Bank tracks projects through three phases as they move through the pipeline to construction completion and operation – 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 all construction and installation is complete and the project is operational. The table highlights the fact that projects can take some time to move through this pipeline (see Table 18). The full energy, economic, and environmental benefits from these projects begin to be fully realized after they are completed.

Table 18. Clean Energy Project Status (FY 2012-2016)

# PROJECTS	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0	0	12	43	63	118
Closed	2	2	60	587	4,186	4,837
Completed	415	1,116	2,350	5,913	4,022	13,816
Total	417	1,118	2,422	6,543	8,271	18,771

Clean Energy Investment

The Connecticut 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. The Green Bank tracks its progress towards this vision as "E3" metrics – Energy, Economic, and Environmental. Investment represents the total amount of private and public funding for clean energy projects, shown in Tables 19 and 20 below.

Table 19. Clean Energy Investment by Source - Public and Private (FY 2012-2016)

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Total CGB Investment	$4,809,813	$18,595,710	$37,834,791	$55,698,896	$48,042,380	$164,981,590
Total Private Investment	$10,179,757	$92,655,897	$102,829,679	$281,861,775	$268,299,049	$755,826,156
Total Project Investment	$14,989,569	$111,064,486	$140,152,366	$335,535,937	$314,086,243	$915,828,602

Leverage Ratio

One of the main goals of the Connecticut Green Bank is to attract and deploy private capital to finance the green energy goals for Connecticut. To that end, the greater the leverage ratio of private to public funds, the better. The leverage ratios for the Connecticut Green Bank are increasing over time. Not only that, but a greater percentage of public funds being used are in the form of loans and leases rather than subsidies and grants.

Table 20. Leverage Ratio of Private to Public Funds by Sector

Leverage Ratio of Public to Private Funds by Sector	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Commercial, Industrial & Institutional [24]	0.0	3.7	1.8	4.5	2.0	2.9
Statutory and Infrastructure	3.1	6.1	4.3	6.4	10.9	6.6
Residential	0.0	0.8	10.5	6.3	5.6	6.2
Total	3.1	6.0	3.7	6.1	6.6	5.6

Clean Energy Produced and Energy Saved

The Connecticut 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. The Connecticut Green Bank tracks its progress towards this vision as "E3" metrics – Energy, Economic, and Environmental. The data below show the energy benefits in terms of capacity (megawatts [MW]), clean energy production (lifetime megawatt hours [MWh]), and annual energy savings (MMBTU) – see Tables 21 through 23.

Table 21. Installed Capacity (MW) of Clean Energy (FY 2012-2016)

MW	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0.0	0.0	3.2	3.8	3.5	10.5
Closed	0.0	0.0	0.3	10.6	38.8	49.7
Completed	2.9	23.5	22.6	51.1	32.1	132.1
Total	2.9	23.5	26.1	65.5	74.4	192.3

Table 22. Lifetime Production (MWh) of Clean Energy (FY 2012-2016)

MWh (lifetime)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0	0	260,864	318,157	252,554	831,575
Closed	408	143	6,258	282,920	979,350	1,269,078
Completed	67,980	1,419,204	740,526	1,223,733	763,659	4,215,103
Total	68,388	1,419,346	1,007,648	1,824,810	1,995,564	6,315,757

Table 23. Annual Energy Savings (MMBtu) of Clean Energy (FY 2012-2016)

MMBTU (annual)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0	0	143,872	438,296	134,684	716,851
Closed	56	19	1,905	464,980	176,220	643,181
Completed	9,278	59,462	233,100	183,267	108,315	593,421
Total	9,334	59,481	378,877	1,086,544	419,219	1,953,454

[24] Leverage ratio does not reflect private funding warehouse created in fiscal year 2016. Green Bank C-PACE assets will be transferred to this warehouse, shifting the leverage ratio towards private funding.

3. MEASURES OF SUCCESS – ATTRACT AND DEPLOY CAPITAL

Renewable 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 (see Table 24).

Table 24. Renewable Energy Technology Deployment (FY 2012-2016)

RENEWABLE ENERGY TECHNOLOGY*	Commercial & Industrial Sector		Statutory and Infrastructure Sector		Residential Sector		Total	
	MW	MWh (lifetime)	MW	MWh (lifetime)	MW	MWh (lifetime)	MW	MWh (lifetime)
Anaerobic Digesters			7.2	587,384			7.2	587,384
Biomass	0.6	14,257					0.6	14,257
CHP	0.1	6,874	7.1	646,601			7.1	653,475
Fuel Cell			14.8	1,166,832			14.8	1,166,832
Hydro	0.5	43,898					0.5	43,898
Solar PV	17.9	426,062	119	2,836,940	16.0	380,030	153.3	3,643,032
Wind			5.0	118,260			5.0	118,260
Total	19.1	491,090	157.2	5,444,220	16.0	380,030	192.3	6,315,340

*Residential solar projects that receive financing also receive an incentive under the Residential Solar Incentive Program so they are counted in each sector's results. They have been removed from the total to avoid double counting.

The Connecticut Green Bank's efforts have led to a significant amount of solar PV deployment in the state (about 80% of all green energy projects deployed is from solar PV). When comparing deployment to green energy production, solar PV produces the most energy (58% of all green energy production), fuel cells also contribute a large proportion given the efficiency of the technology (over 18% of all green energy production).

Assets – Current and Non-Current

The Connecticut Green Bank's success in shifting to a financing model from a subsidy model is evident in the 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 25: Current and Non-Current Assets (FY 2013-2016)

	Year Ended June 30,				
	2016	2015	2014	2013	2012
Current Assets					
Cash and Cash Equivalents	$ 48,072,060	$ 39,893,649	$ 71,411,034	$ 68,105,014	$ 64,672,910
Receivables	4,531,258	2,867,233	8,253,318	4,545,661	3,305,301
Prepaid Expenses	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	845,479	803,573	766,086	704,032	670,645
Current portion of program loans	884,739	10,264,825	652,447	--	--
Total Current Assets	60,852,247	57,972,194	81,702,524	73,875,521	68,999,158
Non-Current Assets					
Portfolio Investments	1,000,000	1,000,000	1,000,000	1,000,000	2,155,525
Bonds Receivable	3,492,282	1,600,000	1,600,000	--	--
Solar Lease Notes - Less current portion	8,162,635	9,015,437	9,778,315	10,536,136	11,064,879
Program Loans - Less current portion	32,382,778	30,253,119	12,750,457	3,788,094	--
Renewable Energy Certificates	812,772	933,054	1,069,390	1,217,491	1,324,614
Capital Assets, Net of Depreciation and Amortization	57,863,787	26,971,087	3,074,337	362,505	91,329
Asset retirement obligation, net	2,261,472	1,029,196	--	--	--
Restricted Assets:					
Cash and Cash Equivalents	9,749,983	8,799,005	9,513,715	9,536,656	8,540,684
Total Non-Current Assets	115,725,709	79,600,898	38,786,214	26,440,882	23,177,031
Total Assets	$176,577,957	$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 Table 26), the Connecticut Green Bank has quickly moved towards this model, with fewer and fewer funds devoted to subsidies. This trend has developed even as total investment in clean energy has increased to over $915 million in total from 2012 through 2016, enabling the Connecticut Green Bank to do more at a faster pace while managing ratepayer resources more efficiently.

Table 26. Ratio of Capital Invested as Subsidies, Credit Enhancements, and Loans and Leases (FY 2012-2016)

GREEN BANK FUNDS INVESTED*	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Subsidies *(Grants)*	$4,809,813	$12,419,798	$17,992,300	$27,816,544	$20,552,219	$83,590,674
% Green Bank Funds Invested in Subsidies	100%	67%	48%	50%	43%	51%
Credit Enhancements *(LLR & IRBS)*	$0	$187,122	$512,104	$2,024,733	$2,255,186	$4,979,145
% Green Bank Funds Invested in Credit Enhancements	0%	1%	1%	4%	5%	3%
Loans and Leases *(includes sell downs)*	$0	$5,988,790	$19,330,387	$25,857,619	$25,234,975	$76,411,772
% Green Bank Funds Invested in Loans and Leases	0%	32%	51%	46%	53%	46%
Total	$4,809,813	$18,595,710	$37,834,791	$55,698,896	$48,042,380	$164,981,590

* Approved/Closed/Completed

Credit Quality of Residential Borrowers

The credit quality of Green Bank's residential borrowers reflects the relatively high FICO scores in the state; 78% of single family house households have a FICO of 680 or higher. The Green Bank has recently begun to focus on ensuring that credit challenged customers have access to energy financing products through such initiatives as its partnership with PosiGen and bringing Capital 4 Change, which has experience serving this market, into the Smart-E program.

Table 27. Credit Quality of Residential Borrowers by product (FY 2012-2016)

	Credit Score Ranges						
	Below 640	**640-679**	**680-699**	**700-719**	**720+**	**Unknown**	**Total**
Smart-E Loan	26	75	45	65	501	25	737
CT Solar Lease	1	45	39	78	1,029		1,192
CT Solar Loan	-	-	11	15	253		279
Total	27	120	95	158	1,783	25	2,208
	1%	5%	4%	7%	82%	1%	

CONNECTICUT GREEN BANK

3. MEASURES OF SUCCESS –PUBLIC BENEFITS

Jobs Created

The Connecticut 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, support the creation of jobs, promote energy security, and address climate change. The Connecticut Green Bank tracks its progress towards this vision as "E3" metrics – Energy, Economic, and Environmental. The data below highlights the economic benefits of the Connecticut Green Bank's projects (see Tables 28 through 29). Investment represents the total amount of private and public funding for clean energy projects and direct and indirect and induced jobs quantifies the resulting job creation[25].

Table 28. Direct Job-Years Supported (FY 2012-2016)

Direct Jobs	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0	0	0	6	37	43
Closed	1	0	10	148	871	1,030
Completed	88	559	540	1,301	795	3,283
Total	88	559	550	1,455	1,703	4,355

Table 29. Indirect and Induced Job-Years Supported (FY 2012-2016)

Indirect & Induced Jobs	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0	0	0	9	61	70
Closed	1	0	16	237	1,400	1,655
Completed	142	1,131	868	2,093	1,279	5,514
Total	142	1,132	885	2,340	2,740	7,239

[25] Jobs estimates are based on multipliers determined as a result of work performed by Navigant Consulting for the Connecticut Renewable Energy and Energy Efficiency Economy Baseline Study completed in March 2009 and subsequently updated in 2010. This Navigant Study was an independent, third party analysis of Connecticut's clean energy economy. Data were acquired as a result of primary research. Navigant performed a census of over 300 companies, institutions, and organizations identified as active players in Connecticut's renewable energy and energy efficiency economy. Seventy-four (74) key renewable energy and energy efficiency companies were interviewed; 95 additional key companies were researched in detail. All renewable companies in Connecticut were identified and analyzed. Key energy efficiency companies were identified and analyzed, with the overall market size estimated by extrapolation. Company interviews included questions about customers, supply chain, number of jobs, corresponding salaries, and revenue. Detailed interview questionnaires are available in the Methodology section of the Baseline Study, pages 58-81.

http://www.ctcleanenergy.com/Portals/0/Phase%201%20Deliverable%20Final%20Full.pdf

DECD has approved of the methodology for estimating the economic development benefits (i.e., job-years created) from the investment in clean energy projects.

http://ctcleanenergy.com/Portals/0/board-materials/4_DECD%20Findings_Economic%20Development%20Estimates_FY%202013%20Results_CEFIA_121613.pdf

3. MEASURES OF SUCCESS –PUBLIC BENEFITS

CO2 Emission Reductions Supported and Equivalencies

The data below highlight the environmental benefits of these projects as a reduction in carbon (CO2) emissions and standard equivalencies[26] (see Tables 30 through 33).

Table 30. Lifetime CO2 Emissions Reductions (FY 2012-2016)

Lifetime CO2 Emission Reductions (Tons)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0	0	86	462	14,769	15,317
Closed	211	74	3,240	173,149	473,491	650,166
Completed	35,248	178,363	267,853	641,990	396,843	1,520,297
Total	35,459	178,437	271,179	815,600	885,103	2,185,779

[26] All emissions reductions from renewable energy projects are determined using ISO-New England information, because that is where the energy will be displaced. This produces results that may be significantly different from emissions savings based on a comparison to national averages. In addition, the generation characteristics of each technology have an impact on the emissions reduction that can be expected. Solar-powered systems will produce only during the daylight hours, which normally coincide with the peak demand period for the utilities. The generating fleet during this time may include peaking plants and reserve plants, which will have lower efficiencies than the "baseload" plants which run 24 hours per day. Consequently, emissions are higher, and the renewable energy systems look better by comparison. The calculations are based on the results of the 2007 New England Marginal Emission Rate Analysis (http://www.iso-ne.com/genrtion_resrcs/reports/emission/2007_mea_report.pdf). The appropriate marginal emissions rates for Connecticut are used to determine the net avoided emissions for each of the technologies evaluated.

a. PV systems are analyzed using the average of the Marginal Emission Rates (in Lbs/MWh) for "On-Peak Ozone Season" and "On-Peak Non-Ozone Season". The underlying assumptions are that PV systems will be operating primarily during the on-peak periods, and that their output in the five months of the "Ozone Season" (May – September) is about the same as in the seven months of the "Non-Ozone Season."
b. Fuel cells are also evaluated using the "Annual Average (all hours) Marginal Emission Rates", because they are expected to produce power continually as "base load" generators. Fuel Cell emissions assume that 50% of the thermal output ("waste heat") is used to displace natural gas used for heating. This is conservative, since 50% thermal utilization is the minimum standard for CCEF's acceptance of a fuel cell project.

Emissions estimates for anaerobic digester, wind, and energy efficiency projects were not estimated.

To determine the exact avoided CO2 for CHP projects one needs to know what the CHP system is displacing (i.e. boiler, grid, etc.), as well as the efficiencies, in order to determine the existing CO2 emissions and then do the calculation to get the avoided emissions. For general purposes a typical 3.7 MW system operating on natural gas would generate about 13,000 tons of CO2 annually and 195,000 tons over its 15-year life. Typically avoiding 35-50% CO2 overall from the existing infrastructure. Not factoring in the utility transmission and distribution losses.

It should be noted that a methodology for estimating the environmental protection benefits from the investment in clean energy projects (i.e., GHG emissions reduced) has not yet been proposed to or approved by DEEP. The Connecticut Green Bank is currently looking into the EPA's AVERT (Avoided Emissions and Generation Tool) for future estimations of emissions reductions - http://www3.epa.gov/avert/

Table 31. Lifetime CO2 Emissions Reduction Energy for Home Equivalents (FY 2012-2016)

Energy for # of Homes	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0	0	2,070	2,522	1,930	6,522
Closed	2	1	30	1,723	4,925	6,680
Completed	324	15,292	4,399	5,871	3,636	29,522
Total	326	15,293	6,499	10,116	10,491	42,724

Table 32. Lifetime CO2 Emissions Reduction Cars Off the Road Equivalents (FY 2012-2016)

Cars off the Road	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0	0	1	3	81	85
Closed	1	0	22	1,251	3,098	4,372
Completed	235	1,966	1,608	4,178	2,637	10,624
Total	236	1,967	1,630	5,432	5,816	15,080

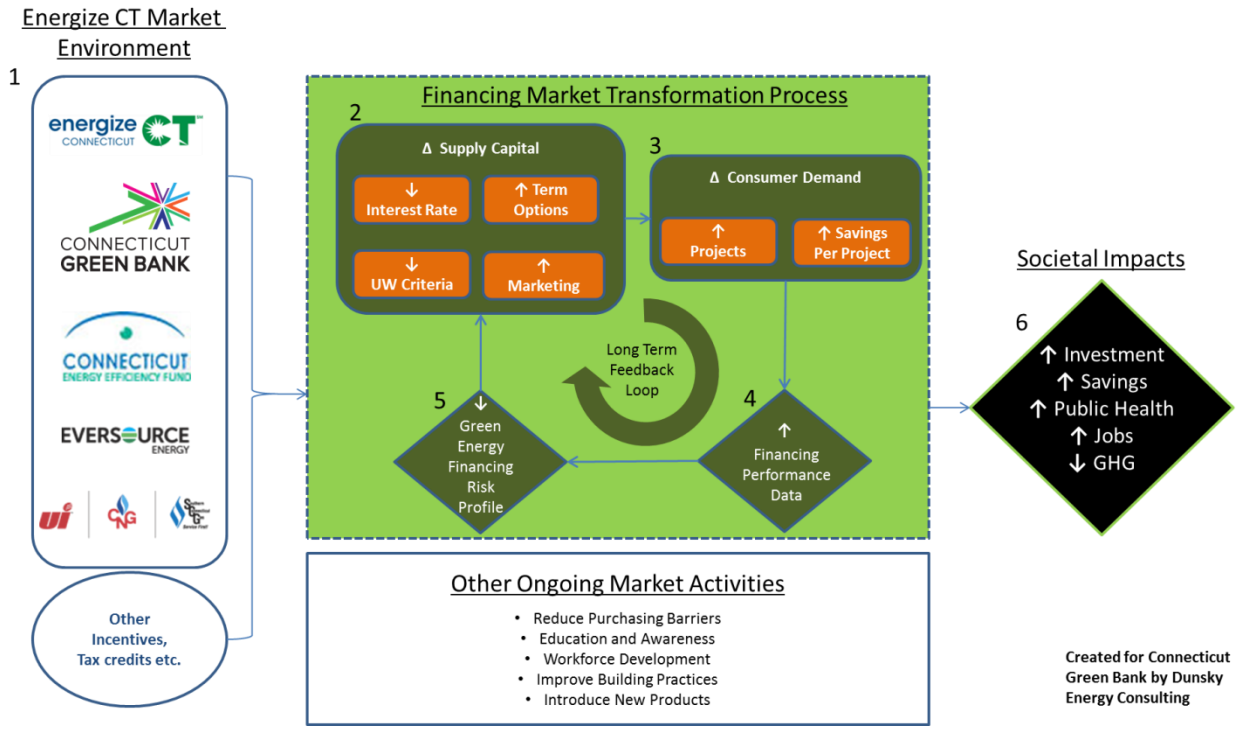
Table 33. Lifetime CO2 Emissions Reduction Acres of Trees Planted Equivalents (FY 2012-2016)

Planting # Acres of Trees	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Total
Approved	0	0	1	6	162	169
Closed	3	1	43	2,504	6,202	8,753
Completed	470	3,936	3,219	8,365	5,279	21,269
Total	473	3,937	3,263	10,875	11,643	30,191

4. MARKET TRANSFORMATION – PROGRAM LOGIC MODEL

The Connecticut Green Bank has published an Evaluation Framework[27] and developed a Program Logic Model (PLM) that presents the green bank model of attracting and deploying private capital through financing (see Figure 1). This PLM serves as a foundation for evaluating clean energy deployment through subsidy and financing programs of the Connecticut Green Bank.

Figure 1. Connecticut Green Bank Program Logic Model – Including Subsidies and Financing



This figure is a generalized market transformation and impact logic model that can be adapted to apply to a specific program of a green bank, as its market transformation strategies and associated evaluation frameworks are developed. An example of the green bank model and the financing market transformation process is the CT Solar Loan.[28]

As the Green Bank's capital availability expands to support further clean energy deployment, one can anticipate that there will be increased coordination between the Green Bank's programs and those administered by the utilities. It is thus important to include the various other key participants in this overall logic model, in order to be able to identify the variety of interactions that can occur between them, that over the short, medium, and long term can lead to the transformation of the funding of clean energy projects. In addition, it is important to identify known interventions in the clean energy environment which can influence the ways in which the Green Bank's financing efforts might play out over time.

[27] 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)

[28] Comprehensive Annual Financial Report for FY 2015 – Market Transformation: Financial Warehouse and Credit Enhancement Structures Case of the CT Solar Loan (pp. 133-136)

4. MARKET TRANSFORMATION – PROGRAM LOGIC MODEL

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 are used to incent 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. It too relies on information, marketing, direct incentives, and financing opportunities. [29]

Of the Green Bank programs, currently only participants in the Residential Solar Investment Program (RSIP) are required to receive a home energy assessment (i.e., supported by the utility efficiency programs), BPI audit, or equivalent. The program participants in the RSIP, with their individual energy saving projects, may thus receive rebates or incentives from the utilities (which are intended to overcome barriers to customer participation and to encourage increased selection of energy efficient measures), the Green Bank, or other levels of government (e.g., state incentives and Federal tax credits for solar PV and other technologies) as well as opportunities to finance some or all of the remaining portion of their clean energy project. In the context of a PLM, one can anticipate similar links between the Green Bank programs and those of the investor owned utilities (IOU's).

An impetus for coordination between the utility administered energy efficiency programs and the Green Bank programs is threefold: 1) more energy savings, and resulting emissions reductions, could potentially 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 Green Bank is required by statute.[30] It is important to note that there are a number

[29] 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.

[30] 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

of other ongoing market activities that 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 a number of 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.

Here 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 benefits of the Green Bank's Supply of Capital interventions can lead to, but are not limited to:

    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 to increase eligibility for and expand access to financing; and
    d. Increased marketing 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.

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.

4. MARKET TRANSFORMATION – PROGRAM LOGIC MODEL

- **Consumer Demand –** in combination with a comprehensive set of clean energy programs under the Energize CT initiative, the Green Bank drives demand for clean energy by marketing financing programs and increasing awareness of the potential benefits stemming from clean energy projects. Green Bank programs that deliver rebates and incentives – or connect with customers to support energy savings projects that are eligible for rebates and incentives – can further help to drive demand for natural gas conversions (e.g., Energize Norwich in partnership with Norwich Public Utilities)[31] as well as reduce the installed costs of and drive demand for solar PV projects (e.g., Solarize Connecticut). 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 the number of clean energy projects; and
  b. Increase the 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 financing performance is expected to play a central part in attracting more private capital investment to offer affordable and attractive financing offerings on their own. As the Green Bank increases the access to affordable and attractive capital, and more customers use financing for their clean energy projects, data demonstrating strong and reliable performance of these projects may indicate lower and more predictable risk.

- **Financing Risk Profile –** Green Bank can help reduce clean energy financing risk profiles in a number of ways. For example, it can absorb a portion or all of 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 may allow 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 potentially advantageous risk/return profile associated with clean energy investments and (2) takes

[31] Section 52 of Public Act 13-298

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.[32]

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 of the PLM elements ultimately aim to contribute to Green Bank program impacts and benefits. These include the direct impacts resulting from more clean energy investments supported by Green Bank financing that result in an increase in energy savings and improvement of public health (e.g., asbestos remediation, lead abatement, etc.) to the customer,[33] increase in the creation of local in-state jobs,[34] and the reduction of greenhouse gas emissions[35] 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 2 below represents the transition over time of the Green Bank's clean energy impacts and associated creation of societal benefits.

[32] 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

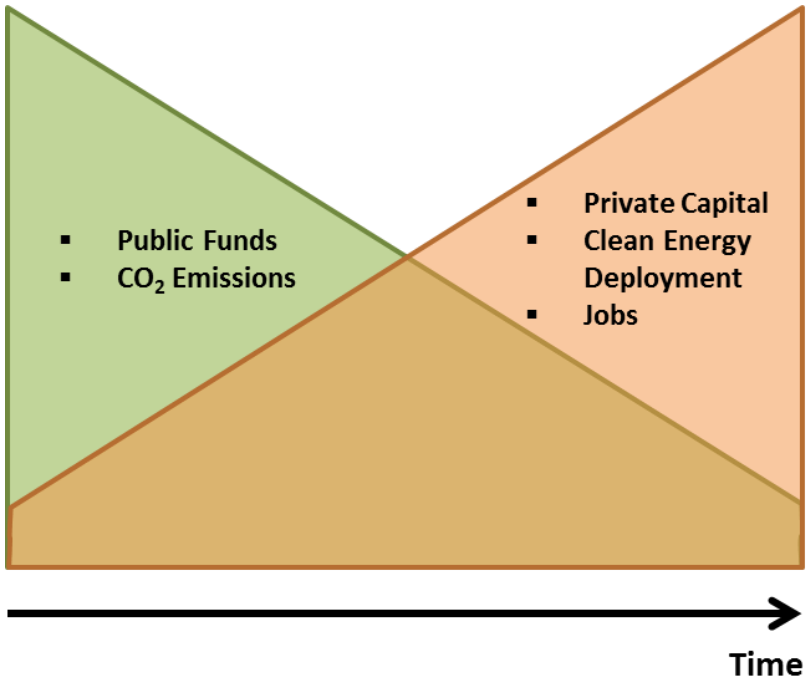
[33] Green Bank will be working with the Connecticut Department of Energy and Environmental Protection and the U.S. Environmental Protection Agency to develop and approve a methodology for estimating public health benefits from the reduction of criteria pollutants as a result of the production of clean energy and reduction of energy consumption through the use of the Co-Benefits Risk Assessment (COBRA) model – https://www.epa.gov/statelocalclimate/co-benefits-risk-assessment-cobra-screening-model

[34] Green Bank is working with the Connecticut Department of Economic and Community Development and Navigant Consulting to update and approve a methodology for estimating economic development benefits from the investment in clean energy projects.

[35] Green Bank is working with the Connecticut Department of Energy and Environmental Protection to develop and approve a methodology for estimating greenhouse gas emission reduction benefits from the production of clean energy and reduction of energy consumption through the use of the AVoided Emissions and geneRation Tool (AVERT) - https://www.epa.gov/statelocalclimate/avoided-emissions-and-generation-tool-avert

4. MARKET TRANSFORMATION – PROGRAM LOGIC MODEL

Figure 2. Societal Benefits – Environmental Protection and Economic Development – from Greater Private Capital Investment



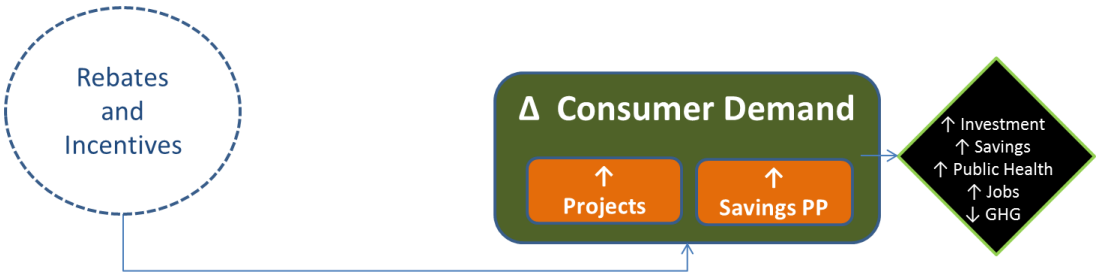
As the Green Bank continues to attract more private investment in Connecticut's clean energy economy through the issuance of green bonds, the deployment of clean energy will be accelerated. The more clean energy that is being deployed, the greater the societal benefits will be.

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION – COST EFFECTIVENESS OF SUBSIDIES CASE OF THE RESIDENTIAL SOLAR INVESTMENT PROGRAM

The Connecticut Green Bank contracted with Cadmus Group, Inc., to conduct a cost-effectiveness analysis of its Residential Solar Investment Program (RSIP).[36] 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 (see Figure 3).

Figure 3. Program Logic Model for the Residential Solar Investment Program



RSIP Growth and Cost Trends

To provide perspective on program growth, cost and incentive trends, Table 34 illustrates the increase in RSIP project volume while installed costs and incentives have decreased from fiscal years 2012 through 2016, grouped by non-Solarize projects, Solarize[37] projects and RSIP in total.

Table 34. RSIP Volume, Capacity and Cost Data by Fiscal Year[38]

	Non-Solarize				Solarize				RSIP Total			
Fiscal Year	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)
2012	290	1,956	$5.11	$1.75					290	1,956	$5.11	$1.75
2013	788	5,481	$4.65	$1.54	327	2,444	$3.84	$1.45	1,115	7,924	$4.32	$1.51
2014	1,677	12,116	$4.27	$1.18	715	5,070	$3.80	$1.15	2,392	17,186	$4.07	$1.17
2015	5,631	42,275	$3.91	$0.67	940	7,864	$3.88	$0.74	6,571	50,139	$3.90	$0.68
2016	7,598	59,088	$3.42	$0.35	103	916	$3.84	$0.43	7,701	60,004	$3.43	$0.35
Total	15,984	120,917	$3.76	$0.62	2,085	16,294	$3.85	$0.96	18,069	137,211	$3.78	$0.66

Tables 35 and 36 provide program growth and cost trend data by installer for fiscal years 2016 and for 2012-2016 combined, grouped by non-Solarize and Solarize projects, and RSIP in total. Data points provided include # Projects, Installed Capacity (kW), Installed Cost ($/W), and Incentive ($/W). Installed costs vary widely and depend on many factors including equipment/panel quality

[36] Per Section 106 of Public Act 11-80 (and revised through Public Act 15-194), the Connecticut Green Bank administers the Residential Solar Investment Program.

[37] Solarize is a community-based marketing program (visit www.solarizect.com for more information)

[38] Based on RSIP Market Watch data as of June 30, 2016, end of FY 2015. Cost data includes all reported installed costs without including those projects where financing costs for some third party ownership installers are included as part of the total system cost. Installed capacity data is provided in kW-STC.

and efficiency, type of installation (e.g., roof-mount, ground-mount, pole-mount), project location, site and installation characteristics and other factors.

Table 35. RSIP FY 2016 Volume, Capacity and Cost Data by Installer[39]

	Non-Solarize				Solarize				RSIP Total			
Installer	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)
31Solar	1	11	$3.44	$0.49	-	-	$0.00	$0.00	1	11	$3.44	$0.49
Aegis Electrical Systems, LLC	90	803	$3.92	$0.43	-	-	$0.00	$0.00	90	803	$3.92	$0.43
All Electric Const. & Comm. LLC	1	15	$3.51	$0.45	-	-	$0.00	$0.00	1	15	$3.51	$0.45
AllGreenIT, Inc.	19	182	$3.46	$0.46	2	14	$3.54	$0.49	21	197	$3.47	$0.46
Apex Solar Energy	2	24	$2.76	$0.45	-	-	$0.00	$0.00	2	24	$2.76	$0.45
BeFree Green Energy, LLC	51	471	$3.78	$0.43	15	130	$3.84	$0.48	66	601	$3.79	$0.44
Bonner Electric	2	18	$3.85	$0.42	-	-	$0.00	$0.00	2	18	$3.85	$0.42
Boston Solar	13	120	$3.51	$0.43	-	-	$0.00	$0.00	13	120	$3.51	$0.43
Consulting Engineering Services, Inc.	1	13	$3.55	$0.46	1	9	$4.12	$0.12	2	22	$3.78	$0.32
CT Solar Power, LLC	2	17	$3.71	$0.48	-	-	$0.00	$0.00	2	17	$3.71	$0.48
C-TEC Solar LLC	164	1,468	$3.76	$0.43	5	44	$3.78	$0.45	169	1,512	$3.76	$0.43
Direct Energy Solar	175	1,552	$3.56	$0.39	-	-	$0.00	$0.00	175	1,552	$3.56	$0.39
Dow Solar	3	16	$7.84	$0.34	-	-	$0.00	$0.00	3	16	$7.84	$0.34
Duck Feet Solar	-	-	$0.00	$0.00	1	11	$3.71	$0.47	1	11	$3.71	$0.47
Earthlight Technologies	111	997	$4.03	$0.46	1	13	$4.25	$0.58	112	1,010	$4.03	$0.46
Eastern CT Solar	5	45	$3.37	$0.46	-	-	$0.00	$0.00	5	45	$3.37	$0.46
EcoSolar Installations, LLC	2	8	$4.07	$0.47	-	-	$0.00	$0.00	2	8	$4.07	$0.47
Emmett O'Brien Technical High School	1	5	$2.14	$0.47	-	-	$0.00	$0.00	1	5	$2.14	$0.47
Encon, Inc.	15	144	$4.68	$0.43	23	156	$3.91	$0.42	38	300	$4.28	$0.43
Evergreen Energy, LLC	3	25	$3.47	$0.48	-	-	$0.00	$0.00	3	25	$3.47	$0.48
Florenton River LLC	1	13	$4.25	$0.47	-	-	$0.00	$0.00	1	13	$4.25	$0.47
Green Earth Energy	14	132	$3.75	$0.38	-	-	$0.00	$0.00	14	132	$3.75	$0.38
JD Solar Solutions, LLC	36	291	$3.46	$0.47	-	-	$0.00	$0.00	36	291	$3.46	$0.47
Litchfield Hills Solar, LLC	11	114	$4.26	$0.45	-	-	$0.00	$0.00	11	114	$4.26	$0.45
Modern Solar Company	1	14	$5.33	$0.46	-	-	$0.00	$0.00	1	14	$5.33	$0.46
New England Clean Energy	1	7	$5.87	$0.50	-	-	$0.00	$0.00	1	7	$5.87	$0.50
Northeast Energy Design Solutions	1	9	$3.25	$0.49	1	8	$4.37	$0.49	2	17	$3.77	$0.49
Northeast Smart Energy LLC	-	-	$0.00	$0.00	1	13	$3.75	$0.47	1	13	$3.75	$0.47
One Roof Energy / Direct Energy Solar	41	276	$3.77	$0.29	-	-	$0.00	$0.00	41	276	$3.77	$0.29
One Source Solar, LLC	2	15	$4.00	$0.48	-	-	$0.00	$0.00	2	15	$4.00	$0.48
OneRoof Energy, Inc.	97	734	$4.36	$0.30	-	-	$0.00	$0.00	97	734	$4.36	$0.30
PosiGen	334	2,205	$4.48	$0.42	-	-	$0.00	$0.00	334	2,205	$4.48	$0.42
PurePoint Energy, LLC	30	247	$4.74	$0.47	1	21	$5.99	$0.44	31	268	$4.84	$0.47
R. Pelton Builders	8	94	$3.41	$0.45	-	-	$0.00	$0.00	8	94	$3.41	$0.45
Real Goods Solar, Inc	20	159	$4.14	$0.36	-	-	$0.00	$0.00	20	159	$4.14	$0.36
Roof Diagnostics Solar and Electric of CT	457	3,019	$3.20	$0.37	-	-	$0.00	$0.00	457	3,019	$3.20	$0.37
Ross Solar Group	124	1,300	$3.92	$0.44	30	306	$3.67	$0.42	154	1,606	$3.87	$0.44
Shippee Solar and Construction LLC	5	45	$3.98	$0.44	-	-	$0.00	$0.00	5	45	$3.98	$0.44

[39] Based on RSIP Market Watch data as of June 30, 2016. Cost data includes all reported installed costs without including those projects where financing costs for some third party ownership installers are included as part of the total system cost. Installed capacity data is provided in kW-STC.

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION – COST EFFECTIVENESS OF SUBSIDIES CASE OF THE RESIDENTIAL SOLAR INVESTMENT PROGRAM

	Non-Solarize				Solarize				RSIP Total			
Installer	**# Projects**	**Installed Capacity (kW)**	**Installed Cost ($/W)**	**Incentive ($/W)**	**# Projects**	**Installed Capacity (kW)**	**Installed Cost ($/W)**	**Incentive ($/W)**	**# Projects**	**Installed Capacity (kW)**	**Installed Cost ($/W)**	**Incentive ($/W)**
Sicuranza Electric	1	10	$4.53	$0.38	-	-	$0.00	$0.00	1	10	$4.53	$0.38
Skyline Solar	8	56	$4.09	$0.40	-	-	$0.00	$0.00	8	56	$4.09	$0.40
SolarCity	3,023	22,462	$5.21	$0.33	-	-	$0.00	$0.00	3,023	22,462	$5.21	$0.33
SON Energy Systems, LLC	1	9	$3.00	$0.49	-	-	$0.00	$0.00	1	9	$3.00	$0.49
Sound Solar Systems, LLC	1	6	$5.52	$0.49	-	-	$0.00	$0.00	1	6	$5.52	$0.49
Summer Hill Solar	8	74	$2.92	$0.44	-	-	$0.00	$0.00	8	74	$2.92	$0.44
SunEdison	96	603	$2.74	$0.33	-	-	$0.00	$0.00	96	603	$2.74	$0.33
Sungevity, Inc.	365	2,871	$3.67	$0.36	-	-	$0.00	$0.00	365	2,871	$3.67	$0.36
Sunlight Solar Energy, Inc.	43	386	$3.61	$0.43	11	83	$3.77	$0.43	54	469	$3.64	$0.43
Sunrun Inc	777	6,039	$2.31	$0.30	-	-	$0.00	$0.00	777	6,039	$2.31	$0.30
Sun-Wind Solutions, LLC	2	16	$3.59	$0.48	-	-	$0.00	$0.00	2	16	$3.59	$0.48
The Roofing Store, LLC	1	7	$5.50	$0.47	-	-	$0.00	$0.00	1	7	$5.50	$0.47
Trinity Solar	1,410	11,817	$3.44	$0.34	10	97	$3.83	$0.36	1,420	11,914	$3.45	$0.34
Tuscany Design Build, Inc.	1	20	$3.84	$0.44	1	11	$4.22	$0.31	2	30	$3.98	$0.39
Vivint Solar Developer, LLC	13	85	$4.97	$0.29	-	-	$0.00	$0.00	13	85	$4.97	$0.29
Waldo Renewable Electric, LLC	3	17	$3.98	$0.52	-	-	$0.00	$0.00	3	17	$3.98	$0.52
White Oak Development, LLC	1	5	$4.30	$0.46	-	-	$0.00	$0.00	1	5	$4.30	$0.46
Total	7,598	59,088	$4.10	$0.35	103	916	$3.84	$0.43	7,701	60,004	$4.10	$0.35

Table 36. RSIP FY 2012-2016 Volume, Capacity and Cost Data by Installer[40]

	Non-Solarize				Solarize				RSIP Total			
Installer	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)
31Solar	19	154	$3.88	$1.02	-	-	$0.00	$0.00	19	154	$3.88	$1.02
A Better Way Solar	1	10	$3.37	$0.59	-	-	$0.00	$0.00	1	10	$3.37	$0.59
Aegis Electrical Systems, LLC	381	3,066	$4.18	$0.77	-	-	$0.00	$0.00	381	3,066	$4.18	$0.77
All Electric Const. & Comm. LLC	3	33	$3.61	$0.65	-	-	$0.00	$0.00	3	33	$3.61	$0.65
AllGreenIT, Inc.	75	629	$3.68	$0.83	116	939	$3.53	$0.91	191	1,568	$3.59	$0.88
Alteris, Inc.	1	5	$3.00	$1.05	-	-	$0.00	$0.00	1	5	$3.00	$1.05
American Solar Partners	3	16	$3.55	$1.73	-	-	$0.00	$0.00	3	16	$3.55	$1.73
Apex Solar Energy	5	39	$3.04	$0.61	-	-	$0.00	$0.00	5	39	$3.04	$0.61
Astrum Solar	27	238	$4.32	$1.84	2	21	$4.21	$1.85	29	258	$4.31	$1.84
Atlantic Solar	1	6	$4.41	$1.11	-	-	$0.00	$0.00	1	6	$4.41	$1.11
BeFree Green Energy, LLC	129	1,156	$4.02	$0.75	363	3,181	$3.74	$0.98	492	4,337	$3.82	$0.92
Bella Casa Verde	2	15	$4.35	$1.13	-	-	$0.00	$0.00	2	15	$4.35	$1.13
Bonner Electric	14	123	$3.95	$0.88	-	-	$0.00	$0.00	14	123	$3.95	$0.88
Boston Solar	25	225	$3.59	$0.45	-	-	$0.00	$0.00	25	225	$3.59	$0.45
Bright Side Solar, LLC	1	4	$5.07	$1.93	-	-	$0.00	$0.00	1	4	$5.07	$1.93
Burrington Solar Edge	1	6	$3.88	$0.72	-	-	$0.00	$0.00	1	6	$3.88	$0.72
CatchinRays 2 LLC	30	235	$4.04	$0.76	-	-	$0.00	$0.00	30	235	$4.04	$0.76
Centurion Solar	16	110	$4.05	$0.83	31	193	$3.98	$1.18	47	303	$4.01	$1.05
Chabot Electric	2	16	$3.14	$0.90	-	-	$0.00	$0.00	2	16	$3.14	$0.90
Connecticut Solar Electric, LLC	2	14	$3.71	$1.24	-	-	$0.00	$0.00	2	14	$3.71	$1.24
Consulting Engineering Services, Inc.	4	33	$3.43	$0.72	1	9	$4.12	$0.12	5	42	$3.58	$0.59
CS Energy Systems, Inc.	2	26	$3.75	$0.73	-	-	$0.00	$0.00	2	26	$3.75	$0.73
CT Electrical, LLC	14	94	$5.39	$1.24	-	-	$0.00	$0.00	14	94	$5.39	$1.24
CT Solar Power, LLC	19	165	$4.18	$0.90	-	-	$0.00	$0.00	19	165	$4.18	$0.90
C-TEC Solar LLC	371	3,032	$3.99	$0.70	421	2,952	$3.99	$0.90	792	5,984	$3.99	$0.80
DCS	34	185	$4.09	$1.54	1	7	$3.50	$0.61	35	192	$4.07	$1.50
Deak Electric, Inc.	2	16	$5.20	$1.02	-	-	$0.00	$0.00	2	16	$5.20	$1.02
Direct Energy Solar	434	3,733	$3.73	$0.61	199	1,608	$3.54	$1.08	633	5,341	$3.68	$0.75
Dow Solar	6	29	$7.99	$0.62	-	-	$0.00	$0.00	6	29	$7.99	$0.62
Duck Feet Solar	-	-	$0.00	$0.00	1	11	$3.71	$0.47	1	11	$3.71	$0.47
Earthlight Technologies	178	1,594	$4.08	$0.56	55	450	$4.00	$0.85	233	2,044	$4.06	$0.63
Eastern CT Solar	7	66	$3.39	$0.52	-	-	$0.00	$0.00	7	66	$3.39	$0.52
EcoSolar Installations, LLC	15	84	$4.51	$1.18	-	-	$0.00	$0.00	15	84	$4.51	$1.18
Elektron Solar, LLC	8	64	$4.75	$1.39	-	-	$0.00	$0.00	8	64	$4.75	$1.39

[40] Based on RSIP Market Watch data as of June 30, 2016. Cost data includes all reported installed costs without including those projects where financing costs for some third party ownership installers are included as part of the total system cost. Installed capacity data is provided in kW-STC.

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION – COST EFFECTIVENESS OF SUBSIDIES CASE OF THE RESIDENTIAL SOLAR INVESTMENT PROGRAM

	Non-Solarize				Solarize				RSIP Total			
Installer	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)
Emmett O'Brien Technical High School	1	5	$2.14	$0.47	-	-	$0.00	$0.00	1	5	$2.14	$0.47
Encon, Inc.	95	743	$5.41	$0.98	280	1,945	$3.95	$0.96	375	2,688	$4.35	$0.96
Endless Mountains Solar Services	10	74	$4.86	$1.38	-	-	$0.00	$0.00	10	74	$4.86	$1.38
Evergreen Energy, LLC	17	137	$3.89	$0.95	1	9	$3.48	$0.61	18	146	$3.87	$0.93
Executive Electric	1	7	$3.91	$1.37	-	-	$0.00	$0.00	1	7	$3.91	$1.37
Florenton River LLC	1	13	$4.25	$0.47	-	-	$0.00	$0.00	1	13	$4.25	$0.47
Giuffrida Electric Company, Inc.	4	26	$4.59	$1.43	-	-	$0.00	$0.00	4	26	$4.59	$1.43
GM Industries, Inc.	26	256	$8.00	$1.37	-	-	$0.00	$0.00	26	256	$8.00	$1.37
Green Earth Energy	23	199	$3.93	$0.58	-	-	$0.00	$0.00	23	199	$3.93	$0.58
Harness the Sun	16	97	$4.15	$1.37	22	193	$3.71	$1.08	38	289	$3.86	$1.18
Infinite Energy Systems	1	11	$5.38	$1.52	-	-	$0.00	$0.00	1	11	$5.38	$1.52
Intina Energy	3	22	$3.86	$1.13	-	-	$0.00	$0.00	3	22	$3.86	$1.13
JD Solar Solutions, LLC	147	1,174	$3.71	$0.85	-	-	$0.00	$0.00	147	1,174	$3.71	$0.85
Leach Services	2	12	$3.70	$1.53	-	-	$0.00	$0.00	2	12	$3.70	$1.53
Lenz Electric	1	4	$5.71	$1.96	-	-	$0.00	$0.00	1	4	$5.71	$1.96
Litchfield Hills Solar, LLC	71	557	$4.54	$0.96	-	-	$0.00	$0.00	71	557	$4.54	$0.96
Macri Roofing, Inc.	2	13	$5.79	$1.58	-	-	$0.00	$0.00	2	13	$5.79	$1.58
Made in USA Solar LLC	11	79	$4.69	$1.26	-	-	$0.00	$0.00	11	79	$4.69	$1.26
Mercury Solar Systems, Inc.	2	16	$4.93	$1.63	-	-	$0.00	$0.00	2	16	$4.93	$1.63
Mister Sparky	6	20	$6.83	$1.90	-	-	$0.00	$0.00	6	20	$6.83	$1.90
Modern Solar Company	5	41	$5.08	$1.15	-	-	$0.00	$0.00	5	41	$5.08	$1.15
Moore Energy	4	27	$4.98	$1.59	-	-	$0.00	$0.00	4	27	$4.98	$1.59
Mystic Solar (Natural Energy Alternatives, LLC)	4	36	$5.09	$1.61	-	-	$0.00	$0.00	4	36	$5.09	$1.61
New England Clean Energy	1	7	$5.87	$0.50	-	-	$0.00	$0.00	1	7	$5.87	$0.50
Next Step Living	129	795	$6.29	$0.88	-	-	$0.00	$0.00	129	795	$6.29	$0.88
Northeast Energy Design Solutions	1	9	$3.25	$0.49	1	8	$4.37	$0.49	2	17	$3.77	$0.49
Northeast Smart Energy LLC	12	92	$3.24	$1.18	1	13	$3.75	$0.47	13	106	$3.30	$1.09
One Roof Energy / Direct Energy Solar	41	276	$3.77	$0.29	-	-	$0.00	$0.00	41	276	$3.77	$0.29
One Source Solar, LLC	2	15	$4.00	$0.48	-	-	$0.00	$0.00	2	15	$4.00	$0.48
OneRoof Energy, Inc.	97	734	$4.36	$0.30	-	-	$0.00	$0.00	97	734	$4.36	$0.30
Paradise Energy Solutions	1	10	$4.08	$0.60	-	-	$0.00	$0.00	1	10	$4.08	$0.60
PosiGen	383	2,517	$4.49	$0.47	-	-	$0.00	$0.00	383	2,517	$4.49	$0.47
PurePoint Energy, LLC	90	719	$4.73	$0.77	19	162	$4.49	$0.55	109	881	$4.69	$0.73
R. Pelton Builders	60	457	$4.07	$1.00	-	-	$0.00	$0.00	60	457	$4.07	$1.00
Real Goods Solar, Inc	190	1,449	$4.14	$0.99	146	1,058	$3.79	$1.24	336	2,507	$3.99	$1.10
Renewable Resources, Inc.	21	130	$4.16	$1.47	11	66	$3.87	$1.29	32	195	$4.06	$1.40
Roof Diagnostics Solar and Electric of CT	1,027	7,030	$3.40	$0.55	-	-	$0.00	$0.00	1,027	7,030	$3.40	$0.55
Ross Solar Group	392	3,721	$4.15	$0.82	290	2,524	$3.98	$0.87	682	6,245	$4.08	$0.84

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION – COST EFFECTIVENESS OF SUBSIDIES CASE OF THE RESIDENTIAL SOLAR INVESTMENT PROGRAM

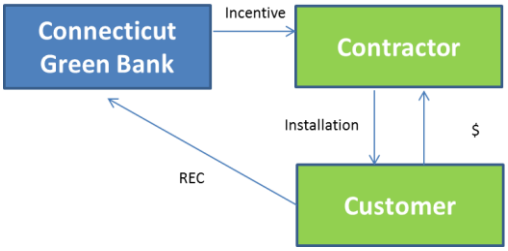
	Non-Solarize				Solarize				RSIP Total			
Installer	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)	# Projects	Installed Capacity (kW)	Installed Cost ($/W)	Incentive ($/W)
Shippee Solar and Construction LLC	105	815	$3.72	$1.05	14	113	$3.91	$0.60	119	928	$3.75	$0.99
Sicuranza Electric	2	20	$5.45	$0.95	-	-	$0.00	$0.00	2	20	$5.45	$0.95
Sky View Solar	1	5	$6.03	$1.37	-	-	$0.00	$0.00	1	5	$6.03	$1.37
Skyline Solar	38	299	$4.21	$0.82	-	-	$0.00	$0.00	38	299	$4.21	$0.82
SolarCity	6,820	49,515	$5.16	$0.61	4	21	$5.15	$0.59	6,824	49,536	$5.16	$0.61
SON Energy Systems, LLC	2	16	$3.55	$0.87	-	-	$0.00	$0.00	2	16	$3.55	$0.87
Sound Solar Systems, LLC	6	52	$4.80	$1.20	-	-	$0.00	$0.00	6	52	$4.80	$1.20
Summer Hill Solar	24	177	$3.19	$0.89	-	-	$0.00	$0.00	24	177	$3.19	$0.89
Sun Harvest Renewable Resources, LLC	10	76	$6.07	$1.62	-	-	$0.00	$0.00	10	76	$6.07	$1.62
Sundoor Solar	2	14	$4.00	$0.86	-	-	$0.00	$0.00	2	14	$4.00	$0.86
SunEdison	96	603	$2.74	$0.33	-	-	$0.00	$0.00	96	603	$2.74	$0.33
Sungevity, Inc.	811	6,156	$3.96	$0.65	-	-	$0.00	$0.00	811	6,156	$3.96	$0.65
Sunlight Solar Energy, Inc.	197	1,517	$4.15	$0.91	94	700	$3.89	$1.00	291	2,217	$4.07	$0.94
Sunrun Inc	777	6,039	$2.31	$0.30	-	-	$0.00	$0.00	777	6,039	$2.31	$0.30
Sun-Wind Solutions, LLC	17	138	$3.88	$0.96	-	-	$0.00	$0.00	17	138	$3.88	$0.96
Super Green Solutions	8	70	$3.58	$0.63	-	-	$0.00	$0.00	8	70	$3.58	$0.63
The Roofing Store, LLC	1	7	$5.50	$0.47	-	-	$0.00	$0.00	1	7	$5.50	$0.47
Today Electronics USA	1	9	$3.82	$0.71	-	-	$0.00	$0.00	1	9	$3.82	$0.71
Trinity Solar	2,213	17,766	$3.50	$0.47	10	97	$3.83	$0.36	2,223	17,863	$3.50	$0.47
Tuscany Design Build, Inc.	8	82	$5.38	$0.93	1	11	$4.22	$0.31	9	93	$5.24	$0.86
US Energy Concierge	13	72	$4.38	$0.89	-	-	$0.00	$0.00	13	72	$4.38	$0.89
Verengo Solar	35	272	$3.61	$1.00	-	-	$0.00	$0.00	35	272	$3.61	$1.00
Vivint Solar Developer, LLC	13	85	$4.97	$0.29	-	-	$0.00	$0.00	13	85	$4.97	$0.29
Waldo Renewable Electric, LLC	42	302	$4.82	$1.13	1	6	$3.82	$0.49	43	308	$4.81	$1.11
White Oak Development, LLC	10	61	$5.84	$1.46	-	-	$0.00	$0.00	10	61	$5.84	$1.46
Total	15,984	120,917	$4.33	$0.62	2,085	16,294	$3.85	$0.96	18,069	137,211	$4.28	$0.66

4. MARKET TRANSFORMATION – COST EFFECTIVENESS OF SUBSIDIES CASE OF THE RESIDENTIAL SOLAR INVESTMENT PROGRAM

Rebates and Incentives

The RSIP is a subsidy program that provides incentives to offset the cost for homeowners to install solar photovoltaic (PV) systems. Incentives are provided either upfront (i.e., through an expected performance based buy-down or EPBB) for homeowners that want to own a system or over time based on system production (i.e., through a performance based incentive or PBI) for homeowners who want to lease a system from a third-party owner. With either incentive type, the Renewable Energy Credits (RECs) are owned by the Connecticut Green Bank (see Figure 4).

Figure 4. Legal Structure and Flows of Capital for the RSIP[41]



The subsidy under the RSIP has decreased over time (see Table 37) with the intention of increasing the number of projects and increasing the amount of clean energy produced (see Table 38) while at the same time supporting the goal of reducing the market reliance on rebates and incentives and moving it towards innovative low-cost financing (see Market Transformation: Financial Warehouse and Credit Enhancement Structures for CT Solar Loan and CT Solar Lease).

Table 37. 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	$0.513		$0.400	$0.054	$0.054	$0.110	$0.055
Step 9	2/1/2016	$0.487		$0.400	$0.046	$0.046	$0.110	$0.055

[41] 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.

4. MARKET TRANSFORMATION – COST EFFECTIVENESS OF SUBSIDIES CASE OF THE RESIDENTIAL SOLAR INVESTMENT PROGRAM

Table 38. Residential Solar PV Systems Approved, In Progress or Completed through the RSIP Subsidy by Step

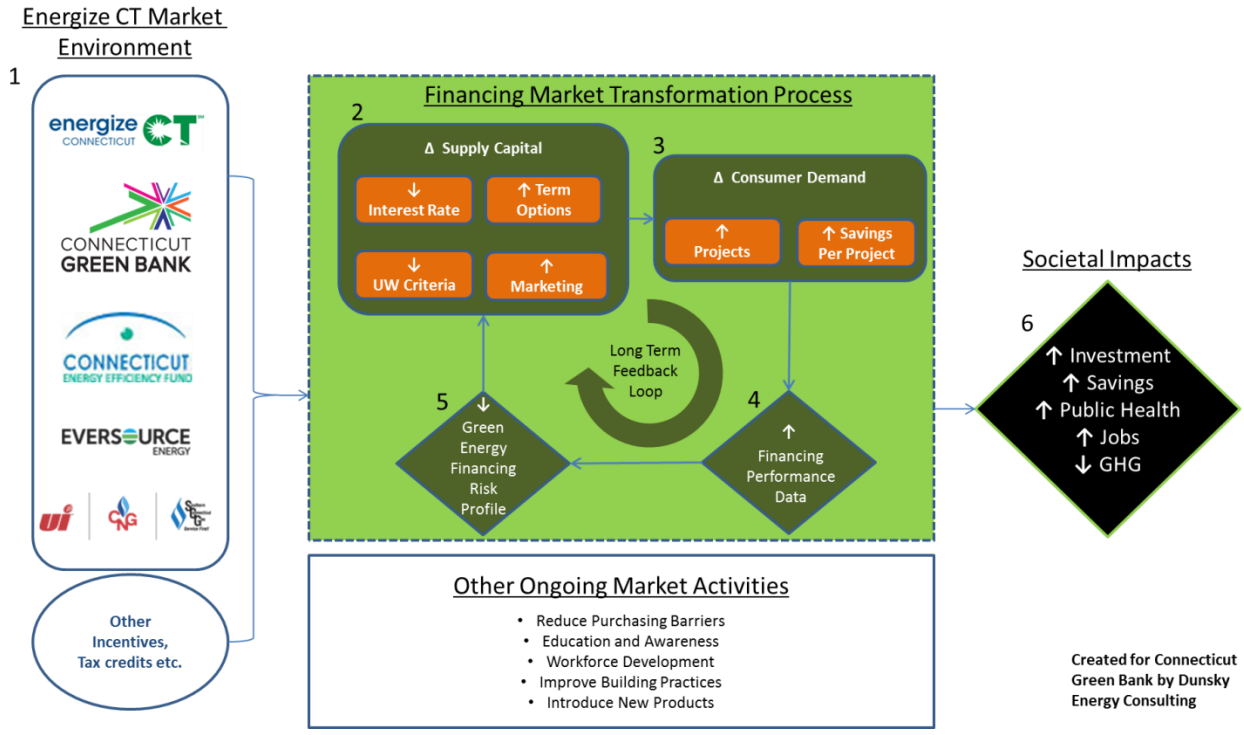
RSIP Subsidy by Step	**Approved** (kW)	**Completed** (kW)	**Total** (kW)	**Average Incentive** ($/W-STC)
Step 1	0.0	1,380.7	1,380.7	$1.79
Step 2	0.0	5,991.5	5,991.5	$1.63
Step 3	88.2	13,097.5	13,185.7	$1.23
Step 4	644.2	19,002.9	19,647.1	$1.03
Step 5	930.2	12,748.7	13,678.9	$0.75
Step 6	1,767.6	11,001.1	12,768.6	$0.51
Step 7	2,614.8	17,122.3	19,737.1	$0.40
Step 8	626.2	2,476.7	3,102.9	$0.38
Step 8.1	2,850.0	6,658.8	9,508.8	$0.39
Step 8.2	8,671.1	8,775.8	17,446.9	$0.33
Step 9	18,662.2	2,100.4	20,762.5	$0.32
Total	36,854.5	100,356.3	137,210.8	$0.66

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE CT SOLAR LOAN

As the Connecticut Green Bank's residential solar PV loan program, we are applying the Program Logic Model that focuses on financing and credit enhancements (see Figure 5).

Figure 5. Program Logic Model for the CT Solar Loan



Financing Program

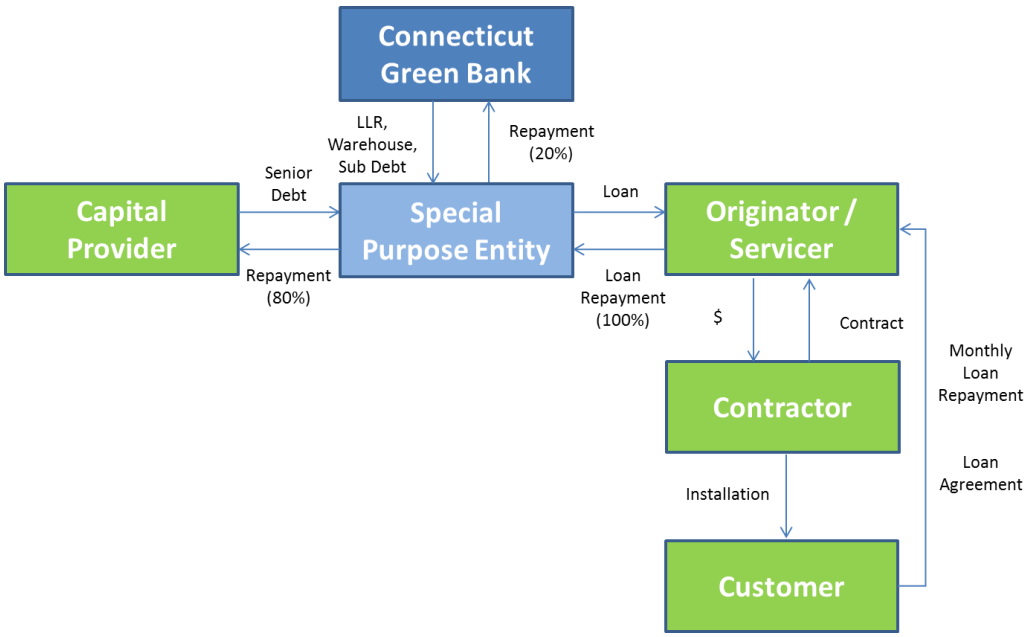
The CT Solar Loan was a financing product developed in partnership with Sungage Financial[42] that uses credit enhancements (i.e., $300,000 loan loss reserve)[43] in combination with a $5 million warehouse of funds and $1 million of subordinated debt from the Connecticut Green Bank. Through this product, the Connecticut Green Bank lowers 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 is 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,[44] servicing,[45] and financing features in combination with the support of the Connecticut Green Bank (see Figure 6).

[42] 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
[43] From repurposed American Recovery and Reinvestment Act funds
[44] Sungage Financial in partnership with local contractors
[45] Concord Servicing Corporation

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE CT SOLAR LOAN

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.

Figure 6. Legal Structure and Flows of Capital for the CT Solar Loan



The CT Solar Loan provided financing for 279 projects totaling nearly $6.0 million of investment and 2,193.1 kW of residential solar PV deployment (see Table 39). To date there are no defaults and as of June 30, 2016 there are 5 delinquencies or 1.8% of loans.

Table 39. CT Solar Loan Metrics

Year	# of Projects	Investment	Installed Capacity (kW)
2013	3	$58,974	17.7
2014	140	$2,774,655	1,107.9
2015	136	$3,120,143	1,068.2
Total[46]	279	$5,953,772	2,193.1

[46] Includes approved, closed and completed projects.

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 limiting 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.[47] And then it graduated to a partnership between Sungage Financial and Digital Federal Credit Union – with no resources from the Connecticut Green Bank.[48] 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.

Marketing Programs

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. 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 40).

[47] http://www.businesswire.com/news/home/20140206005031/en/Sungage-Financial-CEFIA-Mosaic-Announce-5-Million#.VgRTgVIXL4Y

[48] http://www.spark.ctgreenbank.com/ct-solar-loan-partner-graduates-from-connecticut-green-bank/

Table 40. Number of Projects, Investment, and Installed Capacity through Solarize Connecticut for the CT Solar Loan Financing Product

	# of Projects	Investment	Installed Capacity (kW)
Solarize	168	$3,273,609	1,285.7
Non-Solarize	111	$2,680,163	907.4
Total	279	$5,953,772	2,193.1
% Solarize	60	55	59

The 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.

Data Accessibility

There were 462 applications into the CT Solar Loan – 279 closed, 96 withdrew, and 87 declined in underwriting. The household customers that accessed the CT Solar Loan since its launch in 2013 had varying credit scores – see Table 41.

Table 41. Credit Scores of Household Customers Using the CT Solar Loan

	Credit Score Ranges					
	Below 640	640-679	680-699	700-719	720+	Total
CT Solar Loan			11	15	253	279
			3.9%	5.4%	90.7	

Of the CT Solar Loans approved and closed with household customers, the following table is a breakdown of the contractors offering the financing product – see Table 42.

Table 42. Residential Solar PV Contractors and the CT Solar Loan

Contractor	# of Loans	$ of Loans	% of Loans
31Solar	1	$20,298	0.34%
Aegis Electrical Systems, LLC	24	$539,766	9.07%
AllGreenIT, Inc.	7	$112,604	1.89%
BeFree Green Energy, LLC	2	$46,606	0.78%
Catchin Rays	7	$175,248	2.94%
Centurion Solar	4	$107,025	1.80%
C-TEC Solar LLC	45	$926,307	15.56%
DCS	1	$16,440	0.28%
Direct Energy	28	$572,721	9.62%

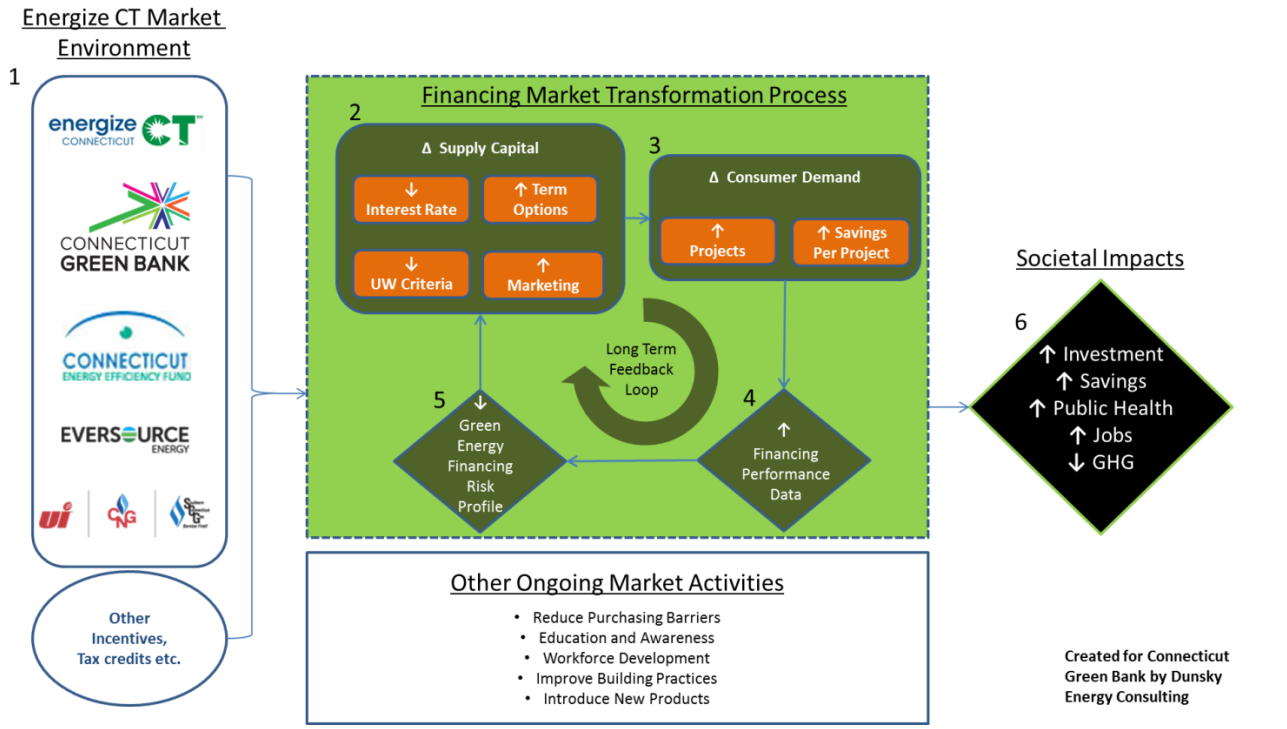
Contractor	# of Loans	$ of Loans	% of Loans
Earthlight Technologies	8	$191,189	3.21%
EcoSmart Home Services	2	$55,366	0.93%
Encon, Inc.	13	$217,599	3.65%
Northeast Smart Energy LLC	1	$19,960	0.34%
PurePoint Energy, LLC	6	$174,016	2.92%
RGS Energy	18	$360,238	6.05%
Ross Solar Group	72	$1,571,531	26.40%
Shippee Solar and Construction LLC	3	$61,543	1.03%
Sunlight Solar Energy, Inc.	36	$764,760	12.84%
US Energy Concierge	1	$20,556	0.35%
Total	279	$5,953,772	100.00%

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE CT SOLAR LEASE

As the Connecticut Green Bank's residential and commercial solar PV lease program, we are applying the Program Logic Model that focuses on financing and credit enhancements (see Figure 7).

Figure 7. Program Logic Model for the CT Solar Lease

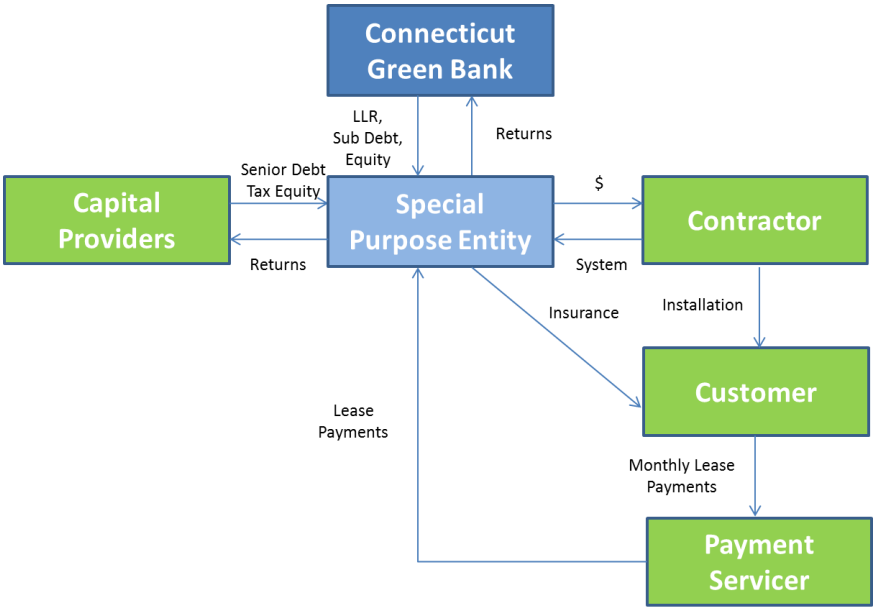


Financing Programs

The CT Solar Lease was a financing product developed in partnership with a tax equity investor (i.e., US Bank) and a syndicate of local lenders (i.e. First Niagara Bank and Webster Bank) that uses a credit enhancement (i.e., $3,500,000 loan loss reserve),[49] in combination with $2.3 million in subordinated debt and sponsor equity from the Connecticut Green Bank as the "member manager" to provide up to $75 million in lease financing for residential and commercial solar PV projects. Through the product, the Connecticut Green Bank lowers 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, capital provided to consumers through the CT Solar Lease is 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 includes origination by contractors, servicing of lease payments,[50] insurance and "one call" system performance and insurance resolution,[51] and financing features in combination with the support of the Connecticut Green Bank (see Figure 8).

[49] From repurposed American Recovery and Reinvestment Act funds
[50] AFC First Financial
[51] Assurant

Figure 8. Legal Structure and Flows of Capital for the CT Solar Lease[52]



Through 6/30/2016, the CT Solar Lease provided financing for 1,192 residential solar PV projects and 36 commercial solar PV projects totaling $67.3 million of investment and 17,095 kW of clean energy deployment (see Tables 43 and 44). To date there are no defaults and as of 6/30/2016 there are 2 delinquencies or 0.2% of the portfolio.

Table 43. CT Solar Lease Metrics – Residential

Year	# of Projects	Investment	Installed Capacity (kW)
2014	60	$2,306,025	461.2
2015	486	$18,370,999	3,966.6
2016	646	$23,187,919	5,145.0
Total[53]	1,192	$43,864,942	9,572.7

Table 44. CT Solar Lease Metrics – Commercial

Year	# of Projects	Investment	Installed Capacity (kW)
2015	22	$9,836,739	3,154.3
2016	14	$13,663,830	4,367.8
Total	36	$23,500,568	7,522.2

[52] 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.
[53] Includes approved, closed and completed projects.

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE CT SOLAR LEASE

The CT Solar Lease yields an appropriate rate of return to the capital providers commensurate with the risks they are taking, provided 27 contractors with an important sales tool, and gave 1,228 customers the ability to lease solar PV and lower their energy costs. The CT Solar Lease is the second "solar PV fund" established using a combination of ratepayer funds and private capital. In developing this fund, the Green Bank sought to innovate both in the types of credits that would be underwritten and broaden 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, the pool of offtakers that for the most part are non-investment grade or "unrated" credits 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 equity investor and lenders from Main Street – not Wall Street – in the fund. The CT Solar Lease is 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 Clease Energy States Alliance "State Leadership in Clean Energy" award in 2016.

CT Solar Lease and QECBs

The Connecticut Housing Finance Authority (CHFA) is partnering with the Green Bank to identify buildings among the State Sponsored Housing Portfolio (SSHP), as well as other affordable multifamily properties, that are well positioned to "go solar". The Green Bank will own, operate, and maintain these systems while providing owners with discounted electricity for 20 years through Power Purchase Agreements. Originally, the Green Bank intended to secure the power purchase agreements and solar leases for these SSHP systems using C-PACE. When a conflict with CHFA's bond indenture for the financing for these SSHPs with C-PACE as the security mechanism was identified, the Green Bank needed to secure an alternative financing arrangement in order to complete the financing for the SSHP systems. Working with CHFA, the Green Bank structured incremental debt funding using proceeds from Qualified Energy Conservation Bonds (QECBs) that CHFA could make available for this purpose. The Green Bank was able to carve out the SSHP repayment streams from the lenders' collateral package under the Connecticut Solar Lease fund, thereby providing repayment assurance that permitted CHFA to issue the QECBs to Bank of America. With the funding structure in place, the Green Bank was able to move forward with local contractors to provide financing for more than a dozen solar PV systems for the SSHP properties, resulting in more than 750 kW of clean renewable energy for these multifamily dwellings.

With respect to the CT Solar Lease and the commercial market, over $23 million is being used to deploy solar PV systems in the commercial sector (see Table 45).

Table 45. CT Solar Lease Commercial Contractors

Contractor	# of Leases	$ of Leases	% of Leases
64 Solar	3	$949,536	4.04%
American Solar	9	$4,383,607	18.65%
C-TEC Solar LLC	3	$7,690,234	32.72%
Davis Hill	1	$652,860	2.78%
Deutsche Eco USA Corp.	2	$3,300,960	14.05%
Encon, Inc.	10	$2,667,653	11.35%
Entersolar	1	$1,047,153	4.46%
Northeast Energy Design Solutions	1	$802,125	3.41%
Northeast Smart Energy LLC	3	$589,453	2.51%
Renewable Resources, Inc.	1	$239,883	1.02%
Ross Solar Group	2	$1,177,105	5.01%
Total	36	$23,500,568	100.00%

Given the growth in the market from consumers and the level of interest in providing financing from local capital providers, the CT Solar Lease is under consideration for expansion as it applies to commercial customers.

Marketing Programs

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. 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 46).

Table 46. Number of Projects, Investment, and Installed Capacity through Solarize Connecticut for the CT Solar Lease Financing Product

	# of Projects	Investment	Installed Capacity (kW)
Solarize	326	$11,766,734	2,553.8
Non-Solarize	866	$32,098,208	7,018.9
Total	1,192	$43,864,942	9,572.7
% Solarize	27	27%	27%

The 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.

Data Accessibility

1,192 household customers accessed the CT Solar Lease since its launch in 2013 – see Table 47.

Table 47. Credit Scores of Household Customers Using the CT Solar Lease

	Credit Score Ranges					
	Below 640	**640-679**	**680-699**	**700-719**	**720+**	**Total**
Solar Lease	1	45	39	78	1,029	1,192
	0.1%	3.8%	3.3%	6.5%	86.3%	

There were 2,833 applications received through the CT Solar Lease – 1,192 were approved, closed, or completed, 1,026 withdrawn, and 615 declined. To date, there have been no defaults and there is presently one delinquency. Of the CT Solar Leases approved and closed with household customers, the following table is a breakdown of the contractors offering the financing product – see Table 48.

Table 48. Residential Solar PV Contractors and the CT Solar Lease

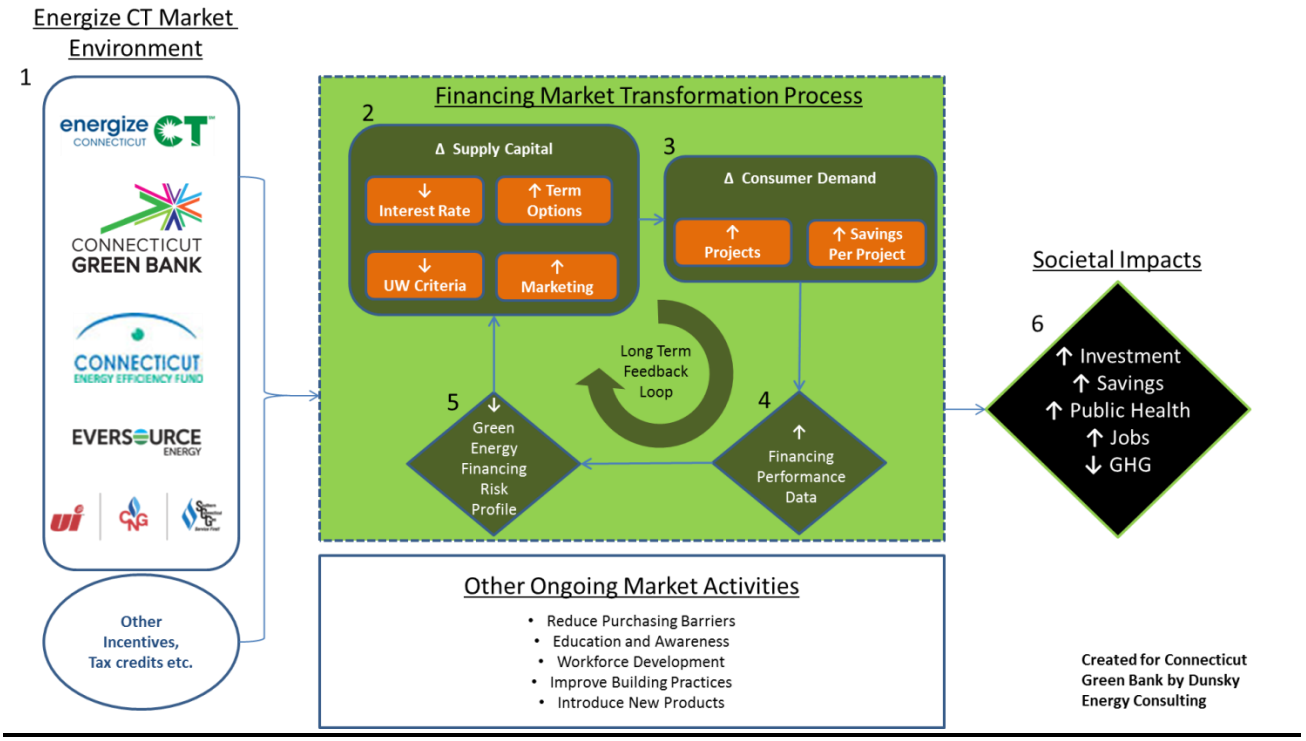
Contractor	# of Leases	$ of Leases	% of Leases
Aegis Electrical Systems, LLC	60	$2,158,610	4.92%
AllGreenIT, Inc.	9	$387,576	0.88%
Astrum Solar	54	$2,137,763	4.87%
BeFree Green Energy, LLC	84	$3,535,688	8.06%
Boston Solar	6	$230,580	0.53%
Connecticut Solar Power, LLC	2	$76,523	0.17%
C-TEC Solar LLC	85	$3,061,148	6.98%
Direct Energy	114	$4,373,528	9.97%
Earthlight Technologies	19	$721,551	1.64%
EcoSmart Home Services	3	$118,035	0.27%
Encon, Inc.	139	$4,641,335	10.58%
Litchfield Hills Solar, LLC	17	$682,940	1.56%
PurePoint Energy, LLC	7	$270,117	0.62%
Real Goods Solar, Inc	7	$229,775	0.52%
Renewable Resources, Inc.	4	$136,773	0.31%
RGS Energy	100	$3,547,073	8.09%
Ross Solar Group	88	$3,516,632	8.02%
Sunlight Solar Energy, Inc.	35	$1,251,128	2.85%
Trinity Solar	356	$12,672,388	28.89%
Tuscany Solar	3	$115,785	0.26%
Total	1,192	$43,864,942	100.00%

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE SMART-E LOAN

For the Energize CT Smart-E residential loan program, underwritten and administered by Connecticut Green Bank, we are applying the Program Logic Model that focuses on financing and credit enhancements (see Figure 9).

Figure 9. Program Logic Model for the Smart-E Loan



Financing Program

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., $2,800,000 loan loss reserve)[54] and interest rate buy-downs 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 or retrofit their homes and reduces the loan performance risks to lenders. The Loan Loss Reserve uses $2.8mm in repurposed ARRA funds to demonstrate the loan economics to lenders, 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 or solar.

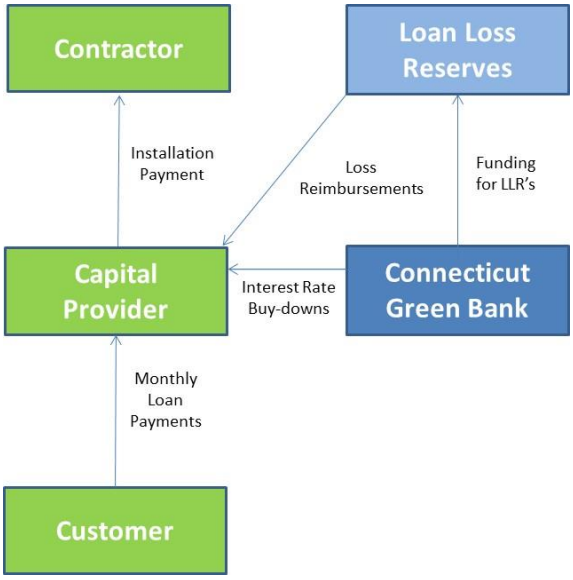
The Smart-E Loan was designed to make it easy and affordable for homeowners to make energy efficiency and renewable energy improvements to their homes with no cash out of pocket and at interest rates low enough and repayment terms long enough to make the improvements "cash flow positive". At the same time, the Green Bank was intentional in opening conversations with local

[54] From repurposed American Recovery and Reinvestment Act funds

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 hundreds 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,[55] servicing,[56] and financing features in combination with the support of the Connecticut Green Bank (see Figure 10).

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



The Smart-E Loan provided financing for 737 projects totaling $13 million of investment and 2,780.9 kW of residential solar PV deployment (see Table 49). To date there have been 2 defaults totaling $51,127 or 0.4% of the portfolio and as of 6/30/2016 there are 0 delinquencies. To date the secondary loan loss reserve has not had to reimburse any of the participating lenders.

Table 49. Smart-E Loan Metrics

Year	# EE	# RE	# RE/EE	Unknown	Total # of Projects	Investment	Installed Capacity (kW)	Annual Saved/Produced (MMBtu)
2013	1	1	-	1	3	$52,400	6.0	38
2014	90	40	6	15	151	$1,910,087	355.9	2,906
2015	123	84	69	44	320	$6,000,452	1,366.9	7,872
2016	113	52	75	23	263	$5,291,436	1,052.0	7,056
Total[57]	327	177	150	83	737	$13,254,375	2,780.9	17,871

[55] Sungage Financial in partnership with local contractors
[56] Concord Servicing Corporation
[57] Includes approved, closed and completed projects.

Marketing Programs

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. 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 50).

Table 50. Number of Projects, Investment, and Installed Capacity through Solarize Connecticut for the Smart-E Loan Financing Product

	# of Projects	Investment	Installed Capacity (kW)
Solarize	106	$2,509,259	964.1
Non-Solarize	631	$10,745,116	1,816.8
Total	737	$13,254,375	2,780.9
% Solarize	14%	19%	35%

The Solarize Connecticut program provided a significant marketing channel and origination catalyst for the Smart-E Loan comprising nearly 15 to 20 percent of the total projects and investment and 35% of the installed capacity.[58]

Data Accessibility

There were 1,260 applications into the Smart-E Loan – 737 closed, 168 withdrew, and 355 declined in underwriting. The household customers that accessed the Smart-E Loan since its launch in 2013 had varying credit scores – see Table 51.

Table 51. Credit Scores of Household Customers Using the Smart-E Loan

	Credit Score Ranges						
	Below 640	640-679	680-699	700-719	720+	Unknown	Total
Smart- E Loan	26	75	45	65	501	25	737
	3.4%	10.2%	6.1%	8.8%	68.0	3.4%	

Of the Smart-E Loans approved and closed with household customers, the following tables are a breakdown of the contractors and lenders offering the financing product – see Tables 52 and 53.

[58] 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.

Table 52. Residential Contractors and the Smart-E Loan

Contractor	# of Loans	$ of Loans	% of Loans
20/20 Save Green Now	3	$22,550	0.17%
31Solar	8	$141,953	1.07%
72 Degrees Air Conditioning & Heating	1	$11,000	0.08%
A&B Cooling & Heating	1	$14,350	0.11%
A.R. Fonda Mechanical Services	1	$8,275	0.06%
Absolute Air Services	3	$48,907	0.37%
Aegis Electrical Systems, LLC	4	$119,487	0.90%
Aiello Home Services LLC	1	$11,800	0.09%
Air Inc	2	$26,795	0.20%
All Phase Heating & Cooling Contractors	3	$46,332	0.35%
All Time Manufacturing Co Inc	2	$9,000	0.07%
AllGreenIT, Inc.	4	$75,536	0.57%
American Heating and Cooling LLC	1	$10,000	0.08%
American Windows & Siding LLC	4	$81,085	0.61%
Apex Solar	2	$13,500	0.10%
Aspen Heating and Cooling	1	$10,000	0.08%
Bartol Heating & A/C	1	$6,359	0.05%
Bay State Fuel Oil	1	$7,792	0.06%
BeFree Green Energy, LLC	40	$1,096,136	8.27%
Benvenuti Oil	3	$34,289	0.26%
Better Building Performance	1	$4,000	0.03%
Better Way Solar	1	$25,000	0.19%
Billy Carlson Heating & AC, LLC	1	$10,500	0.08%
Bonner Electric	6	$152,593	1.15%
Boston Solar	7	$190,900	1.44%
Brayman Heating & Cooling, Inc.	3	$38,690	0.29%
Brooks Oil	1	$14,531	0.11%
Caprio Homes	1	$13,000	0.10%
Caso HVAC	1	$11,045	0.08%
Cawley's Plumbing & Heating	1	$30,000	0.23%
Chabot Electric	1	$6,626	0.05%
Charter Oak Mechanical Service LLC	3	$35,125	0.27%
Chickos Energy Services	5	$77,443	0.58%
Climate Partners, LLC	12	$188,152	1.42%
Conditioned Air Systems Inc	2	$13,550	0.10%
CT Electrical, LLC	1	$22,000	0.17%
CT Exteriors	1	$4,615	0.03%
C-TEC Solar LLC	67	$1,459,883	11.01%
Currie’s Plumbing and Heating	2	$20,656	0.16%
D&D Heating and A/C	2	$65,000	0.49%
Daniels Energy	1	$10,803	0.08%
DeLia Mechanical	7	$61,200	0.46%
Depco Mechanical LLC	1	$6,450	0.05%

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE SMART-E LOAN

Contractor	# of Loans	$ of Loans	% of Loans
Dependable Energy	1	$11,540	0.09%
Diamond Plumbing & Heating	1	$7,000	0.05%
Direct Energy	23	$497,659	3.75%
Douglas Mechanical	1	$6,200	0.05%
Dr. Energy Saver	7	$145,426	1.10%
Duct Works	2	$36,250	0.27%
Dunklee	3	$34,175	0.26%
Dutch	1	$11,700	0.09%
Dziengiel Plumbing Unlimited	3	$35,133	0.27%
Earthlight Technologies	4	$110,000	0.83%
East Coast Mechanical	3	$46,686	0.35%
East Hartford Heating and Cooling	2	$15,876	0.12%
Eastern Mechanical	1	$21,100	0.16%
EcoSmart Home Services	9	$243,484	1.84%
Edward M Sikorski	1	$6,350	0.05%
Elm City Energy Solutions	1	$40,000	0.30%
Encon, Inc.	8	$195,381	1.47%
Evergreen Energy, LLC	3	$64,200	0.48%
F.F. Hitchcock Oil Company	1	$9,819	0.07%
Fahan Brothers	1	$40,000	0.30%
For U Builders	3	$67,795	0.51%
Gelo	1	$13,300	0.10%
Giordano Heating and Cooling	1	$10,500	0.08%
Glasco Heating & Air Conditioning, Inc.	24	$203,630	1.54%
GMI Solar	1	$25,000	0.19%
Good Life Energy Savers	3	$35,785	0.27%
Green Earth Energy	2	$32,032	0.24%
Greystone Home Services LLC	1	$14,096	0.11%
Gulick Building & Development, LLC	1	$7,200	0.05%
Harness the Sun	8	$173,784	1.31%
HARP Mechanical	4	$32,928	0.25%
Home Depot	3	$89,334	0.67%
Home Doctor of America	1	$14,250	0.11%
HomePro Rx	1	$24,000	0.18%
Hurlburt's Plumbing and Heating	1	$7,500	0.06%
Independent Mechanical Inc.	1	$1,800	0.01%
Insulation Solutions of CT	1	$39,227	0.30%
Ireland Oil Co., Inc.	1	$8,095	0.06%
Izbicki Plumbing and Heating	8	$74,100	0.56%
Jack Cipriano Plumbing & Heating	1	$8,400	0.06%
James Carboni Plumbing and Heating, Inc.	6	$61,956	0.47%
James Onze	1	$12,280	0.09%
JD Solar Solutions, LLC	27	$733,546	5.53%
John C. Fiderio & Sons, Inc.	1	$3,325	0.03%
Kevin Caswell & Sons Contracting	1	$5,000	0.04%

Contractor	# of Loans	$ of Loans	% of Loans
King Energy Associates	2	$50,500	0.38%
Lantern Energy	3	$31,417	0.24%
Link Mechanical Services, Inc.	3	$29,157	0.22%
M&G Plumbing and Heating	1	$6,550	0.05%
M. Wallenta	2	$23,200	0.18%
Made in USA Solar LLC	3	$71,000	0.54%
Mainline Heating and Supply	1	$15,648	0.12%
Master Mechanical LLC	1	$7,227	0.05%
MDK	7	$60,706	0.46%
Michael White	1	$13,000	0.10%
Miller Plumbing and Heating	1	$11,000	0.08%
Modern Heating & AC	1	$6,257	0.05%
MTL Heating and Cooling LLC	2	$16,400	0.12%
Nero A/C, Heating & Refrigeration, Inc.	3	$34,199	0.26%
New England Conservation Services, LLC	1	$40,000	0.30%
NP Brulotte & Sons	1	$20,045	0.15%
Nutmeg Mechanical Services, Inc.	5	$110,805	0.84%
One Hour	2	$10,500	0.08%
One Source Solar	1	$40,000	0.30%
Peoples Products	1	$19,267	0.15%
Peter Tavino, PE, PC	1	$30,000	0.23%
Precision Mechanical	2	$12,444	0.09%
PurePoint Energy, LLC	2	$61,821	0.47%
R&W Heating Energy Solutions LLC	65	$732,715	5.53%
Real Goods Solar, Inc	4	$115,940	0.87%
Renewal by Andersen of Southern New England	1	$25,000	0.19%
Riley's Heating Service Inc.	15	$141,020	1.06%
Ross Solar Group	51	$1,257,530	9.49%
Ryan Oil Company Inc.	1	$12,600	0.10%
Santa Energy	5	$59,575	0.45%
Schede Plumbing & Heating	1	$14,850	0.11%
Scotland Heating & A/C	1	$8,000	0.06%
Secondino Mechanical Services	2	$37,500	0.28%
Shippee Solar and Construction LLC	10	$316,824	2.39%
Silver City Furnace	1	$22,275	0.17%
SLS Heating	1	$8,600	0.06%
Solv It Now	1	$27,710	0.21%
Sonic Development Inc.	1	$30,000	0.23%
Stafford Mechanical Services, Inc.	1	$9,450	0.07%
Stan Pollack Building & Remodeling	1	$25,000	0.19%
Steve Basso Plumbing Heating & A/C LLC	1	$7,345	0.06%
Strohmaier Builders	1	$40,000	0.30%
Summer Hill Solar	7	$83,602	0.63%
Sunlight Solar Energy, Inc.	5	$96,350	0.73%
Super Green Solutions	1	$30,000	0.23%

Contractor	# of Loans	$ of Loans	% of Loans
Superior Fuel	2	$24,208	0.18%
The Heat People	3	$30,989	0.23%
The Roofing Store, LLC	1	$40,000	0.30%
Tom Buehler Plumbing & Heating	2	$14,920	0.11%
Tomax Heating and Cooling	2	$16,615	0.13%
Total Energy Solutions	3	$59,718	0.45%
Total Mechanical Systems LLC	2	$16,129	0.12%
Tri-City	2	$23,753	0.18%
Tyler Air	1	$6,054	0.05%
Uplands Construction Group LLC	1	$25,000	0.19%
Viglione Heating & Cooling Inc.	8	$75,437	0.57%
Waldo Renewable Electric, LLC	3	$76,859	0.58%
Wesson Energy, Inc.	6	$90,559	0.68%
West Hartford Windows LLC	1	$5,500	0.04%
Westville Crest Plumbing and Heating, Inc.	1	$9,100	0.07%
Wilcox Fuel, Inc.	1	$5,005	0.04%
William Perotti & Sons, Inc.	1	$16,007	0.12%
Yankee Gas	1	$8,000	0.06%
Unknown	79	$1,353,742	10.21%
Total	737	$13,254,375	100.00%

Table 53. Lenders and the Smart-E Loan

Lender	# of Loans	$ of Loans	% of Loans
CorePlus Federal Credit Union	183	$ 2,511,003	18.94%
Eastern Savings Bank	182	$ 4,527,516	34.16%
First National Bank of Suffield	38	$ 812,860	6.13%
Ion Bank	40	$ 488,138	3.68%
Liberty Bank	29	$ 380,814	2.87%
Mutual Security Credit Union	10	$ 224,769	1.70%
Nutmeg State Financial Credit Union	157	$ 2,832,971	21.37%
Patriot Bank	41	$ 533,664	4.03%
Quinnipiac Bank & Trust	7	$ 84,056	0.63%
Thomaston Savings Bank	16	$ 238,644	1.80%
Union Savings Bank	23	$ 413,460	3.12%
Workers Federal Credit Union	11	$ 206,481	1.56%
Total	737	$ 13,254,375	100.00%

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE LOW INCOME SOLAR LEASE AND ENERGY EFFICIENCY ENERGY SAVINGS AGREEMENT (ESA)

For the Connecticut Green Bank's residential solar PV low-income lease program, we are applying the Program Logic Model that focuses on financing and credit enhancements (see Figure 11).

Figure 11. Program Logic Model for the Low Income Solar Lease

Financing Program

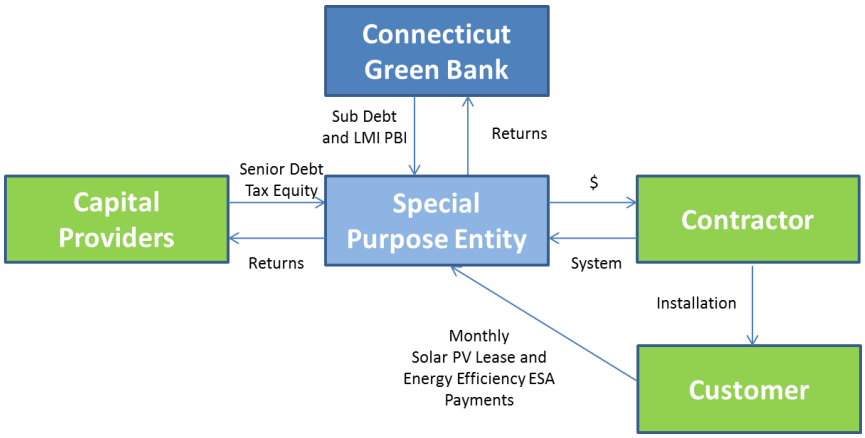
The Connecticut Green Bank offers a solar PV lease product directly targeted to the low-to-moderate income (LMI) population of the state through the solar developer PosiGen. The product was developed in partnership with PosiGen, a senior lender (Enhanced Capital) and a tax equity investor (U.S. Bank). Connecticut Green Bank supplied the initial senior debt of $5,000,000 which has been subordinated to an additional $5,000,000 lent to the lease fund by Enhanced Capital to provide $20 million in lease financing for low income residents' solar projects. This fund is committed to growing in size with Connecticut Green Bank poised to lend an additional $5 million once the fund raises an additional $5 million in private capital. The RSIP program's performance based incentive (PBI) is targeted toward the LMI population and provides a significantly higher incentive to customers demonstrating these income requirements.

Through the product, the Connecticut Green Bank lowers the barriers to Connecticut low-income residential customers seeking to install solar PV with no up-front investment. This increases demand, while at the same time reducing the market's reliance on subsidies through the RSIP. As a lease, capital provided to consumers through the PosiGen solar PV lease and energy efficiency ESA is returned to the Connecticut Green Bank, the tax equity investor and the lenders. This is in contrast to traditional subsidies targeted to LMI homeowners, which are effectively grants.

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE LOW INCOME SOLAR LEASE AND ENERGY EFFICIENCY ENERGY SAVINGS AGREEMENT (ESA)

The financial structure of the Low Income Solar Lease product includes origination,[59] servicing,[60] and financing features in combination with the support of the Connecticut Green Bank (see Figure 12).

Figure 12. Legal Structure and Flows of Capital for the Low Income Solar Lease



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 low and moderate income 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 being "anchor capital" for PosiGen together with PosiGen's own resources along with tax equity from U.S. Bank (U.S. Bank was already an investor in the Connecticut market through the Green Bank's Connecticut Solar Lease). Documentation was structured to ultimately facilitate funding by a senior lender, providing for the subordination of the Green Bank's loans once this senior lender could be secured. The Green Bank also integrated a working capital module within the financing arrangements to enable PosiGen to focus its capital resources on expanding to Connecticut. 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 to resolve supply chain issues. By using its balance sheet as anchor 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 was able to establish operations, get a market started and its rapid success in Connecticut enabled the Green Bank and PosiGen to secure a senior lender and a new source of tax equity to enable operations to expand to several cities throughout Connecticut.

[59] Sungage Financial in partnership with local contractors
[60] Concord Servicing Corporation

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE LOW INCOME SOLAR LEASE AND ENERGY EFFICIENCY ENERGY SAVINGS AGREEMENT (ESA)

The Low Income Solar Lease provided financing for 333 projects totaling $9.8 million[61] of investment and 2,199 kW of residential solar PV deployment (see Table 54). To date, there have been no delinquencies and no defaults.

Table 54. Low Income Solar Lease

Year	Total # of Projects	Investment[62]	Installed Capacity (kW)
2016	333	$9,843,865	2,199.1
Total[63]	333	$9,843,865	2,199.1

Of the low income households that installed solar PV, over 65% of them also participated in the energy efficiency ESA, resulting in more comprehensive energy efficiency measures being included in the project.

Marketing Programs

To build the pipeline of projects for the lease, Connecticut Green Bank supports PosiGen's marketing campaigns, leveraging the institution's local experience. This includes assisting with PosiGen's outreach efforts through its Solar for All campaigns which are modeled after Solarize campaigns.

[61] Fair Market Value of systems installed

[62] Fair Market Value of systems installed

[63] Includes approved, closed and completed projects.

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE COMMERCIAL PROPERTY ASSESSED CLEAN ENERGY (C-PACE)

As the Connecticut Green Bank's commercial and industrial financing program, we are applying the Program Logic Model that focuses on financing and credit enhancements (see Figure 13).

Figure 13. Program Logic Model for the C-PACE Program

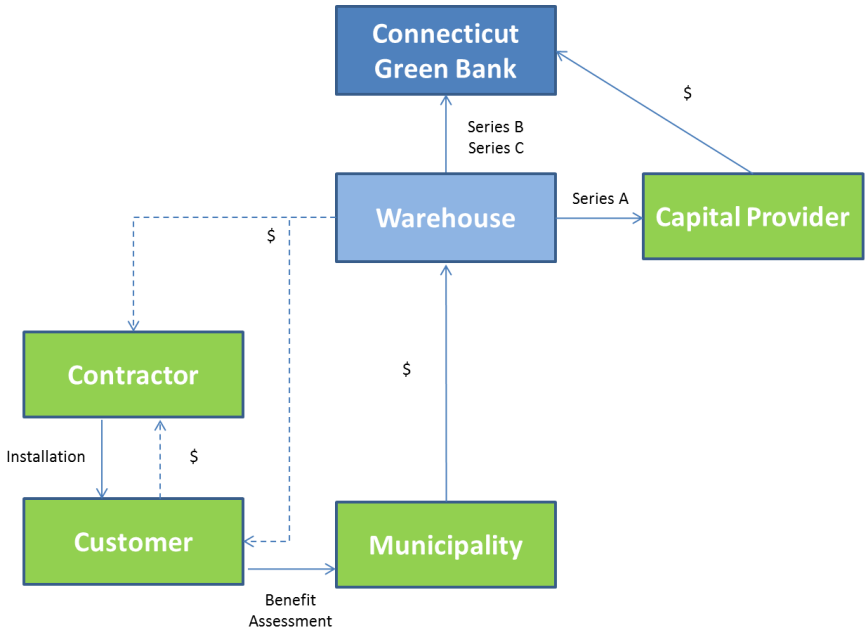
Financing Program

Commercial Property Assessed Clean Energy (C-PACE) is a structure through which commercial property owners can finance energy efficiency and renewable energy improvements through financing secured by a voluntary benefit assessment on their property and repaid via the property tax bill. A tax lien, or benefit assessment, is placed on the improved property as security for the loan, 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 32 unique banks and 5 specialized lending institutions have provided lender consent to over 70 projects – demonstrating that existing mortgage holders see C-PACE as adding value to the property and net income to the business occupying the building as a result of lower energy prices.

The Connecticut Green Bank maintains a $40 million warehouse of capital from which it finances C-PACE transactions and sells to capital markets upon completion (see Figure 14). Through the warehouse, funds are advanced to either the customer or 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 other property taxes are paid on the property. The Connecticut Green Bank aggregates the benefit assessment liens which are then sold to interested capital providers. As the benefit assessment payments are made by the property owners, they are then

remitted from the various municipalities to the Connecticut Green Bank or its designated servicer to repay the capital providers for the energy improvements financed through C-PACE.

Figure 14. Legal Structure and Flows of Capital for C-PACE



Prior to the establishment of C-PACE in a given municipality, its legislative body must pass a resolution enabling the municipality to enter into agreement with the Connecticut Green Bank to assess, collect, remit, and assign benefit assessments against C-PACE borrowers' liabilities. As of June 30, 2016, there are 123 cities and towns signed up for C-PACE representing more than 90% of commercial and industrial building space in Connecticut. Over 200 contractors have been trained to participate in the C-PACE program. Additionally, as of June 30, 2016, over $72 million in C-PACE assessment advances have been approved of which $68 million has closed.

A portfolio of $17.5 million in benefit assessment liens comprised of 30 energy efficiency and renewable 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 all of 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 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 the end, the Green Bank established a strategic financing partnership with Hannon Armstrong Sustainable Infrastructure (Hannon),

publicly listed on the NYSE. The Green Bank and Hannon structure uses a special purpose entity (SPE) established by Hannon 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 up to a maximum of $100 million with the residual capital provided by the Green Bank.

Data Accessibility

114 customers accessed the C-PACE since its launch in 2013 – see Tables 55 and 56.

Table 55. CPACE Metrics

Year	# EE	# RE	# RE/EE	Total # of Projects	Investment	Installed Capacity (kW)	Annual Saved/Produced (MMBtu)
2013	1	-	1	2	$943,952	101.0	1,362
2014	7	14	3	24	$20,429,943	3,416.0	36,923
2015	11	30	10	51	$29,452,897	6,925.3	41,363
2016	7	21	9	37	$21,628,858	5,272.7	32,476
Total[64]	26	65	23	114	$72,455,651	15,715.0	112,123

Table 56. Types of End-Use Customers Participating in C-PACE

End-Use	# of Properties (#)	Annual Savings/Production (MMBtu)	Square Footage (ft^2)	C-PACE Investment ($)
Industrial	33	37,667	1,464,131	$22,803,305
Multi-family/apartment (> 5 units)	5	4,680	218,044	$3,184,523
Non-profit	11	4,559	319,269	$3,127,755
Office	20	39,771	1,577,251	$21,067,720
Public assembly	2	748	40,000	$642,194
Retail	36	22,300	975,603	$19,200,221
Warehouse & storage	6	2,275	136,420	$2,393,904
Other	1	123	5,804	$36,029
Total	114	112,123	4,736,522	$72,455,651

To date, there have been 3 delinquencies totaling $4,986,119 or 6.9% of the portfolio and no defaults.

Of the 114 C-PACE projects, the following is a breakdown of projects by municipality – see Table 57.

[64] Includes approved, closed and completed projects.

Table 57. Cities and Towns Supporting C-PACE Projects

Municipality	# of Properties (#)	Annual Savings/Production (MMBtu)	Square Footage (ft^2)	C-PACE Investment ($)
Ansonia	1	411	38,896	$205,652
Avon	2	2,649	89,764	$1,059,417
Bloomfield	1	3,227	0	$3,234,075
Bridgeport	14	13,912	693,713	$6,684,513
Bristol	4	2,311	90,951	$2,579,989
Brookfield	1	-93	36,772	$1,164,790
Canaan	1	406	16,200	$425,527
Canton	1	176	15,000	$154,507
Clinton	1	623	0	$624,260
Cromwell	1	4,084	109,032	$2,114,163
Danbury	1	847	19,640	$87,938
Deep River	1	123	5,804	$36,029
East Haddam	2	694	41,450	$732,597
East Lyme	2	192	16,225	$147,185
East Windsor	3	1,904	94,000	$1,693,944
Ellington	1	764	25,760	$502,504
Enfield	1	1,105	57,000	$881,993
Fairfield	2	658	11,700	$673,360
Glastonbury	2	760	49,000	$676,037
Groton	2	5,133	48,500	$921,682
Hartford	9	5,159	363,604	$2,832,671
Killingly	1	171	0	$153,258
Killingworth	1	257	20,000	$261,649
Manchester	4	5,260	97,104	$5,055,353
Meriden	2	6,800	470,000	$3,306,233
Middletown	2	5,256	146,368	$4,100,595
Naugatuck	1	48	53,158	$541,582
New Britain	1	4,113	150,000	$2,842,049
New Haven	1	1,343	28,000	$836,128
New London	6	2,519	258,369	$2,296,519
Newington	1	562	53,200	$794,873
Newtown	2	4,465	202,814	$2,973,807
North Stonington	1	439	30,000	$344,252
Norwalk	1	661	10,000	$559,952
Norwich	1	545	50,000	$366,586
Plainville	4	3,989	236,000	$2,695,236
Putnam	1	9,218	125,000	$2,350,000
Shelton	1	637	37,600	$271,147
Simsbury	1	824	42,456	$685,316
Somers	1	691	48,360	$997,269
South Windsor	1	135	0	$135,200
Southington	2	534	24,325	$457,792
Stamford	5	4,489	258,900	$1,602,497
Stonington	1	230	16,400	$230,636
Stratford	2	897	48,000	$549,244
Torrington	1	116	19,000	$132,325

Municipality	# of Properties (#)	Annual Savings/Production (MMBtu)	Square Footage (ft^2)	C-PACE Investment ($)
Trumbull	1	1,066	100,000	$1,012,004
Vernon	1	787	30,044	$519,890
Waterbury	3	1,569	45,953	$1,969,966
Watertown	2	1,010	34,756	$604,107
West Haven	1	267	13,000	$243,296
Westport	2	590	22,700	$265,353
Willington	1	50	10,432	$55,421
Windsor	2	3,855	197,572	$2,175,617
Windsor Locks	1	392	34,000	$336,703
Woodbridge	2	3,294	0	$3,300,960
Total	114	112,123	4,736,522	$72,455,651

Of the C-PACE approved and closed projects, the following table is a breakdown of the contractors offering the financing product – see Table 58.

Table 58. C-PACE Contractors

Contractor	# of C-PACE Transactions	$ of C-PACE Transactions	% of C-PACE Transactions
3x Solution Inc	1	$1,164,790	1.61%
64 Solar	3	$949,536	1.31%
Action Air Systems Inc.	1	$179,980	0.25%
American Solar	4	$1,554,554	2.15%
Antonio LLC	1	$20,500	0.03%
BeFree Green Energy, LLC	1	$232,714	0.32%
C&N Mechanical	1	$30,434	0.04%
Chabot Electric	1	$234,202	0.32%
Conserv-Inc	1	$559,952	0.77%
Controlled Air	1	$137,368	0.19%
C-TEC Solar LLC	2	$7,306,975	10.08%
Davis Hill	1	$652,860	0.90%
Deutsche Eco USA Corp.	2	$3,300,960	4.56%
Direct Energy	2	$633,103	0.87%
Earthlight Technologies	6	$1,749,571	2.41%
ECNY	1	$243,296	0.34%
Efficient Lighting and Maintenance, Inc.	1	$30,620	0.04%
Efficient Lighting Consultants	1	$541,582	0.75%
Emcor Services	3	$2,973,427	4.10%
Encon, Inc.	6	$2,091,775	2.89%
Energy Solutions Inc.	1	$52,654	0.07%
Entersolar	1	$1,116,629	1.54%
Environmental Systems Corp	1	$107,556	0.15%
ESI Power Corp	3	$905,109	1.25%
Fortunato Construction Group, Inc.	1	$741,702	1.02%
GM Industries, Inc.	2	$506,321	0.70%
Green Earth Energy	29	$19,016,112	26.25%
H. Hulse, Inc.	1	$166,236	0.23%
Harness the Sun	1	$201,072	0.28%

CONNECTICUT GREEN BANK

4. MARKET TRANSFORMATION
FINANCIAL WAREHOUSE AND CREDIT ENHANCEMENT STRUCTURES
CASE OF THE COMMERCIAL PROPERTY ASSESSED CLEAN ENERGY (C-PACE)

Contractor	# of C-PACE Transactions	$ of C-PACE Transactions	% of C-PACE Transactions
High Performance Energy Solutions	1	$87,938	0.12%
Inovateus	1	$2,842,049	3.92%
JD Solar Solutions, LLC	2	$370,396	0.51%
JK Energy Solutions	3	$3,405,337	4.70%
Johnson Control	1	$558,716	0.77%
Kurt Kuegler	1	$120,109	0.17%
Lockheed Martin	1	$2,974,349	4.11%
M.J. Fahy & Sons	1	$36,350	0.05%
MSL Group	4	$2,805,767	3.87%
NORESCO	2	$2,274,881	3.14%
Northeast Smart Energy LLC	3	$589,453	0.81%
Nxegen	1	$331,884	0.46%
Oatley Mechanical Services, Inc.	1	$271,147	0.37%
Reliable Combustion Services LLC	1	$384,000	0.53%
Renewable Resources, Inc.	1	$239,883	0.33%
Ross Solar Group	2	$840,889	1.16%
Sarracco Mechanical	1	$218,814	0.30%
Seldera LLC	1	$836,128	1.15%
Smart Energy Services	1	$418,540	0.58%
Sound Solar Systems, LLC	1	$261,649	0.36%
Trane	4	$5,185,781	7.16%
Total	114	$72,455,651	100.00%

CONNECTICUT **GREEN BANK**
Audit, Compliance and Governance Committee Presentation
for the Audit of the fiscal year ended June 30, 2016

BlumShapiro

Accounting | Tax | Business Consulting

The passion to unlock potential

CT Green Bank - Audit Results

Agenda:

- Engagement Scope and Reporting
- Financial Highlights
- Required Auditors' Communications

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CT Green Bank - Audit Results

Engagement Scope and Reporting

- The audit was performed under the following standards:
  - Auditing Standards Generally Accepted in the United States of America (GAAS).
  - The standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States (GAGAS).

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CT Green Bank - Audit Results

Engagement Scope and Reporting (continued)

- Reporting Results in the Financial Statements:
  - Reporting under GAAS:
    - Unmodified audit opinion.
  - Reporting under GAGAS:
    - Reporting on Internal Control and Compliance at the Financial Statement Level

<u>Under Internal Control</u>

- No Material Weakness were identified.

<u>Under Compliance</u>

- No instances of noncompliance were identified.

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CT Green Bank - Audit Results

Financial Highlights – Statement of Net Assets (in thousands)

	2016	2015	Increase (Decrease)
Cash and cash equivalents	$ 57,822	$ 48,693	$ 9,129
Bonds receivable	3,492	1,600	1,892
Portfolio investments	1,000	1,000	--
Solar lease notes	9,008	9,819	(811)
Program loans	33,268	40,518	(7,250)
Capital assets, net	57,864	26,971	30,893
Other assets	14,124	8,972	5,152
Total Assets	176,578	137,573	39,005
Deferred Outflows of Resources			
Deferred amount for pensions	2,573	1,669	904
Total Deferred Outflows of Resources	2,573	1,669	904

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CT Green Bank - Audit Results

Financial Highlights – Statement of Net Assets (in thousands)

	2016	2015	Increase (Decrease)
Current liabilities	6,612	6,825	(213)
Unearned revenue	6,258	2,519	3,739
Pension liabilities	16,096	14,900	1,196
Other long term liabilities	2,528	1,093	1,435
Long term debt, less current maturities	18,648	3,546	15,102
Total Liabilities	50,142	28,883	21,259
Deferred Inflows of Resources			
Fair value of interest rate swap	1,628	660	968
Deferred amount for pensions	(3)	532	(535)
Total Deferred Outflows of Resources	1,625	1,192	433
Invested in capital assets	57,864	26,971	30,893
Restricted Net Position:			
Non-expendable	1	1	--
Restricted - energy programs	9,750	8,799	951
Unrestricted	59,769	73,396	(13,627)
Total Net Position	$ 127,384	$ 109,167	$ 18,217

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CT Green Bank - Audit Results

Financial Highlights

2016 Financial Analysis

- Total assets of the Green Bank increased $39MM during 2016, due principally to an increase in Capital Assets associated with the acquisition of solar equipment by CT Solar Lease 2, LLC.
- Total liabilities increased $21.2MM due to Line of Credit Draw Downs associated with CT Solar Lease 2, LLC activity.
- Deferred inflows associated with the Fair Value of the Green Bank's interest rate swap increased $968 thousand which reflects the decline in the fair market value of the swap.

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CT Green Bank - Audit Results

Financial Highlights – Statement of Changes in Net Assets (in thousands)

	2016	2015	Increase (Decrease)
Revenues	$ 37,788	$ 46,294	$ (8,506)
Operating Expenses			
Grants and programs	27,228	22,131	5,097
General and administrative expense	4,630	3,117	1,513
Total Operating Expenses	31,858	25,248	6,610
Operating Income	5,930	21,046	(15,116)
Non-Operating Revenues (Expenses)			
Interest earned	3,017	2,312	705
Interest expense	(731)	(119)	(612)
Investment loss	(3)	(1,180)	1,177
Unrealized loss on interest rate swap	(968)	(660)	(308)
Provision for loan losses	(1,022)	(564)	(458)
Capital contribution	12,294	6,844	5,450
Distribution to member	(301)	(105)	(196)
Payments to State of Connecticut	--	(19,200)	19,200
Net Change	$ 18,216	$ 8,374	$ 9,842

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CT Green Bank - Audit Results

Financial Highlights

2016 Operating Activity

- The Green Bank had operating revenues of approximately $37.7MM for the year ended June 30, 2016 which was a decrease form the prior year of approximately $8.5MM. This was mainly due to a decrease in a decrease in Regional Greenhouse Gas Initiative (RGGI) auction proceeds received.
- Total operating expenses increased approximately $6.6MM during 2016, due principally to increases in grant and program expense increases associated with financial incentives to residential and commercial property owners to install renewable energy or energy efficiency measures.
- Net Non-Operating Revenues (Expenses) were $18.2MM. This was mostly attributable to capital contributions of $12.3MM received from Firstar Development.

CT Green Bank - Audit Results

Management Responsibilities and Required Auditors' Communications

- Management Responsibilities

  - Establishing and maintaining effective internal controls over financial reporting and compliance.
  - Selection and application of accounting principals.
  - For the preparation of and fair presentation of the financial statements and all accompanying information in conformity with U.S. generally accepted accounting principals.
  - Making all financial records and related information available to the external auditors.

CT Green Bank - Audit Results

Management Responsibilities and Required Auditors' Communications

- Management Responsibilities (continued)
  - Providing access to the external auditors to all information which they are aware that is relevant to the preparation of the financial statements and any additional information the auditor may request for the purpose of the audit.
  - For the design and implementation of programs and controls to prevent fraud and form informing the auditors about all known or suspected fraud affecting the entity.
  - For the preparation of the supplementary information the auditors have been engaged to report on.
  - Establishing and maintaining a process for tracking the status of audit findings and recommendations.

CT Green Bank - Audit Results

- **Managements Responsibilities and Required Auditors' Communications**
- Required communications to those charged with governance (Audit Committee/Board of Directors):
  - Auditor Responsibility under generally accepted auditing standards.
  - Planned Scope & Timing of the Audit.
  - Significant Findings from the Audit including the auditors views about findings or issues that the auditor considers to be significant and relevant to those charged with governance regarding their oversight of the financial reporting process.
  - Corrected and Uncorrected Misstatements to the financial statements.

CT Green Bank - Audit Results

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NOTES:

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Concepts for 2017 Regular Legislative Session, with Green Bank status.

Policy	Description	Green Bank Role
Defense	Defend our funding sources and potential cash sweeps	Lead – Number one legislative priority
R-PACE	Full policy, CGB administration	Lead
C-PACE	Technical tweak	Lead
Local manufacturing incentive	Remove an unused residential solar "kicker" incentive, and possibly replace with incentive for local labor. US-India trade dispute says an existing 5% kicker may be against WTO obligations.	Lead
Accessing low-cost federal capital	Open our enabling statute to allow us to match USDA loan guarantee definitions for "eligible borrowers"	Lead, seek support of DEEP and also utilities and EEB. Necessity of this legislative change TBD.
Data Coordination	Standardized definition for census tract data sources and "distressed communities" between CGB and EDCs. For statutory DEEP reporting in 16-245ee.	Defer to DEEP to lead. CGB support.
Lead By Example	Performance contracting on state buildings has the potential to count against either the spending cap or bonding cap (or both).	Defer to DEEP to lead, with Treasurer's Office. CGB support.
Anaerobic digester pilot expansion	Others might propose more AD activity	No – likelier to be either be DEEP or third party proposal if we see it
Renewable Thermal Technologies	Policies that might flow from a 2016 draft Comprehensive Energy Strategy	Support DEEP's lead
Electric Vehicles	Policies that might flow from a 2016 draft Comprehensive Energy Strategy	Support DEEP's lead
Grid 2.0 catch-all	Policies that might flow from a 2016 draft Comprehensive Energy Strategy	Support DEEP's lead
Rate Design	Fixed/variable charge type of debate	Advocates lead – potential CGB support

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CONNECTICUT GREEN BANK

Memo

To: Nandika Prakash

From: Bryan Garcia

CC: Commissioner Catherine Smith, Chairwoman; Eric Shrago, Director of Operations; Lucy Charpentier, Manager of Evaluation, Measurement, and Verification

Date: September 13, 2016

Re: Request for Review and Approval – Clean Energy Jobs in Connecticut Study and Calculator and Evaluation Framework for Societal Perspective for Economic Development Draft Fact Sheet

---

As you are aware, the Connecticut Green Bank ("Green Bank"), in conjunction with the Department of Economic and Community Development ("DECD"), engaged Navigant Consulting to conduct a study with regard to the economic impact (i.e., estimate of direct, indirect and induced job-years created) from the investment in clean energy deployment in Connecticut. We appreciate your guidance and assistance throughout that process.

Through its evaluation efforts in general, and specially its "Evaluation Framework: Assessing, Monitoring, and Reporting of Program Impacts and Processes," the Green Bank has assembled the following materials for your review and approval:

- Clean Energy Jobs in Connecticut – Final Report by Navigant Consulting (August 10, 2016);
- Clean Energy Jobs in Connecticut – Final Calculator by Navigant Consulting (August 10, 2016); and
- Evaluation Framework: Societal Perspective (Economic Development) – Draft Fact Sheet by the Green Bank

If you could review the attached materials and provide an official DECD approval response of these materials by Friday, October 7, 2016, we would appreciate it. We have provided a link to a similar response from Michael Lettieri from the DECD of December 16, 2013 as an example – click here.

We will then provide all of these jointly produced materials to the Board of Directors of the Green Bank for their review and approval at the October 21, 2016 meeting.

Thank you Nandika for your continuous support.

EVALUATION FRAMEWORK
SOCIETAL PERSPECTIVE

CONNECTICUT GREEN BANK

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Economic Development Overview

One of the indicators that the Connecticut Green Bank will be tracking in its programs and overall portfolio is the extent to which investments in clean energy create value from a societal perspective as it relates to the economic development of the state[1]. For the Green Bank programs this will be measured as the relationship between investments and associated direct and indirect jobs created. In 2009, and updated in 2010, Navigant Consulting prepared a Connecticut Renewable Energy and Energy Efficiency Economy Baseline Study[2], which included a focus on the investments in those energy sectors and the resulting job creation. Since that report was prepared, the availability of new clean energy technologies that have emerged (e.g., DER resources, EVs, electric charging stations, etc.), and a variety of related economic factors (e.g., costs of labor, cost of resource acquisition, etc.) have changed. In coordination with the Connecticut Department of Economic and Community Development (DECD) and with assistance from Eversource Energy and United Illuminating, The Connecticut Green Bank contracted Navigant Consulting to refresh the investment-jobs portion of its earlier study by providing an updated calculator tool to estimate the economic development benefits from clean energy investments in Connecticut, as reflected in job-years created. The updated study focused on jobs associated with the investment area of the Connecticut Green Bank: renewable energy (RE) and energy efficiency (EE) project development and deployment, and product development and manufacturing. The final value output in the jobs calculator is *job-years created per $1 million invested in clean energy projects in Connecticut*.

The Connecticut Green Bank, through its Evaluation Framework, and specifically its Societal Perspective metrics, will use the findings of this study to estimate, analyze, and report on the economic development benefits of the investment activity in clean energy deployment in Connecticut that it is an integral part of.

Results of RE/EE job-years created to investment analysis

Below is a summary of the results of the analysis of direct, indirect, and induced job-years created by each million-dollar investment in clean energy deployment in Connecticut:

~5 job-years for storage tech installers	**~9 job-years** for residential solar installers	**~14 job-years** for commercial EE installers
~7 job-years for EV charging installers	**~11 job-years** for fuel cell manufacturers	**~15 job-years** for RTT installers
~7 job-years for commercial solar installers	**~14 job-years** for wind project installers	**~18 job-years** for residential EE installers

About the Connecticut Green Bank

The Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011 as a part of Public Act 11-80. As the nation's first full-scale green bank, it is leading the clean energy finance movement by leveraging public and private funds to scale-up renewable energy deployment and energy efficiency projects across Connecticut. The Green Bank's success in accelerating private investment in clean energy is helping Connecticut create jobs, increase economic prosperity, promote energy security and address climate change. For more information about the Connecticut Green Bank, please visit www.ctgreenbank.com

About the Department of Economic and Community Development

The Department of Economic and Community Development is the state's lead agency responsible for strengthening Connecticut's competitive position in the rapidly changing knowledge-based global economy. The department administers the Manufacturing Innovation Fund that was created to support and strengthen Connecticut's manufacturing sector. For more information about the Department of Economic and Community Development, please visit www.decd.org

continued >

Methodology

1 Calculation of total jobs at top companies:
Interviewed top companies, 22 total (40 researched)

- 12 RE companies interviewed, 17 researched, 60% of market
- 10 EE companies interviewed, 17 researched, 30% of market
- Asked each company for current total number of RE/EE jobs in relevant job classifications and sections of the RE/EE value chain

2 Extrapolation to represent the total industry of CT:
Determined market share for companies in Connecticut RE/EE industry

- Calculated for non-interviewed companies
- If interviewed companies had **X** jobs, representing **Y%** of the market share, then all jobs = **X / Y%**

3 Estimated jobs created per $1 Million invested using jobs calculator

This analysis mainly considers direct jobs[3] in private companies that employ people who are based in Connecticut. A multiplier for calculating indirect jobs[4] and induced jobs[5] from the number of direct jobs was provided by DECD for the study.

Key Findings

Renewable Energy: Employment in the solar industry has grown by approximately 30% since 2010 to become the largest RE industry for jobs in Connecticut.

- The majority of RE jobs are split between the solar and fuel cell industries, with other RE technologies making up the remaining 6% of RE industry jobs
- Installation and engineering jobs account for the largest job type at solar companies
- Manufacturing and engineering jobs account for the largest job types at fuel cell companies
- The majority of solar employees in Connecticut focus on the residential market

Energy Efficiency: Overall employment has remained relatively constant, experiencing most job growth in the residential customer market.

- EE technologies mainly include lighting, HVAC, and building envelope, with the majority of companies participating in multiple technologies
- Installation jobs account for the majority of roles
- Most jobs are focused on residential and C&I customer markets, with the remaining focused on retail and utility
- The average number of employees at C&I companies is 90-120, while it is 10-40 at residential companies

Example of Jobs Calculator: Residential Solar

In the example below, the Connecticut Green Bank would apply the Societal Perspective to report the economic development results in its Comprehensive Annual Financial Report in the following manner: **"In FY 2016 there was a total investment of $240 million in Residential Solar PV in Connecticut. Through the Connecticut Green Bank's support, about 940 direct and 1,220 indirect and induced job-years were created in the state from installing nearly 60 MW of Residential Solar PV."**

Occupation *Solar PV Installation – Residential*	Capital Invested	Company Overhead and Margin	Project Cost after Overhead and Margin	Labor (% of project cost)	Non-labor Costs (% of project costs)
	A	B	C=Ax(1-B)	D	E=100%-D
	$1,000,000	20%	$800,000	35%	65%
Weighted Average Wage	**Fully Burdened Employee Cost**	**Job-years Created per Million Dollars Invested**	**Indirect and Induced Job Multiplier**	**Indirect and Induced Jobs Created from Capital Invested**	**Total Job Years Created from Capital Invested**
F	G=Fx1.3	H=Cx(D/G)	I	J=HxI	K=H+J
$55,000	$71,500	3.9	1.3	5.1	9.0

[1] See Section 7 of Connecticut Green Bank's Evaluation Framework: Assessing, Monitoring, and Reporting of Program Impacts and Process (July 2016)
[2] Connecticut Renewable Energy and Energy Efficiency Economy Baseline study, Navigant Consulting, Inc. [Completed in March 2009 and subsequently updated in 2010]
[3] These are existing jobs in the specified Connecticut industries.
[4] Represents the response as supplying industries increase output in order to accommodate the initial change in final demand.
[5] Generated by the spending of households who benefit from the additional wages and business income they earn through direct and indirect activity.

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CONNECTICUT GREEN BANK

Clean Energy Jobs in Connecticut

Prepared for the Connecticut Green Bank

August 10, 2016

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Disclaimer

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Occupation	Capital Invested	Company Overhead (SG&A) and Margin (%)	Project Cost After Overhead (SG&A) and Margin
Renewable Energy	**A**	**B**	**C=A*(1-B)**
Fuel Cell			
Fuel Cell Manufacturing	$ 1,000,000	20%	$ 800,000
Fuel Cell R&D/Engineering	$ 1,000,000	20%	$ 800,000
Solar PV			
Solar PV Installation - Residential	$ 1,000,000	20%	$ 800,000
Solar PV Installation - Non-Residential	$ 1,000,000	20%	$ 800,000
Renewable Thermal Technologies			
Ductless Split Heat Pump	$ 1,000,000	20%	$ 800,000
Geothermal Installation	$ 1,000,000	20%	$ 800,000
Solar Thermal Installation	$ 1,000,000	20%	$ 800,000
Other			
Wind Installation	$ 1,000,000	20%	$ 800,000
Hydro Installation	$ 1,000,000	20%	$ 800,000
EV Charging Stations - Installation	$ 1,000,000	20%	$ 800,000
Storage Installation	$ 1,000,000	20%	$ 800,000
Energy Efficiency	**A**	**B**	**C=A*(1-B)**
Residential (Single and Multi-Family)			
Lighting	$ 1,000,000	20%	$ 800,000
Home Energy Solutions (HES) - Audits	$ 1,000,000	20%	$ 800,000
HES - Weatherization & HVAC	$ 1,000,000	20%	$ 800,000
Gas Conversion	$ 1,000,000	20%	$ 800,000
Commercial			
Small Business Energy Advantage	$ 1,000,000	20%	$ 800,000
Large Commerical and Industrial	$ 1,000,000	20%	$ 800,000

Calculator Notes:

Company Overhead and Margin (C) is assumed to be 20% and include jobs related to sales

Labor (D) is the percent of the project cost that is used to pay installers, electricians, project

Non-Labor (E) is the percent of the project cost that is used to cover all other project expens

Weighted Average Wage (F) is distributed amongst installers, electricians and PM/engineers
The weight for each job type is based on research and/or interview feedback for employee b
Total Job-Years Created from Capital Invested (H) is the total number of installer, electricia

Source: Navigant Consulting, Connecticut Green Bank, DECD.
DECD provided multiplier of 1.3 for burden rate and 1.6 for indirect and induced jobs.

d from Public Investments Made by Connecticut Green Bank

Labor (% of Project Cost)	Non-Labor (% of Project Cost)	Weighted Average Wage	Fully Burdened Employee Cost	Direct Job Years Created per Million Dollars Invested	Indirect & Induced Jobs Multiplier
D	E=100%-D	F	G=F*1.3	H=C*(D/G)	I
40%	60%	$ 50,000	$ 65,000	4.9	1.3
40%	60%	$ 85,000	$ 110,500	2.9	1.3
35%	65%	$ 55,000	$ 71,500	3.9	1.3
25%	75%	$ 50,000	$ 65,000	3.1	1.3
60%	40%	$ 55,000	$ 71,500	6.7	1.3
60%	40%	$ 55,000	$ 71,500	6.7	1.3
50%	50%	$ 55,000	$ 71,500	5.6	1.3
60%	40%	$ 60,000	$ 78,000	6.2	1.3
60%	40%	$ 60,000	$ 78,000	6.2	1.3
25%	75%	$ 50,000	$ 65,000	3.1	1.3
20%	80%	$ 55,000	$ 71,500	2.2	1.3
D	E=100%-D	F	G=F*1.3	H=C*(D/G)	I
50%	50%	$ 40,000	$ 52,000	7.7	1.3
70%	30%	$ 55,000	$ 71,500	7.8	1.3
50%	50%	$ 55,000	$ 71,500	5.6	1.3
50%	50%	$ 55,000	$ 71,500	5.6	1.3
50%	50%	$ 50,000	$ 65,000	6.2	1.3
50%	50%	$ 55,000	$ 71,500	5.6	1.3

s, marketing, management and other overhead jobs
managers and engineers
es, including materials and non-labor soft costs

s based on wages in CT as reported by the U.S. Department of Labor as of May 2015
breakdowns for that field/technology
n and PM/engineering jobs created for 1 year

Indirect & Induced Jobs Years Created per Million Dollars Invested	Total Job-Years Created from Capital Invested
J=H*I	K=H+J
6.4	**11.3**
3.8	**6.7**
5.1	**9.0**
4.0	**7.1**
8.7	**15.4**
8.7	**15.4**
7.3	**12.9**
8.0	**14.2**
8.0	**14.2**
4.0	**7.1**
2.9	**5.1**
J=H*I	K=H+J
10.0	**17.7**
10.2	**18.0**
7.3	**12.9**
7.3	**12.9**
8.0	**14.2**
7.3	**12.9**

CLEAN ENERGY JOBS IN CONNECTICUT

FINAL REPORT

AUGUST 10, 2016

NAVIGANT REFERENCE NO. 184823

CONNECTICUT GREEN BANK SM

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August 2016

CONTRIBUTORS

This study was conducted by Navigant Consulting, Inc. (Navigant) with support from the Connecticut Green Bank (CGB) and Connecticut Department of Economic and Community Development (DECD), and assistance by Connecticut utilities Eversource Energy and United Illuminating (UI).

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Note: If this document is referenced, it should be cited as: Navigant Consulting Inc., Connecticut Department of Economic and Community Development, and Connecticut Green Bank. June 2016. *Clean Energy Jobs in Connecticut*.

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2. Jobs Impact Based on Dollars Invested
3. Current RE and EE Jobs
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NAVIGANT

COMPARISON

Connecticut Green Bank requested Navigant refresh their Clean Energy Economy Baseline Study as the industry has evolved.

2009-2010 STUDY[1]

- **Central focus:** To provide **detailed inventory/accounting** of renewable energy and energy efficiency jobs and wages, jobs impact based on dollars invested, clean energy value chain, and a summary of DECD work
- **Study pool:** 74 companies interviewed, 95 researched
- **Interview focus:** Job counts and industry insights
- **Technology:** Energy efficiency (EE) in general and renewable energy (RE), primarily solar PV and fuel cells

2015-2016 REFRESH

- **Central focus:** To provide an **updated calculator** tool to estimate the economic development benefits (i.e., job-years created) from clean energy investments in Connecticut
- **Study pool:** 31 companies interviewed, 40 researched
- **Interview focus:** Technology-specific data inputs for calculator
- **Additional technologies:** New distributed energy resources (DER) such as electric vehicle (EV) charging and energy storage

[1]*Connecticut Renewable Energy and Energy Efficiency Economy Baseline study, Navigant Consulting, Inc. [Completed in March 2009 and subsequently updated in 2010]*

APPROACH

Navigant employed a top-down approach, seeking to interview and research the biggest employers and, using that data, extrapolate to the whole market.

- Focus was on **product development** and **manufacturing** as well as **project development** and **deployment** jobs across various leading and emerging **RE and EE** technologies.
- **Cross-checking was conducted using CGB, utility, and DECD resources**, Navigant's internal databases, and Connecticut industry experts.
- The state-wide industry size was estimated by extrapolation. **Assumptions and methodology were verified by CGB and DECD.**
- For market segments **not included in utility or Green Bank data**, employee counts were updated from the last study based on Navigant's existing data sources and professional judgement.
- Charts and figures in this presentation represent **direct jobs specific to RE and/or EE only** and refer to indirect and induced jobs only when specified.
- 40 companies were researched in detail, and **31 interviews were conducted** including:
  - 22 RE/EE companies
  - Three utilities
  - Three organizations/institutions
  - Three subject matter experts (SMEs)

INTERVIEWS

A focused interview approach was used to gather results from top employers or other sources and extrapolate for all current jobs.

1. **Build the initial company database.** Navigant developed a company and contact list using information from Connecticut Green Bank, Navigant's 2010 study, trade organizations, utilities, other public sources, and companies known to the evaluation team.

2. **Research primary contact information.** Missing email addresses and telephone numbers were researched through online searches and phone calls.

3. **Create, test, and revise the interview questions.** The interview question set was refined several times with the goal of making it concise while capturing information that was of greatest interest (see next slide).

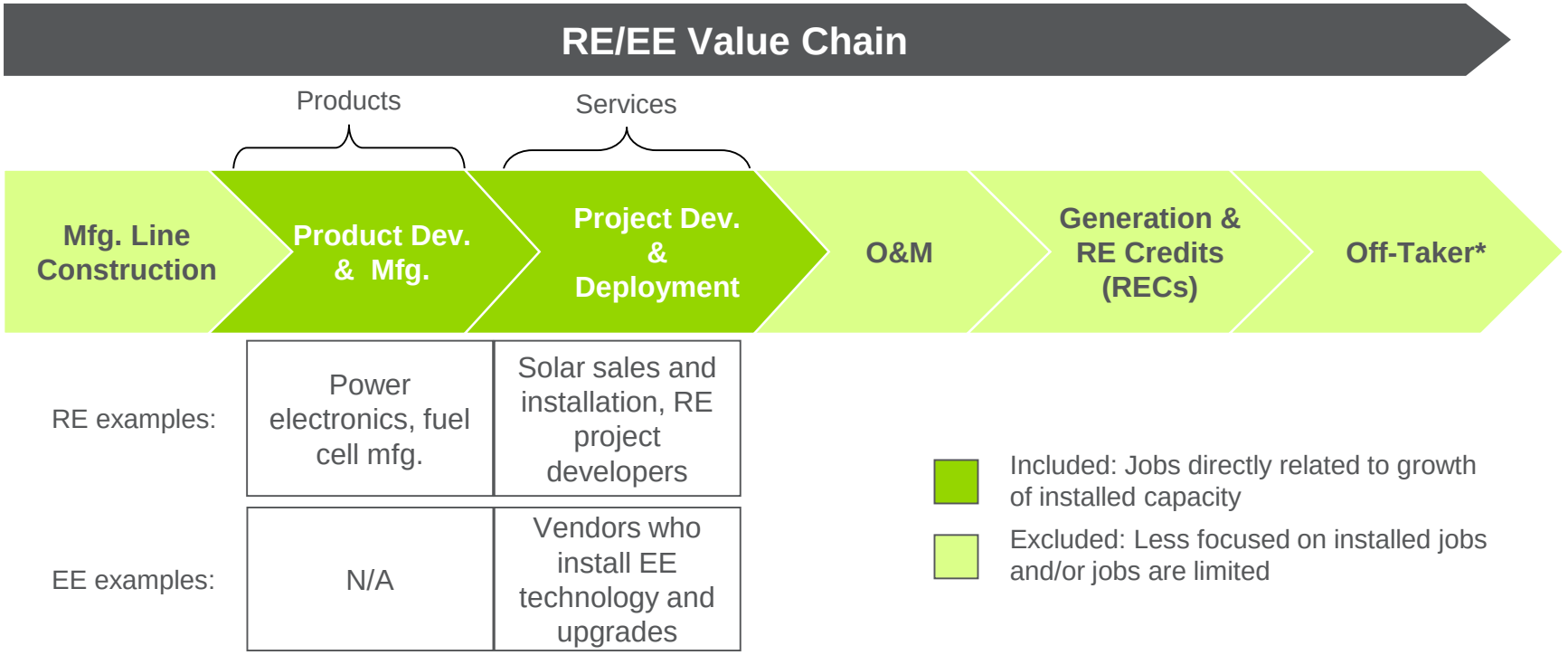
4. **Conduct interviews.** Navigant managed the interview process and conducted the interviews. The evaluation team conducted 31 formal interviews of some of the largest RE/EE companies and contacted other stakeholders in this sector to augment the information collected from the formal interviews.

5. **Data collection.** Navigant worked with Connecticut Green Bank and other Connecticut departments to cross-check and supplement the team's assumptions and findings.

6. **Review and clean the data set.** Navigant worked with Connecticut Green Bank and other Connecticut departments to extensively review the analysis and results for accuracy and completeness, following up to verify and correct information as needed.

VALUE CHAIN

Based on a recommendation by the CGB, Navigant focused the calculator and jobs study on sections of the value chain most closely associated with project installation, which is the focus of the CGB.



**Note: An off-taker is an entity that purchases electricity or RECs from an independent power producer or marketer*

NAVIGANT

JOB TYPES

In line with the value chain segments examined, "jobs types" included in the calculator related to manufacturing, installation, engineering, and project management.

General Job Type	Example Specific Occupation Types[1]
Manufacturing	Production occupations (e.g., assemblers, fabricators, equipment operators, and process workers)
Installers/Field Technicians	Installation and construction occupations (e.g., solar PV installers, heating, AC and refrigeration mechanics and installers, insulation workers, floor, ceiling and wall)
Electricians	Electricians, electro-mechanical technicians, electrical and electronics installers and repairers
Engineers/Project Managers	Engineers (e.g., mechanical, civil, and electrical engineers); management occupations (e.g., project, construction, and engineering managers)

[1]Specific Occupation titles from Bureau of Labor Statistics – May 2015 State Occupational Employment and Wage Estimates Connecticut
http://www.bls.gov/oes/current/oes_ct.htm

DIRECT VS. INDIRECT JOBS

This analysis mainly considers direct jobs in private companies that employ people who are based in Connecticut. A multiplier for calculating indirect and induced jobs from the number of direct jobs was provided by the DECD for this study.

DIRECT JOBS

- For the purpose of this baseline analysis, direct jobs are considered existing jobs in the specified Connecticut industries.
- In policy analysis, direct jobs are commonly defined as the initial change in final demand for the industry sector in question. Direct job impacts describe the changes in economic activity for sectors that first experience a change in demand because of a project, policy decision, or some other stimuli.

INDIRECT JOBS

- Represents the response as supplying industries increase output in order to accommodate the initial change in final demand. These indirect beneficiaries will then spend money for supplies and services, which results in another round of indirect spending.

INDUCED JOBS

- Jobs generated by the spending of households who benefit from the additional wages and business income they earn through direct and indirect activity. The increase in income, in effect, increases the purchasing power of households.

Primary scope (the numbers presented in this report are direct jobs unless otherwise indicated)

Secondary scope through use of multipliers

Source: S. Grover, "Energy, Economic, and Environmental Benefits of the Solar America Initiative," August 2007, NREL/SR-640-41998.

DECD ANALYSIS OF INDIRECT AND INDUCED JOBS

DECD provided a multiplier for calculating indirect and induced jobs from the number of direct jobs for this study.

- DECD performed the simulations by creating net new jobs in the following sectors that include the occupations listed below:

Occupation	NAICS Code	Sector Description
Electrician, Installer/Field Technician	23	Construction
Engineer	541	Professional, technical, and scientific services
Fuel Cell Manufacturing (Solid State)	334	Computer and electronic product manufacturing
Fuel Cell Manufacturing (Electrochemical Generators)	335	Electrical equipment and appliance manufacturing

- DECD then obtained the multiplier by dividing the total employment generated in the economy by the net new jobs in the above sectors entered as input into Connecticut's REMI[1] model.
- The simulations generated an employment multiplier of 2.3, which means that for each RE/EE job, an additional 1.3 jobs are created, on average, each year.
- This relatively high multiplier most likely reflects the relatively large local supply of labor and intermediate goods; the decrease in the same multiplier over the 2010 study is likely due to the narrower job base classifications used this time around, as well as higher worker productivity in these sectors as companies do more with fewer workers.

[1]REMI V.1.6.7, Connecticut Single Region Model. REMI is a dynamic input-output model that assesses individual and firm behavioral responses to changes in relative prices over time. This simulation provides the potential regional employment impact of the relevant industry groups in Connecticut.

TECHNOLOGIES

This study includes some additional RE and EE technology industries as compared to the last study, such as EV infrastructure and energy storage.

Renewable Energy	
Technology	**Markets**
Fuel cells	Residential
Solar PV	Commercial and industrial (C&I)
Solar thermal	Utility
Wind	
Geothermal	
Small hydro	
Energy storage	
EV charging	

Energy Efficiency	
Technology*	**Markets**
High efficiency heating, ventilation and air conditioning (HVAC)	Residential (including low-income weatherization)
Efficient lighting	C&I
Efficient home appliances	Small business
Water heating	
Building envelope	
Demand response	

**Note: For the purpose of this analysis, Navigant merged all EE technologies and presented the results by market.*

RECOMMENDATIONS

Because the focus of this study was the jobs calculator and installation-focused job creation—specifically product and project development jobs—the study could be expanded to address other segments.

Some areas for future investigation include:

Area of Study	Analysis Focus
Commercial EE	Commercial EE jobs count by job title and customer type
Other RE Manufacturing and R&D	Emerging RE manufacturing and R&D in Connecticut, including EV charging and storage
RE Utility Employees	Number of employees or job-years focused on administering RE programs
Value Chain Segments	Other areas of the value chain not explored in this study, including supply chain, operations and maintenance (O&M), academic, etc.

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NAVIGANT

OVERVIEW

The jobs calculator estimates the job-years created from $1 million in investment based on industry inputs such as cost allocation of labor and current wages.

2016 Analysis: RE/EE Job-Years Created from Public Investments Made by Connecticut Green Bank

NAVIGANT

Occupation	Capital Invested	Company Overhead (SG&A) and Margin (%)	Project Cost After Overhead (SG&A) and Margin	Labor (% of Project Cost)	Non-Labor (% of Project Cost)	Weighted Average Wage	Fully Burdened Employee Cost	Direct Job Years Created per Million Dollars Invested	Indirect & Induced Jobs Multiplier	Indirect & Induced Jobs Created per Million Dollars Invested	Total Job-Years Created from Capital Invested
Renewable Energy	A	B	C=A*(1-B)	D	E=100%-D	F	G=F*1.3	H=C*(D/G)	I	J=H*I	K=H+J
Fuel Cell											
Fuel Cell Manufacturing	$ 1,000,000	20%	$ 800,000	40%	60%	$ 50,000	$ 65,000	4.9	1.3	6.4	**11.3**
Fuel Cell R&D/Engineering	$ 1,000,000	20%	$ 800,000	40%	60%	$ 85,000	$ 110,500	2.9	1.3	3.8	**6.7**
Solar PV											
Solar PV Installation - Residential	$ 1,000,000	20%	$ 800,000	35%	65%	$ 55,000	$ 71,500	3.9	1.3	5.1	**9.0**
Solar PV Installation - Non-Residential	$ 1,000,000	20%	$ 800,000	25%	75%	$ 50,000	$ 65,000	3.1	1.3	4.0	**7.1**

Excerpt from the jobs calculator.

UPDATES TO PREVIOUS STUDY

- These values are representative of the **2015-2016** market in Connecticut.
- Final values are given in **job-years** created per $1 million in capital invested.
- Public vs. private funding is **not specified** in the 2016 calculator refresh.
- Job-years created are calculated **after Sales, General & Administrative (SG&A) and margin** is removed.

KEY FINDINGS

More job-years in EE are created per $1 million capital investment than for RE because material costs and wages are, on average, lower in the EE industry.

FAST FACTS

A $1 million capital investment creates:

- ~**5 job-years** for **energy storage** installers
- ~**7 job-years** for **EV charging** station installers
- ~**9 job-years** for **residential solar** installers
- ~**11 job-years** for **fuel cell** manufacturers
- ~**14 job-years** for **wind** project installers
- ~**14 job-years** for **commercial EE** installers
- ~**15 job-years** for **renewable thermal technologies (RTT)** installers
- ~**18 job-years** for **residential EE** installers

Job-years created are direct, indirect, and induced.

KEY FINDINGS

- More fuel cell manufacturing job-years are created per $1 million investment than solar installation jobs because a larger portion of funding goes toward labor.
- Renewable Thermal Technologies (RTT) and residential EE technologies create the most job-years per investment because labor and material costs are lower for these technologies.
- Investments in residential solar create more job-years from investment than commercial solar because material costs make up a larger portion of overall project cost for commercial customers.
- Other RE technologies such as energy storage and EV charging stations are still new to market and maintain high material costs, with less investment going toward installation labor.

RESULTS: RENEWABLE ENERGY

RE job-years created per $1 million capital invested per the calculator approach:

Occupation	Direct Job-Years Created per $1 Million Invested	Indirect and Induced Jobs Created per $1 Million Invested	Total Job-Years Created from $1 Million Invested
Renewable Energy			
Fuel Cell			
Fuel Cell Manufacturing	4.9	6.4	11.3
Fuel Cell R&D/Engineering	2.9	3.8	6.7
Solar PV			
Solar PV Installation - Residential	3.9	5.1	9.0
Solar PV Installation - Non-Residential	3.1	4.0	7.1
Renewable Thermal Technologies			
Ductless Split Heat Pump	6.7	8.7	15.4
Geothermal	6.7	8.7	15.4
Solar Thermal	5.6	7.3	12.9
Other			
Wind Installation	6.2	8.0	14.2
Hydro Installation	6.2	8.0	14.2
EV Charging Stations - Installation	3.1	4.0	7.1
Storage Installation	2.2	2.9	5.1

NAVIGANT

RESULTS: ENERGY EFFICIENCY

EE job-years created per $1 million capital invested per the calculator approach:

Occupation	Direct Job-Years Created per $1 Million Invested	Indirect and Induced Jobs Created per $1 Million Invested	Total Job-Years Created from $1 Million Invested
Energy Efficiency			
Residential (Single and Multifamily)			
Lighting	7.7	10.0	17.7
Home Energy Solutions (HES) - Audits	7.8	10.2	18.0
HES - Weatherization & HVAC	5.6	7.3	12.9
Gas Conversion	5.6	7.3	12.9
Commercial[1]			
Small Business (e.g., Small Business Energy Advantage)	6.2	8.0	14.2
Large Commercial and Industrial (e.g., C-PACE)	5.6	7.3	12.9

[1]*The municipalities, universities, schools, and hospitals (MUSH) market is included in Commercial.*

NAVIGANT

METHODOLOGY

The two key inputs to calculate job-years created for each RE and EE job type are labor allocation of total project cost and average wage.

1. **Labor allocation:** The average of the values provided in company interviews and discussions with SMEs (particularly for wind and storage) was used.
2. **Average wage:** The wage for each of the four job types analyzed by the calculator was taken from the Bureau of Labor Statistics, or BLS, (CT, 2015) for the most similar occupation titles.

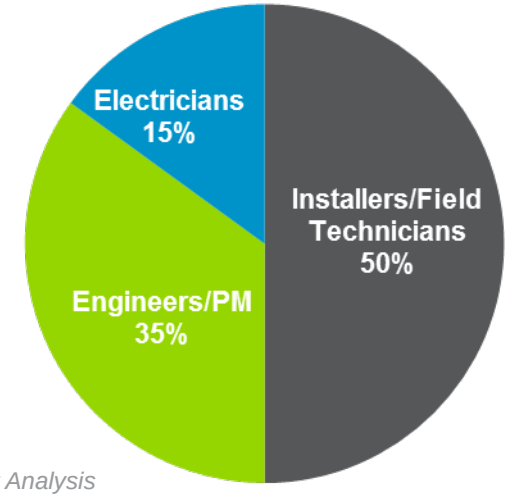
Job Type for Calculator	BLS Occupation Code*	BLS Occupation Title*	BLS Wage CT*	BLS Wage MA**	CT Wage vs. MA
Manufacturing	51-0000	Production occupations	$41,730	$39,500	6%
Installers/Field Technicians	47-2231	Solar photovoltaic installers	$37,270	$43,860	-15%
Electricians	47-2111	Electricians	$55,750	$64,790	-14%
Engineers/PM/R&D	17-2141	Mechanical engineers	$84,520	$91,270	-11%

*May 2015 State Occupational Employment and Wage Estimates Connecticut http://www.bls.gov/oes/current/oes_ct.htm
**May 2015 State Occupational Employment and Wage Estimates Massachusetts http://www.bls.gov/oes/current/oes_ma.htm

METHODOLOGY

3. A **weighted-average wage** was then calculated for each RE and EE offering by multiplying the BLS wages by the job classification breakdown, which was collected through interviews and internal research/experts.
   - The job classification breakdown used for residential solar is provided in the pie chart.
   - The job classification breakdowns used for all other technologies are provided in the table.

Residential Solar Employee Breakdown by Job Type (Average 36 Total Employees)



Source: Navigant Analysis

Employee Breakdown by Job Type*

Technology	Inst.	Elec.	Eng.
Commercial Solar	60%	15%	25%
Fuel Cell	60%	0%	40%
Wind	40%	20%	40%
EV Charging Stations	50%	30%	20%
Storage	25%	5%	70%
Lighting	80%	20%	0%
Small Business Energy Advantage (SBEA)	70%	15%	15%
Large C&I	50%	25%	25%

*Employee breakdowns were determined based on information collected in interviews, as well as with available internal research for the technologies included in this study.

ASSUMPTIONS

The calculator primarily determines job-years per investment for installation- and manufacturing-type labor.

- Distribution/supply work is considered **indirect.**
- Subcontracted work is considered **indirect.**
- **Assumed** 20% for company overhead (SG&A) costs (including jobs) and margin (%).
- The wages **included** are calculated as a weighted average of four different job classifications:
  - Installers/Field Technicians
  - Electricians
  - Engineers/Project Managers/R&D
  - Manufacturing
- **Excluded** from the weighted average wage are the following job types:
  - Administrative and executive
  - O&M
  - Finance and accounting
  - Sales and marketing

NOTES

Some assumptions were made and included as notes within the calculator to clarify key variables and inputs to job-year calculation.

- Job-year final values are representative of the **2015-2016** market in Connecticut.
- Company Overhead and Margin (C) is **assumed to be 20%** and accounts for jobs related to sales, marketing, management, and other overhead jobs and expenses.
- **Labor** (D) is the percentage of the project cost that is used to pay installers, electricians, project managers and engineers.
- Non-Labor (E) is the percentage of the project cost that is used to cover **all other project expenses**, including materials and non-labor soft costs.
- Weighted Average Wage (F) is distributed among **installers, electricians, and PM/engineers** based on wages in Connecticut as reported by the U.S. Department of Labor as of May 2015.
- The weight for each job type is based on research and/or interview feedback for employee breakdowns for that field/technology.
- Total Direct Job-Years Created from Capital Invested (H) is the **total number of installer, electrician, and PM/engineering jobs created for 1 year.**
- Total Indirect and Induced Job-Years (J) is calculated from **DECD inputs.**

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OVERVIEW

Overall, this analysis estimates Connecticut has 5,300 direct jobs in the product development and manufacturing and project development and deployment segments of the RE/EE value chain.

OVERALL

- 5,300 direct RE/EE jobs
- Direct RE/EE jobs account for 0.31% out of a workforce of 1.7 million[1]

RENEWABLE ENERGY (RE)

- 12 companies interviewed, 17 researched, representing ~60% of the market
- 2,500 direct jobs
- Primarily solar and fuel cell jobs

ENERGY EFFICIENCY (EE)

- 10 key companies interviewed, 20 researched, representing ~30% of the market
- 2,800 direct jobs
- Primarily jobs in the residential and C&I market

Note: Indirect and induced jobs can be calculated using a multiplier of 1.3 for all jobs (DECD).

[1]Connecticut Department of Labor, Nonfarm Employment/Residents Employed as of April 2016 http://www1.ctdol.state.ct.us/lmi/ctnonfarmemployment.asp.

RESULTS: RENEWABLE ENERGY

Employment in the solar industry has grown by approximately 30% since 2010 to become the largest RE industry for jobs in Connecticut.

FAST FACTS

- The total number of direct jobs for the RE industry in 2016 is ~2,500.
  - In 2010, the total number of RE jobs was ~1,700.
- 78% of the total fuel cell industry identified.
  - Leading employers include Doosan Group and FuelCell Energy.
- 68% of the total solar industry identified.
  - Biggest contributors include SolarCity and Trinity Solar.
- 26 RE companies identified: 9 companies interviewed, 17 companies researched in detail.
- Of ~2,500 direct jobs:
  - 44% products
  - 56% services

KEY FINDINGS

- The majority of RE jobs are split between the solar and fuel cell industries, with other RE technologies making up the remaining 6% of RE industry jobs.
- Installation and engineering jobs account for the largest job type at solar companies.
- Manufacturing and engineering jobs account for the largest job type at fuel cells companies.
- The majority of solar employees in Connecticut focus on the residential market.

RESULTS: ENERGY EFFICIENCY

Overall employment in the EE industry has remained relatively constant, experiencing most job growth in the residential customer market.

FAST FACTS

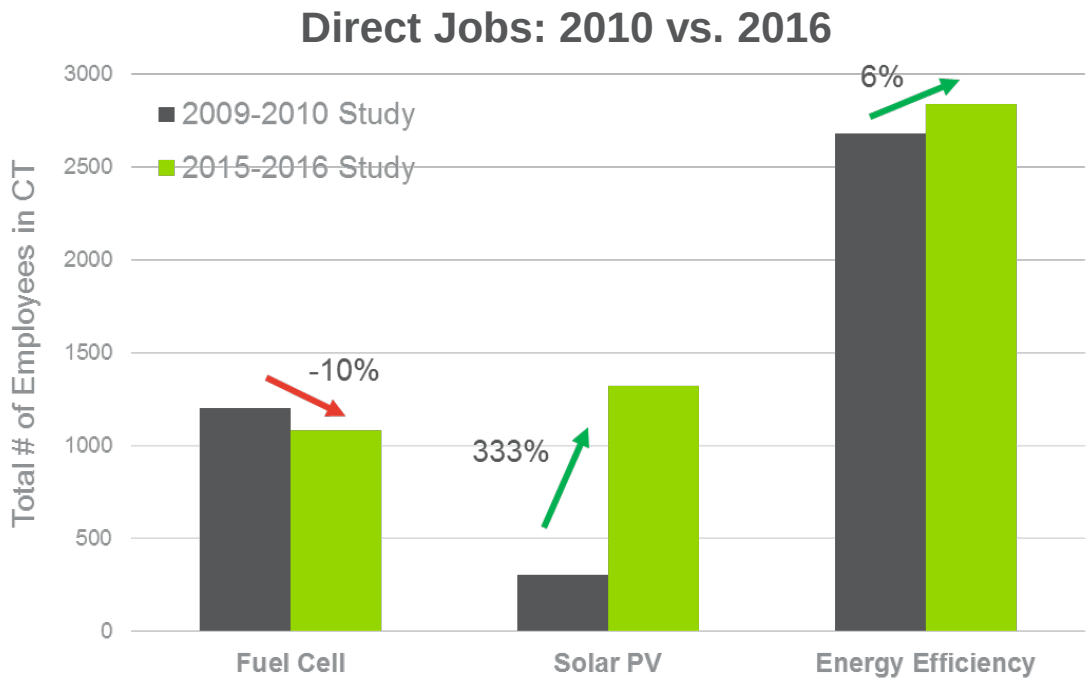
- The total number of direct jobs for the EE industry in 2016 is ~2,800.
  - In 2010, the total number of EE jobs was ~2,700.
- 28% of the residential EE industry identified.
  - Biggest contributors include Competitive Resources and Energy Efficiencies Solutions.
- 27 EE companies identified: 7 companies interviewed, 20 companies researched in detail
- Of ~2,800 direct jobs:
  - 23% products
  - 74% services
  - 3% utility

KEY FINDINGS

- EE technologies mainly included lighting, HVAC, and building envelope, with the majority of companies participating in multiple technologies.
- Installation jobs account for the majority of roles in EE.
- Most EE jobs are focused on the residential and C&I customer markets, with the remaining focused on retail and utility.
  - The average number of employees at C&I companies is 90-120 vs. 10-40 at residential companies.
- Percentage of total EE employees participating in the C&I and retail markets was based off the percentage from the 2010 study.

KEY FINDINGS

The number of direct solar industry jobs in Connecticut is more than 4 times greater than it was 5 years ago, while fuel cell and EE employment numbers have stayed relatively the same.



Source: Navigant Analysis

Note: The methodologies differ between this and the previous study; therefore, the results may not be 1-to-1 comparable. For example, not as many commercial EE companies were directly identified and interviewed in this study, so other sources were used to estimate the number of commercial EE companies and jobs.

INDUSTRY REVIEW

The top 10 RE/EE employers represent approximately 50% of total direct jobs in 2010 and 2016, but there has been significant turnover, which is evident in the variances between the lists below.

2010 Top 10 RE/EE Employers*
United Technologies Corp. (UTC)
FuelCell Energy, Inc.
Sensor Switch
Schuco USA
US Insulation Corp.
Home Depot
Trane
Noble Environmental Power
Alliance Energy Solutions (AES)
Wal-Mart

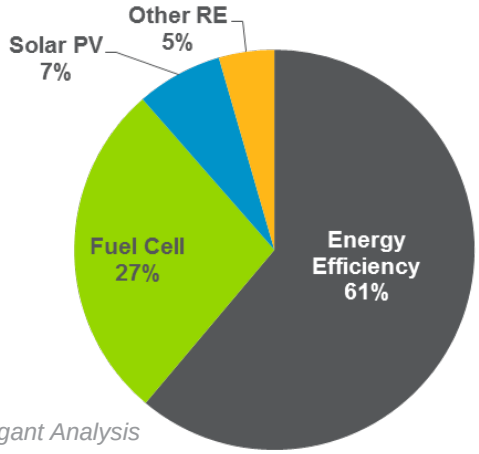
2016 Top 10 RE/EE Employers*
FuelCell Energy, Inc.
SolarCity
Doosan Fuel Cell America, Inc.
Trane
EMCOR
Home Depot
Greenskies Renewable Energy
CED Greentech
Trinity Solar
Competitive Resources

**Utility jobs excluded.*

INDUSTRY REVIEW

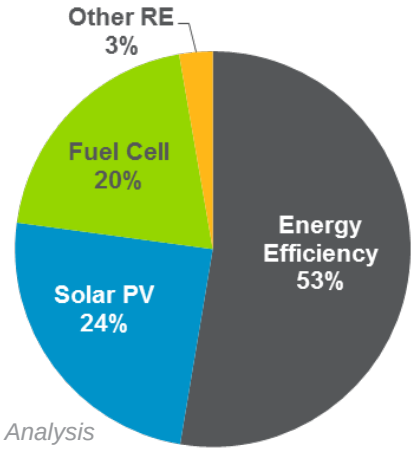
Parallel to the growth of the solar industry, employment in this market has experienced the greatest increase among technologies.

RE + EE Jobs by Technology: 2010
4,500 Jobs



Source: Navigant Analysis

RE + EE Jobs by Technology: 2016
5,300 Jobs

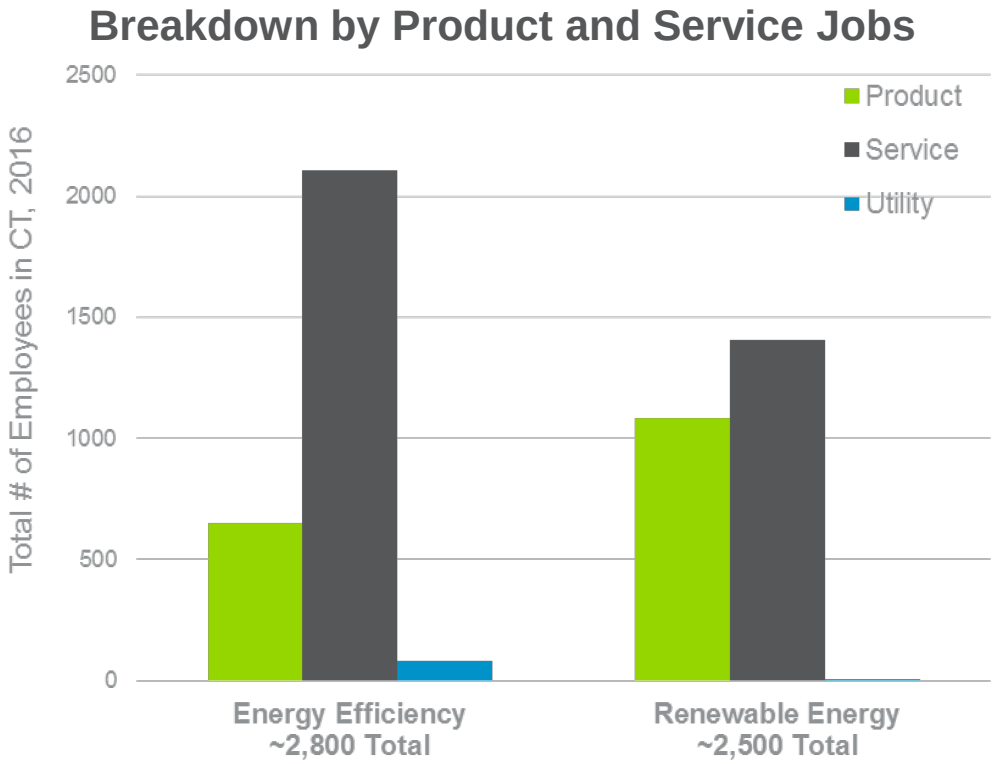


Source: Navigant Analysis

- The methodologies differ between this and the previous study; therefore, the results may not be 1-to-1 comparable.
- The decrease in employment in the fuel cell industry was related to the bankruptcy of UTC Power in 2013 following acquisition by ClearEdge. (Doosan acquired the ClearEdge assets in 2014.). Subsequently, in June 2016, Doosan made some additional layoffs.
- The small increase in EE employment was likely due to the industry increase in available residential program funding and technologies.
- The increase in solar employment was driven by technology cost reduction (i.e., hard and soft costs), public policy, incentives, and access to financing.

BREAKDOWN OF JOBS BY PRODUCT, SERVICE, AND UTILITY

The majority of RE companies and EE companies in Connecticut offer services, with the majority of product jobs belonging to the fuel cell industry.



Source: Navigant Analysis

- For this study, focus is on those parts of the value chain that, for the most part, have jobs in product and service offerings.
  - Jobs were classified as offering either primarily products or primarily services, though companies may offer both.
- Product companies either manufacture and sell to customers or buy from manufacturers and sell to RE/EE installers and developers.
- Service companies provide services such as installation and auditing.
- RE industry service jobs are primarily in solar (~1,300 jobs out of ~1,400 service jobs).
- RE industry jobs at product companies are solely in the fuel cell industry (~1,100 jobs).
- EE industry is mostly service jobs (~2,100 of total EE jobs), with some retail and supply jobs (~600) and minimal utility jobs (~80).

Note: The "Utility" category includes ~80 EE program administration jobs and <10 RE program administration jobs within Eversource, UI, and Norwich Public Utilities (NPU).

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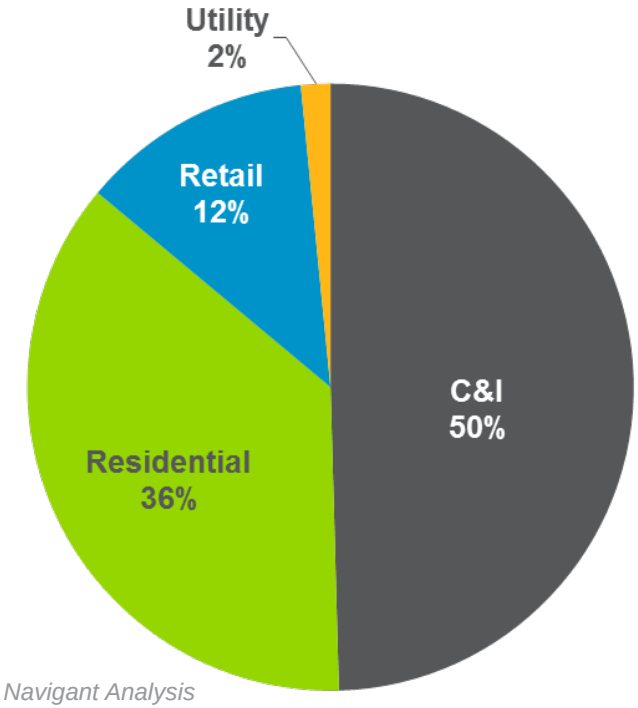
JOBS BY CUSTOMER MARKET

More than half of RE and EE employees studied in the state serve the C&I customer market.

RE + EE Jobs by Customer Market in CT: 2016

5,300 Direct Jobs



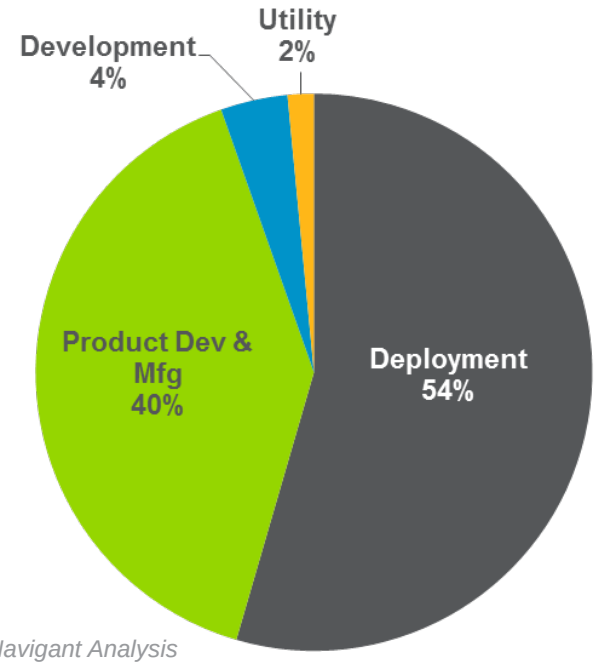
Source: Navigant Analysis

- All fuel cell employees are categorized as working in the C&I customer market, which accounts for approximately 1,100 jobs.
- About 40% of the 2,800-plus EE employees serve the C&I customer market as well.

JOBS BY VALUE CHAIN

More than half of RE and EE employees studied in the state work in the deployment part of the value chain.

RE + EE Jobs by Value Chain in CT: 2016
5,300 Direct Jobs



Source: Navigant Analysis

Note: Direct jobs in deployment and development mostly include installer and engineer job types.

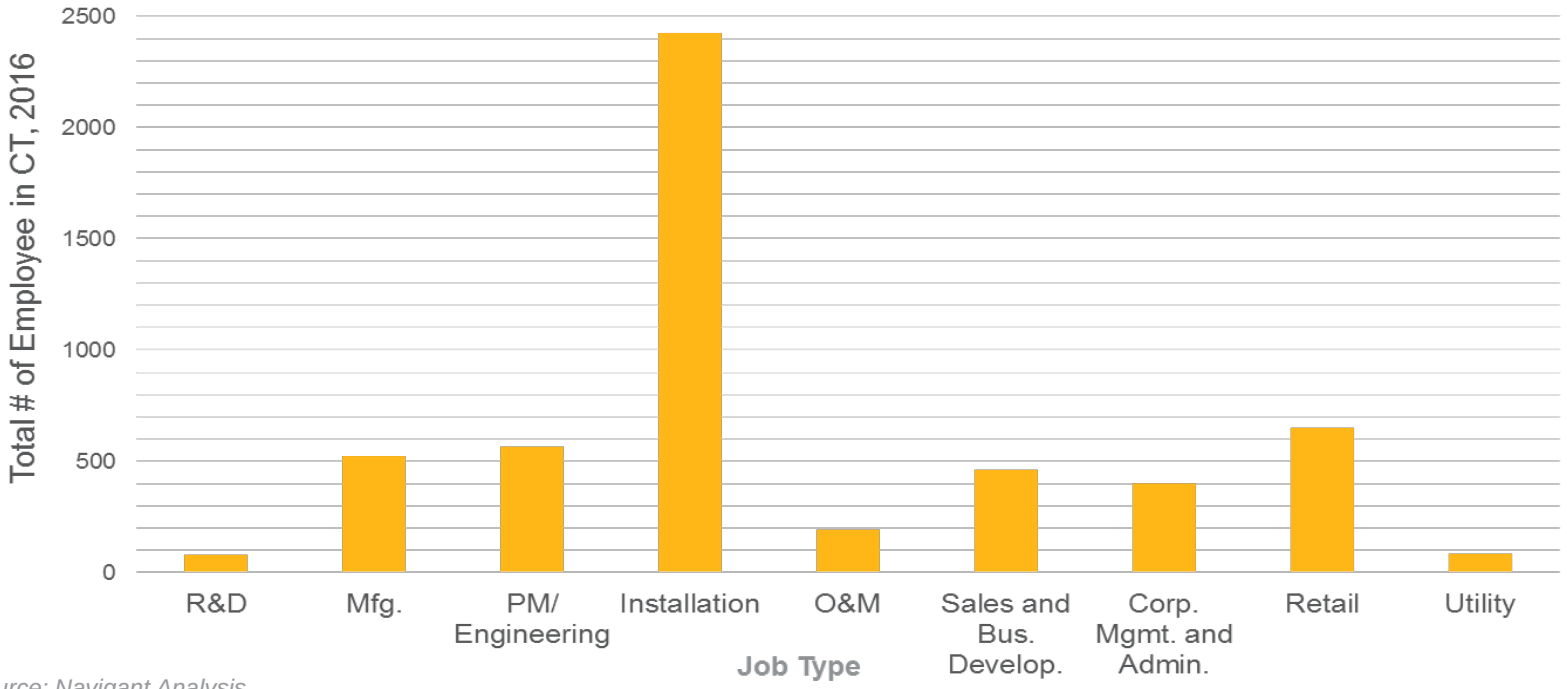
- Navigant specifies the difference between deployment and development as companies in deployment employ their own installers, while project developers subcontract the installation.
- Solar and other RE technologies (apart from fuel cells) account for the majority of the deployment and development jobs.
- All fuel cell employees and the retail and supply portion of the EE industry make up the product development and manufacturing percentage.

JOBS BY JOB TYPE

Most RE and EE employees studied in the state working within the manufacturing and deployment segments have installation jobs, primarily in the solar and EE industries.

RE + EE Jobs by Job Type in CT: 2016

5,300 Direct Jobs



Source: Navigant Analysis

NAVIGANT

APPROACH

The following summarizes the methodology used to collect data through interviews and then extrapolate for statewide current jobs.

1. Calculation of total number of jobs for top companies:

   - Interview top companies:
     - Renewable energy and energy efficiency
     - State leaders for each product of interest
     - Variety of roles along value chain
   - Ask each company for current total number of RE/EE jobs

2. Extrapolation to represent the total market in Connecticut:

   - Determine market share of interviewed and research companies in Connecticut RE/EE industry
     - Feedback from 2010 study was that biggest players were representative of the statewide industry
     - For market segments without interview data, estimate market share based on 2010 study
   - Extrapolate to calculate for non-interviewed companies:

     If interviewed companies had X jobs representing Y% of market share, then all jobs = X / Y%

NOTES

Various sources of public and private data were used to extrapolate the jobs reported in interviews and literature to statewide industry employment.

1. Green Bank and utility-provided data, as well as industry reports and articles, were used to estimate total market size.
   - Publicly available industry reports and internal research were used to estimate the fuel cell market size.
   - Green Bank data was used for the residential solar market size (assuming Green Bank data captures 100% of the residential solar market).
   - Utility Zero Emission Renewable Energy Credit (ZREC) data was used for the commercial solar market size (assuming the top ten installers for small, medium and large commercial projects in the ZREC program represent the commercial solar market).
   - Utility EE data was used for the residential EE market size (assuming utility EE data captures 100% of the residential EE market).
   - Commercial EE and “Other” RE technology market size were based off market share from the 2010 study (limited interviews and data on these players).
2. Jobs reported by companies interviewed or researched were then divided by the market sizes from the first step to calculate statewide industry size in terms of employment.
   - Only full-time employee (FTE) jobs were reported in interviews and research.
   - LinkedIn current employee counts in Connecticut were used for some companies with missing information, and a multiplier of three was applied (derived from companies where employee count was reported in interviews divided by the number on LinkedIn).

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INTERVIEW GUIDE

The interview guide for this study was based off the last study, with questions more directed toward the current economy in Connecticut.

YOUR COMPANY

1. Please tell us a little about yourself and your role in the company.
2. Describe your overall business.
3. Describe your RE/EE business.
   a. Do you offer primarily RE, EE, or a combination?
   b. Do you offer primarily products or services?
   c. To which **renewable or energy efficiency technology** do you must closely associate? See dropdown list **RE (and Other) Products** and **EE Products**
   d. In which area of the value chain does your RE/EE business primarily operate? See dropdown list **Value Chain (High-level)** and **Value Chain (Detailed)**

CUSTOMERS

4. Which market do you primarily serve? See dropdown list **Market Segment**
5. What percentage of RE/EE customers are in CT?

PROJECT ECONOMICS

6. What is the average/median wage for different specialties/job classifications that your company uses for your RE/EE work (provide examples)?
7. What is average project cost?
8. What is the typical split between labor and material as a percent of total project cost?
9. Which RE/EE state-funded programs do you participate in?
10. What percentage of your project costs are funded by upfront state incentives (e.g., Connecticut Energy Efficiency Fund, Green Bank)?
11. Of these project economics inputs you provided, what are the market conditions that could trigger them to change?

CURRENT JOBS

11. How many FTE (full-time equivalent) employees did you have working on RE/EE jobs in Connecticut at the end of 2015?
12. What portion of your Connecticut RE/EE employees are in each value chain segment? See dropdown list **Value Chain (High-level)** and **Value Chain (Detailed)**

APPENDIX

INTERVIEW GUIDE

The following list of dropdowns were used with the interview questions and allowed respondents to identify all that applied.

RE Products	EE Products	Market Segment	Value Chain (High-Level)	Value Chain (Detailed)
Fuel Cell	HVAC	Residential	Mfg. Line Construction	R&D
Solar PV	Lighting	Small Business	Product Dev. & Mfg.	Raw Material Supplier
Solar Thermal	Appliances	Large C&I	Deployment	Component Mfg.
Wind	Water Heating	MUSH	O&M	Assembly & Test
Geothermal	Commercial Refrigeration	Utility/IPP	Generation and REC	RE Deploy: Distributor
Hydro	Pumps, Motors, Drives	Retail	Off-Taker	RE Deploy: Developer
Hydrogen	Building Envelope	Other		RE Deploy: System Integrator
Biomass	Demand Response	Multiple		RE Deploy: Installer
Anaerobic Digestion	Other			RE Deploy: Project Investor
CHP	Multiple			RE Deploy: Business Support
Microgrids				EE Deploy: Supply & Wholesale
Storage				EE Deploy: Retail & Distribution
Grid Infrastructure				EE Deploy: Delivery & Installation
AFV Infrastructure				EE Deploy: Marketing & Outreach
Other				EE Deploy: Evaluation & Consulting
Multiple				EE Deploy: Business Support
				In-House O&M
				Contract O&M
				Finance & Ownership

NAVIGANT

APPENDIX

RE CALCULATOR RESULTS (DETAILED)

NAVIGANT

Occupation	Capital Invested	Company Overhead (SG&A) and Margin (%)	Project Cost After Overhead (SG&A) and Margin	Labor (% of Project Cost)	Non-Labor (% of Project Cost)	Weighted Average Wage	Fully Burdened Employee Cost	Direct Job Years Created per Million Dollars Invested	Indirect & Induced Jobs Multiplier	Indirect & Induced Jobs Created per Million Dollars Invested	Total Job-Years Created from Capital Invested
Renewable Energy	A	B	C=A*(1-B)	D	E=100%-D	F	G=F*1.3	H=C*(D/G)	I	J=H*I	K=H+J
Fuel Cell											
Fuel Cell Manufacturing	$ 1,000,000	20%	$ 800,000	40%	60%	$ 50,000	$ 65,000	4.9	1.3	6.4	**11.3**
Fuel Cell R&D/Engineering	$ 1,000,000	20%	$ 800,000	40%	60%	$ 85,000	$ 110,500	2.9	1.3	3.8	**6.7**
Solar PV											
Solar PV Installation - Residential	$ 1,000,000	20%	$ 800,000	35%	65%	$ 55,000	$ 71,500	3.9	1.3	5.1	**9.0**
Solar PV Installation - Non-Residential	$ 1,000,000	20%	$ 800,000	25%	75%	$ 50,000	$ 65,000	3.1	1.3	4.0	**7.1**
Renewable Thermal Technologies											
Ductless Split Heat Pump	$ 1,000,000	20%	$ 800,000	60%	40%	$ 55,000	$ 71,500	6.7	1.3	8.7	**15.4**
Geothermal Installation	$ 1,000,000	20%	$ 800,000	60%	40%	$ 55,000	$ 71,500	6.7	1.3	8.7	**15.4**
Solar Thermal Installation	$ 1,000,000	20%	$ 800,000	50%	50%	$ 55,000	$ 71,500	5.6	1.3	7.3	**12.9**
Other											
Wind Installation	$ 1,000,000	20%	$ 800,000	60%	40%	$ 60,000	$ 78,000	6.2	1.3	8.0	**14.2**
Hydro Installation	$ 1,000,000	20%	$ 800,000	60%	40%	$ 60,000	$ 78,000	6.2	1.3	8.0	**14.2**
EV Charging Stations - Installation	$ 1,000,000	20%	$ 800,000	25%	75%	$ 50,000	$ 65,000	3.1	1.3	4.0	**7.1**
Storage Installation	$ 1,000,000	20%	$ 800,000	20%	80%	$ 55,000	$ 71,500	2.2	1.3	2.9	**5.1**

APPENDIX

EE CALCULATOR RESULTS (DETAILED)

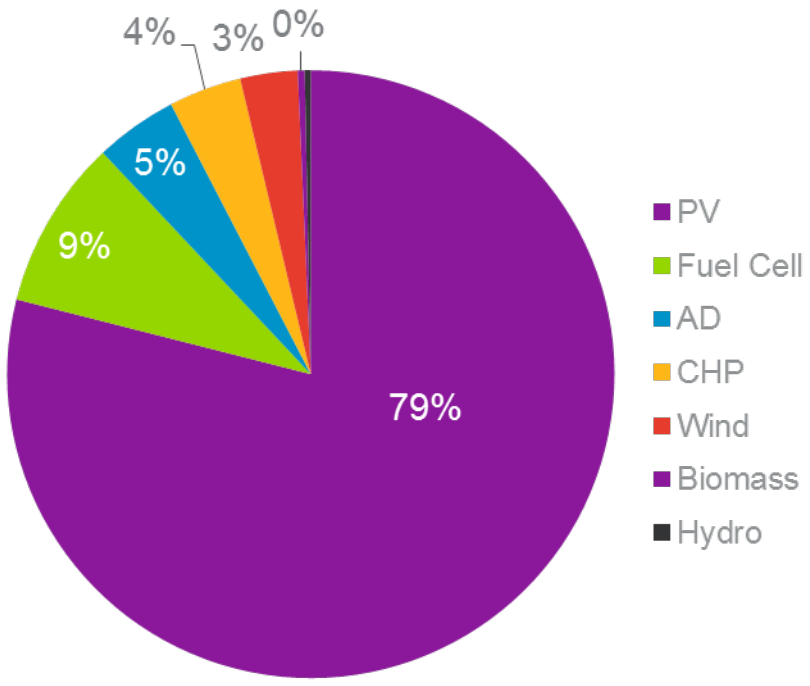
NAVIGANT

Occupation	Capital Invested	Company Overhead (SG&A) and Margin (%)	Project Cost After Overhead (SG&A) and Margin	Labor (% of Project Cost)	Non-Labor (% of Project Cost)	Weighted Average Wage	Fully Burdened Employee Cost	Direct Job Years Created per Million Dollars Invested	Indirect & Induced Jobs Multiplier	Indirect & Induced Jobs Created per Million Dollars Invested	Total Job-Years Created from Capital Invested
Energy Efficiency	A	B	C=A*(1-B)	D	E=100%-D	F	G=F*1.3	H=C*(D/G)	I	J=H*I	K=H+J
Residential (Single and Multi-Family)											
Lighting	$ 1,000,000	20%	$ 800,000	50%	50%	$ 40,000	$ 52,000	7.7	1.3	10.0	**17.7**
Home Energy Solutions (HES) - Audits	$ 1,000,000	20%	$ 800,000	70%	30%	$ 55,000	$ 71,500	7.8	1.3	10.2	**18.0**
HES - Weatherization & HVAC	$ 1,000,000	20%	$ 800,000	50%	50%	$ 55,000	$ 71,500	5.6	1.3	7.3	**12.9**
Gas Conversion	$ 1,000,000	20%	$ 800,000	50%	50%	$ 55,000	$ 71,500	5.6	1.3	7.3	**12.9**
Commercial											
Small Business Energy Advantage	$ 1,000,000	20%	$ 800,000	50%	50%	$ 50,000	$ 65,000	6.2	1.3	8.0	**14.2**
Large Commerical and Industrial	$ 1,000,000	20%	$ 800,000	50%	50%	$ 55,000	$ 71,500	5.6	1.3	7.3	**12.9**

INTERVIEW TARGETS

Because solar makes up 79% of the RE industry in Connecticut based on power capacity (kW), it was important to reach out to solar companies.

Market Share of RE Companies: 2011-2015
165 MW



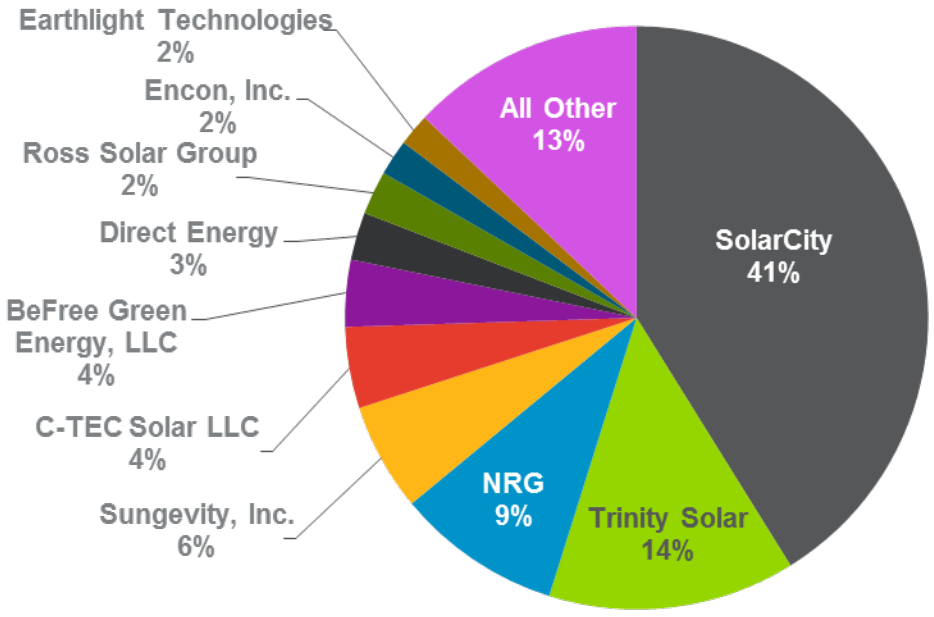
Source: Connecticut Green Bank data, Navigant analysis

- Solar makes up 79% of the RE market in Connecticut based on total number of kilowatts.
- Solar makes up 99.9% of the RE market in Connecticut based on the 15,042 projects reported by the CGB from 2011-2015.
- There are more anaerobic digestion (AD) and combined heat and power (CHP) projects, by count, but more kilowatts from fuel cells.
- The employee-to-kilowatt or employee-to-project count ratio for fuel cell, AD, and wind projects follows a drastically different structure than solar due to average project capacity and technology specifics.

RE INTERVIEW TARGETS: SOLAR

The list of first priority solar companies to contact/research was created based on market share data provided by the Green Bank.

Market Share of Solar Companies: 2015
6,122 Projects



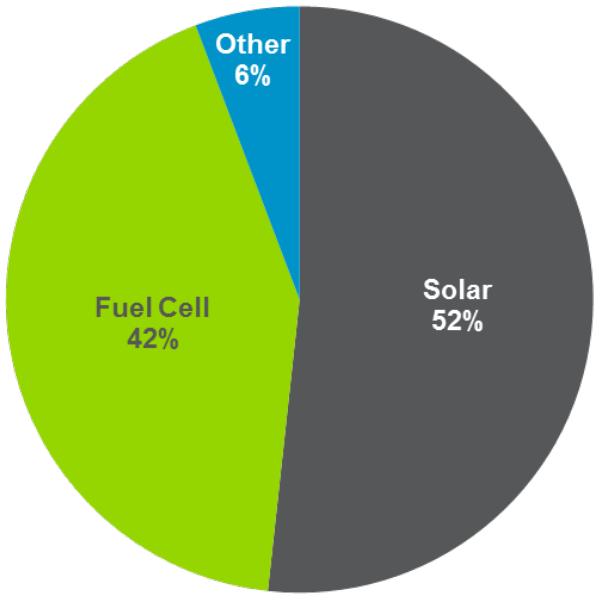
Source: Connecticut Green Bank data, Navigant analysis

- SolarCity holds the greatest share of the solar market in Connecticut based on kilowatts and number of projects.
- The top 10 solar contributors were part of the first priority RE companies to interview.
- For those companies Navigant was able to get an employee count for, this market share was used for extrapolating statewide.
- It was assumed that the Connecticut Green Bank database covered 100% of the residential solar market.
  - Utility data for the top ten installers for small, medium and large commercial projects in the ZREC program was used to represent the commercial market

RE JOBS ANALYSIS

The majority of RE jobs are split between the solar and fuel cell industries, with other RE technologies making up the remaining 6% of RE industry jobs.

RE Jobs by Technology in Connecticut
2,500 Direct Jobs



Source: Navigant Analysis

- Solar jobs account for 52% of the overall RE industry (~1,300 jobs).
  - In 2010, only 18% of RE jobs were solar.
- Fuel cell jobs account for 42% of the RE industry (~1,100 jobs).
  - In 2010, fuel cells account for 71% of the total RE jobs.
- The "Other" category includes solar thermal, geothermal, wind, small hydro, EV, energy storage, biomass, and hydrogen.[1]

[1]*Few companies from the "Other" category were interviewed for this study given the focus on current leading technologies; therefore, the total percentage of these technologies was generally assumed to be the same as the 2010 study.*

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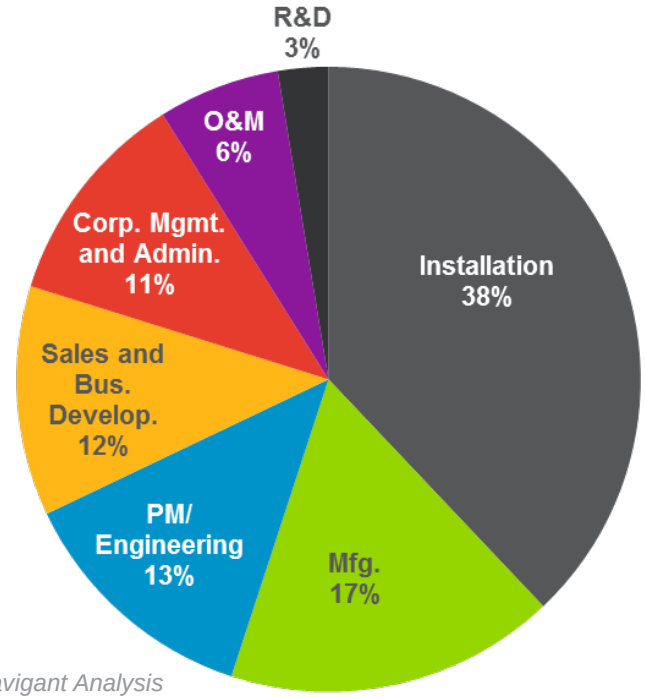
RE JOBS ANALYSIS

Installation-type jobs make up the majority of RE labor, mainly due to the large size of the solar industry in Connecticut.

RE Jobs by Type in Connecticut
2,500 Direct Jobs



Source: Navigant Analysis

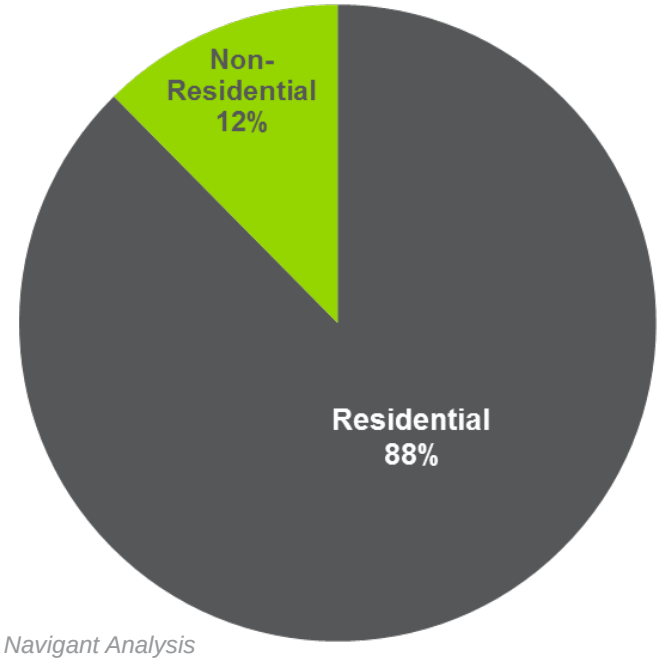
- Installation jobs account for the largest job type at solar companies.
- Manufacturing and engineering jobs account for the largest job type at fuel cell companies.
  - R&D also makes up a portion of the fuel cell jobs but does not appear in any other technology industry in this study.
- Sales and business development-type jobs made up a larger portion at solar companies as compared to fuel cells.
- Corporate, management, and administrative-type jobs were noted as a portion of employees across all technologies.

RE JOBS ANALYSIS

Similar to the trend across the country, residential is the primary customer market for solar in Connecticut.

Solar Jobs by Customer Market in Connecticut

1,300 Direct Jobs



Source: Navigant Analysis

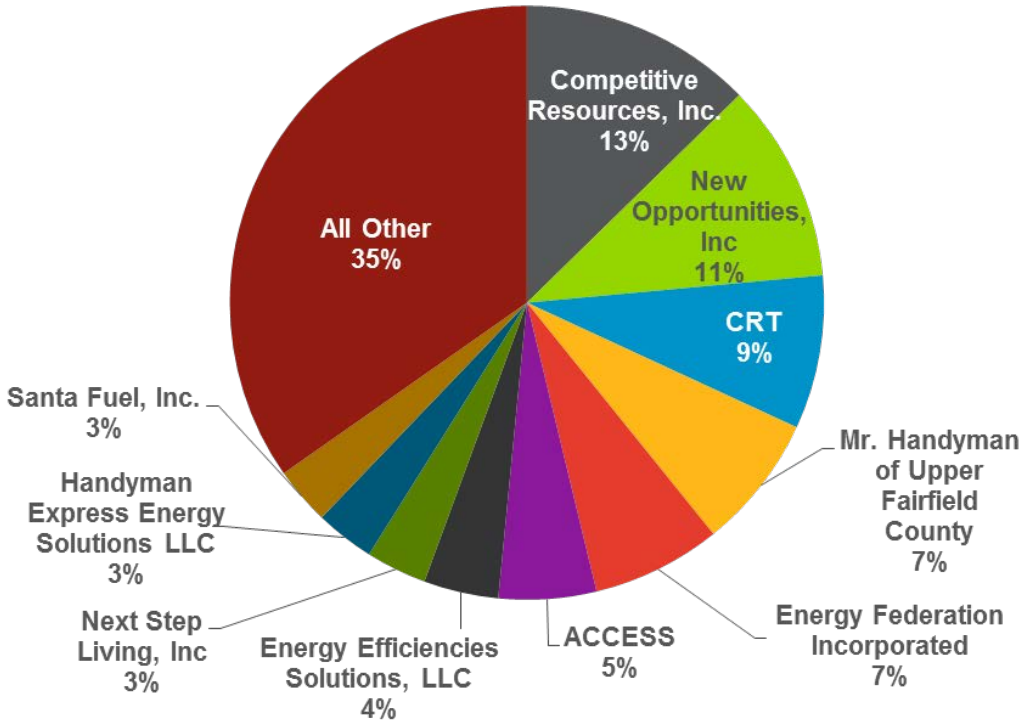
- The majority of solar employees in Connecticut focus on the residential customer market.
- Some companies reported to work in both residential and non-residential; however, in those cases, the majority of employees focused on residential.
- The non-residential market includes:
  - Small business
  - Large C&I
  - MUSH
  - There were few, if any, jobs associated with utility-scale solar

EE INTERVIEW TARGETS

The EE market is highly fragmented, with many companies operating; utility data was used to identify the largest players.

Market Share of EE Companies: 2015

49,210 Projects



Source: Eversource data, Navigant analysis

- Market leaders vary greatly based on annual power capacity (in MMBtu[1]) and number of projects in the EE market due to different technology offerings.
- Unlike RE, the top EE leaders are closer in market share to each other and to all others.
- For this reason, although just as many EE companies were interviewed and researched as RE companies, a smaller portion of the market was captured—approximately 30%.

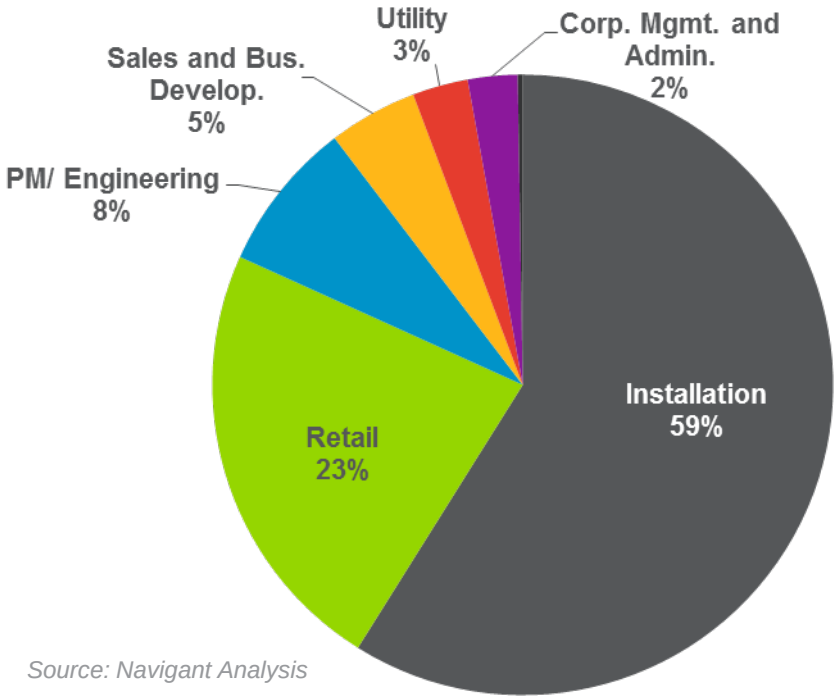
[1]*million British Thermal Units*

NAVIGANT

EE JOBS ANALYSIS

Installation-type jobs make up 59% of EE-related labor, followed by 23% retail, across all EE technologies.

EE Jobs by Type in Connecticut
2,800 Direct Jobs



Source: Navigant Analysis

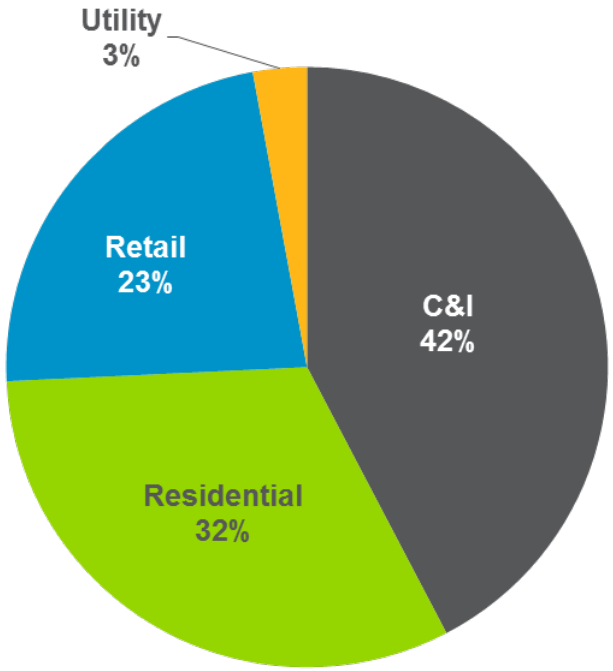
- Installation jobs account for the majority of roles in EE.
- Job titles included under installation varied in skill level and trade:
  - Electricians (master and apprentice)
  - Plumbers and other HVAC-specific technicians
  - Installers of appliances, windows, and insulation
- The retail channel is more important to EE relative to RE.
- Corporate, management, and administrative-type jobs and sales and business development-type jobs account for only a small portion of EE-related labor.

EE JOBS ANALYSIS

Most EE jobs are focused on the residential and C&I customer markets, with the remaining focused on retail and only a few on utility.

EE Jobs by Customer Market in Connecticut

2,800 Direct Jobs



Source: Navigant Analysis

- The majority of EE employees in Connecticut focus on the residential and C&I customer markets.
  - Though there are less EE companies focused on C&I in Connecticut, they hire a larger amount of employees per company.
- The non-residential market includes small business, C&I, and MUSH customers.
- A significant portion of the residential market serves multifamily customers.
- The retail segment includes retail and wholesale suppliers.
- Jobs in the utility sector only include employees who work primarily on EE-related work, such as supporting EE programs and incentives across markets.

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Department of Economic and Community Development

Connecticut
still revolutionary

MEMO

To: Bryan Garcia, President and CEO, Connecticut Green Bank

Cc: Bart Kollen, Deputy Commissioner, DECD

From: Nandika Prakash, Ph.D., Senior Economist, DECD

Re: Request by the Connecticut Green Bank on September 13, 2016 for Review and Approval of the 2016 Clean Energy Jobs in Connecticut Study, Calculator, and Societal Perspective/Evaluation Framework Draft Fact Sheet

Date: October 14, 2016

Background

The Connecticut Green Bank ("Green Bank"), in conjunction with the Department of Economic and Community Development ("DECD"), engaged Navigant Consulting to conduct a study with regard to the economic impact (i.e., estimate of direct, indirect and induced job-years created) from the investment in clean energy deployment in Connecticut. The Green Bank assembled the following materials for DECD's review and approval:

- Memo (September 13, 2016);
- Clean Energy Jobs in Connecticut – Final Report by Navigant Consulting (August 10, 2016);
- Clean Energy Jobs in Connecticut – Final Calculator by Navigant Consulting (August 10, 2016); and
- Evaluation Framework: Societal Perspective (Economic Development) – Draft Fact Sheet by the Green Bank.

Review

The Connecticut Green Bank wants to estimate the extent to which investments in clean energy create value from a societal perspective as it relates to the economic development of the state. For Green Bank programs this will be measured as the relationship between investments and associated direct, indirect and induced jobs created. In coordination with DECD, the Green Bank contracted Navigant Consulting to refresh the investment-jobs portion of its Connecticut Renewable Energy and Energy Efficiency Economy Baseline Study (2009, 2010) by providing an updated calculator tool to estimate the economic development benefits from clean energy investments in Connecticut, as reflected in job-years created. The updated study focused on jobs associated with the investment area of the Connecticut Green Bank: renewable energy (RE) and energy efficiency (EE) project development and deployment, and product development and manufacturing. The final value output in the jobs calculator is job-years created per $1 million invested in clean

energy projects in Connecticut. DECD provided the indirect and induced jobs multiplier, obtained from simulations run using DECD's Connecticut REMI model, to use in the updated calculator.

Findings

DECD reviewed The Green Bank's Final Report, Final Calculator and the Fact Sheet. Our view is that the study is focused and illustrative and the estimates provided by the calculator are reasonable. DECD approves the report, the jobs calculator and the summary fact sheet.

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T 860.563.0015
ctgreenbank.com

CONNECTICUT GREEN BANK

Memo

To: The Audit, Compliance and Governance Committee of the Connecticut Green Bank

From: George Bellas, Vice President Finance and Administration

CC: Bryan Garcia, Brian Farnen, Eric Shrago

Date: October 21, 2016

Re: Updated Banking Resolutions

I am requesting that the Audit, Compliance and Governance Committee recommend that the Green Bank Board of Directors approve the updated banking resolutions set forth below. This revised set of resolutions will authorize the President and CEO of the Connecticut Green Bank and myself to set up bank accounts when a need to do so arises pursuant to an applicable Board authorization and/or consistent with our governance documents such as the creation of a special purpose entity or a loan program that requires the establishment of a bank account.

RESOLUTION

RESOLVED, that Audit, Compliance and Governance Committee (the "Committee") recommend that for any FDIC insured bank requires a particular form of resolution of the Connecticut Green Bank ("Green Bank") Board of Directors for opening a bank account or for other bank account matters, the President and CEO of the Green Bank is authorized to approve the form of such resolutions after review and approval by the General Counsel of the Green Bank,

RESOLVED, the Committee recommends that upon such approval, each resolution is adopted and the Secretary or Assistant Secretary as applicable is authorized to certify the adoption of all such resolutions.

RESOLVED, that the Committee recommends that the Board of Directors authorize the President and CEO to open such bank accounts as are necessary or desirable in the ordinary course of business for the Green Bank and any affiliates it controls that are in existence as of the date of this resolution or to be created by the Board of Directors including but not limited to:

- CEFIA Holdings LLC
- CT Solar Loan I LLC

- CEFIA Services Inc.
- CT Solar Lease 2 LLC
- CGB Meriden Hydro LLC

RESOLVED, that the Committee recommends that the Board of Directors authorize the following Green Bank employee positions to draw checks and initiate and release wire or ACH transfers from such accounts in accordance with the established signatory authority as stated in the Green Bank internal control procedures manual:

- President and CEO
- Vice President Finance and Administration
- Executive Vice President and Chief Investment Officer
- Vice President, Commercial and Industrial Programs
- Managing Director, Statutory and Infrastructure Programs
- Director of Operations

RESOLVED, that the Committee recommends that the Board of Directors affirm that as of the date of this resolution these positions are occupied by the following individuals:

- President and CEO - Bryan Garcia
- Vice President Finance and Administration - George Bellas
- Executive Vice President and Chief Investment Officer – Roberto Hunter
- Vice President, Commercial and Industrial Programs – Michael Dykes
- Managing Director, Statutory and Infrastructure Programs – Dale Hedman
- Director of Operations – Eric Shrago
- Secretary – Matthew Ranelli