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

CONNECTICUT
GREEN BANK

May 18, 2016

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

We look forward to our meeting on Wednesday, May 25th at the Connecticut Green Bank in Rocky Hill from 8:30 a.m. to 9:30 a.m. We will discuss the following agenda items:

1. Audit RFP Process;
2. CT SL2 LLC audited financial statements issued May 11, 2016
3. Modification of Internal Control Procedures to reflect the hiring of Eric Shrago, to replace Mackey Dykes;
4. Draft Evaluation Framework;
5. 2016 Legislative and Regulatory Update;
6. FY 2016 Compliance Reporting;
7. Board Member Appointments Ending During FY 2016; and
8. Draft Succession Plan (password is "comp").

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

Wednesday, May 25, 2016
8:30-9:30 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 December 4, 2015 Regular Meeting* – 5 minutes
4. Review Audit RFP Process and Recommendation* – 10 minutes
5. Review CT SL2 LLC audited financial statements issued May 11, 2016** – 5 minutes
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** – 5 minutes
7. Review Draft Evaluation Framework and Recommendation** – 10 minutes
8. 2016 Legislative and Regulatory Update – 10 minutes
9. Discuss FY 2016 Compliance Reporting – 10 minutes
10. Discuss Board Member Appointments Ending During FY 2016 – 5 minutes
11. Discuss Draft Succession Plan – 5 minutes
12. 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/734704261

Or call in using your telephone:
Dial (646) 749-3122
Access Code: 734-704-261

Next Regular Meeting: Wednesday, October 12, 2016 from 8:30-9:30 a.m.

Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT

RESOLUTIONS

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

Wednesday, May 25, 2016
8:30-9:30 a.m.

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

1. Call to order

2. Public Comments – 5 minutes

3. Approve Meeting Minutes for December 4, 2015 Regular Meeting* – 5 minutes

   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* – 5 minutes

   Resolution #2

   RESOLVED, that the Audit, Compliance and Governance Committee hereby recommends to the Board of Directors for approval the proposed Audit RFP Process.
   Second. Discussion. Vote

5. Review CT SL2 LLC audited financial statements issued May 11, 2016* – 5 minutes

   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** – 5 minutes

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.
Second. Discussion. Vote

7. Review Draft Evaluation Framework and Recommendation** – 10 minutes

Resolution #5

RESOLVED, that the Audit, Compliance and Governance Committee hereby recommends to the Board of Directors for approval the proposed draft Evaluation Framework.
Second. Discussion. Vote

8. 2016 Legislative and Regulatory Update – 10 minutes

9. Discuss FY 2016 Compliance Reporting – 10 minutes

10. Discuss Board Member Appointments Ending During FY 2016 – 5 minutes

11. Discuss Draft Succession Plan – 5 minutes

12. 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

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #1

Call to Order

May 25, 2016

Regular Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #2

Public Comments

May 25, 2016

Regular Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #3

Approval of Meeting Minutes of December 4, 2015 (Regular Meeting)

May 25, 2016

Regular Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #4

Discuss Audit RFP Process

May 25, 2016

Regular Meeting

Connecticut Green Bank
Audit RFP Process

*The Green Bank received 3 proposals in response to our RFP for Professional Auditing Services released on April 14, 2016.

*The following 3 firms submitted proposals:

Blum Shapiro

RSM US LLP

Whittlesey & Hadley, P.C.

*An internal team was assembled to review and evaluate the proposals:

Bryan Garcia, President & CEP

Bert Hunter, EVP and Chief Investment Officer

Brian Farnen, Chief Legal Officer

Eric Shrago, Director of Operations

George Bellas, VP Finance

Jane Murphy, Controller

Connecticut Green Bank
Audit RFP Process

*Each proposal was evaluated based on the following criteria:

-Firm Independence

-Firm License to Practice/Peer Review

-Firm Qualifications and Experience

-Similar Engagements

-Fees

-References

-Firm experience with sustainability accounting and reporting

*The evaluation team recommends the firm xxxxxxxxxxxxx to provide professional audit services to the Green Bank for the fiscal years 2016 to 2018.

May 25, 2016
Regular Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #5

Review of CT SL2 LLC Audited Financial Statements Issued May 11, 2016

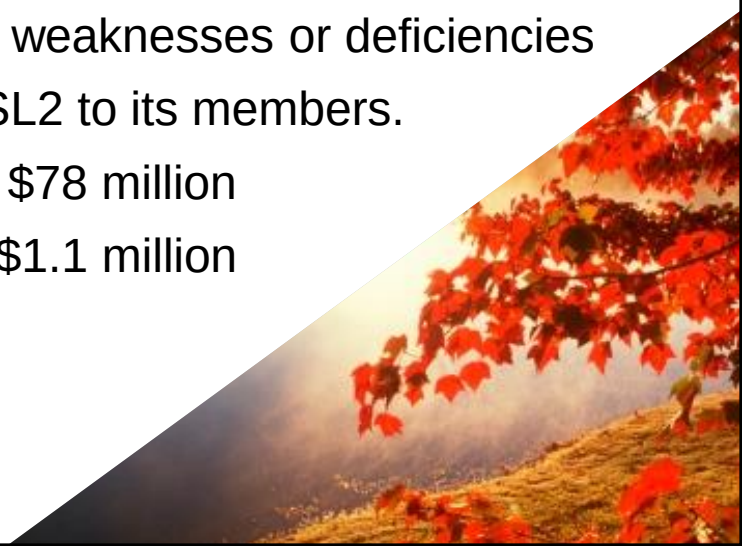
May 25, 2016

Regular Meeting

Connecticut Green Bank

CT SL2 LLC Audited Financial Statements Issued May 11, 2016

* CT Solar Lease 2 LLC engaged the firm Marcum LLP to audit its financial statements for the year ended 12/31/2015 and to provide an Independent Auditors' Report.
* Marcum issued an unqualified report on May 11, 2016 in which it opined that the financial statements for the years ended December 31, 2015 and 2014 were presented fairly in accordance with accounting principals generally accepted in the United States of America.
* Marcum did not report any instances of material weaknesses or deficiencies in the internal accounting control system of CT SL2 to its members.
* CT SL2 assets for the year ended 12/31/15: $78 million
  CT SL2 revenues for the year ended 12/31/15: $1.1 million



CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #6

Modification of Internal Control Procedures CGB 101,CGB102 and CGB103 to reflect the hiring of Eric Shrago to replace Mackey Dykes

May 25, 2016

Regular Meeting

Connecticut Green Bank

Modification of Internal Accounting Control Procedures

* As a result of a change in Green Bank staff, we are requesting that for purposes of approving various types of Green Bank expenditures, vendor invoices and PSA's, Eric Shrago, Director of Operations replace Mackey Dykes, formally VP and COO, currently VP Commercial, Industrial and Institutional Programs in the following internal accounting control procedures:

-CGB101 – Purchasing and Accounts Payable
-CGB 102 – Consulting and Advisory Services
-CGB 103 – Credit Cards

May 25, 2016
Regular Meeting

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #7

Draft Evaluation Framework Review

May 25, 2016

Regular Meeting

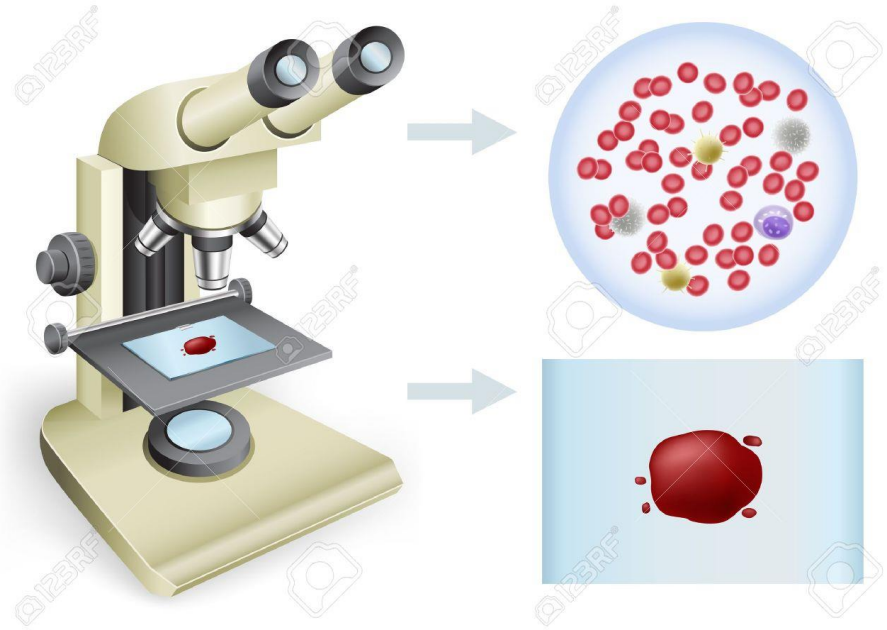
Evaluation Framework Background

- **Qualified Contractors** – in a RFQ issued in August of 2013, the CGB qualified firms and individuals to assist it with program evaluation, measurement and verification – selected team of Opinion Dynamics and Dunsky Energy to assist us in developing an evaluation framework
- **Purpose** – the evaluation framework was developed to assist the CGB in presenting appropriate evaluation approaches to **estimate the impact and benefits** of its programs (i.e., CAFR – Non-Financial Statistics) and to **help it communicate them to key stakeholders**
- **Feedback** – received feedback from the CGB BOD and the utilities (i.e., Eversource Energy and Avangrid) and consultants of the EEB through the Joint Committee of the CGB and EEB

Evaluation Framework
What it Isn't vs. What it Is

CONNECTICUT GREEN BANK

What it Isn't

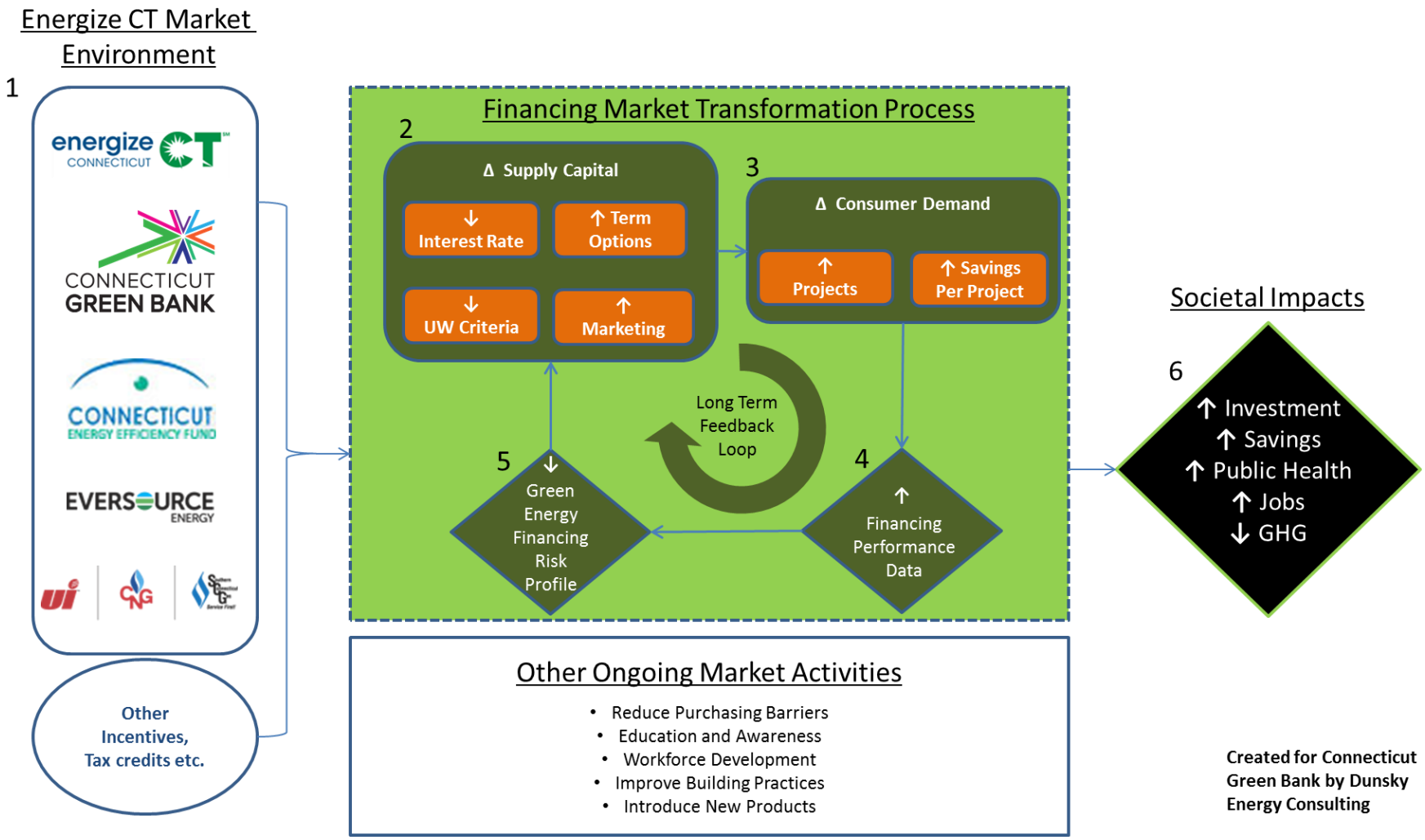


- Microscopic
- Punitive
- Infrequent
- Incentive driven

What it Is

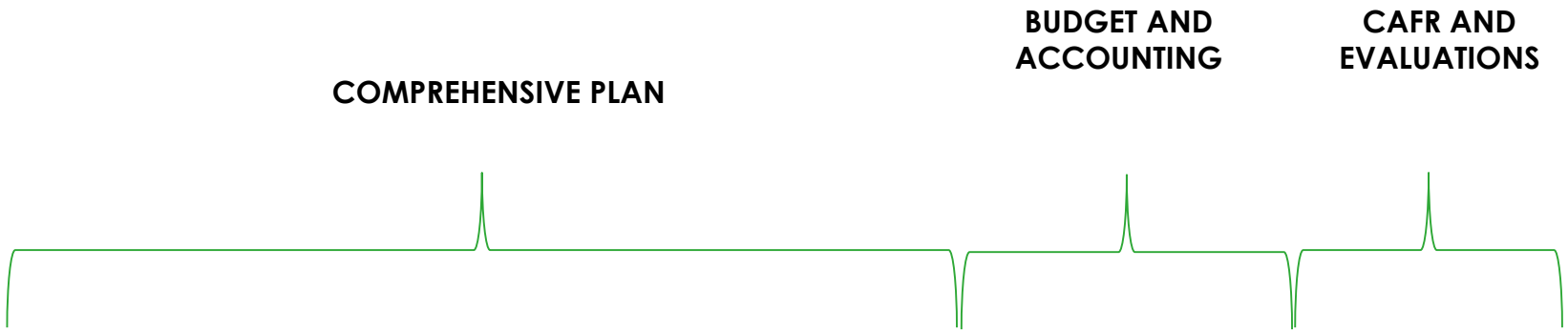
- Macroscopic
- Management
- Ongoing
- Mission driven

Evaluation Framework
Program Logic Model

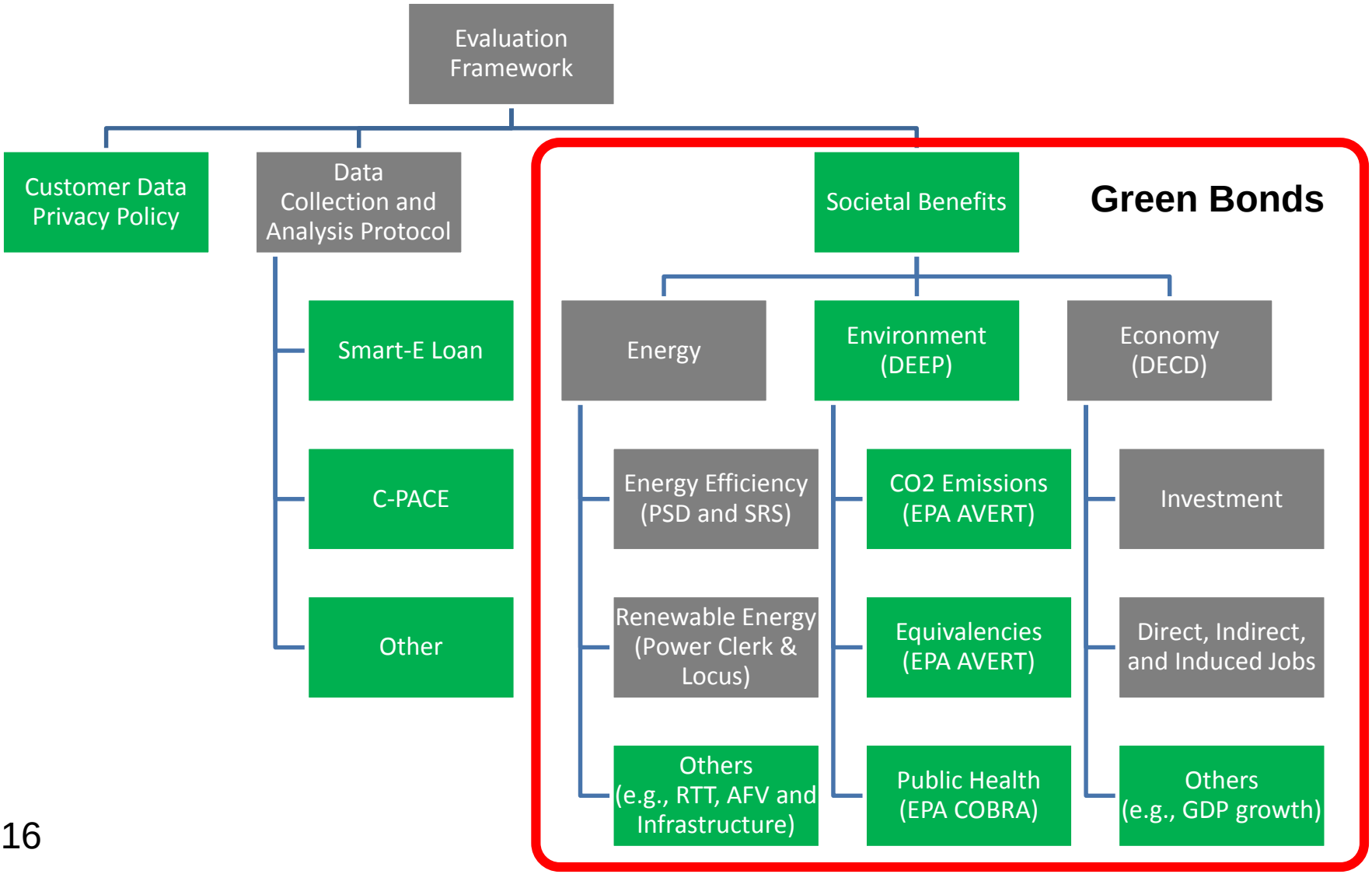


Created for Connecticut Green Bank by Dunsky Energy Consulting

Evaluation Framework
Continuous Process Improvement

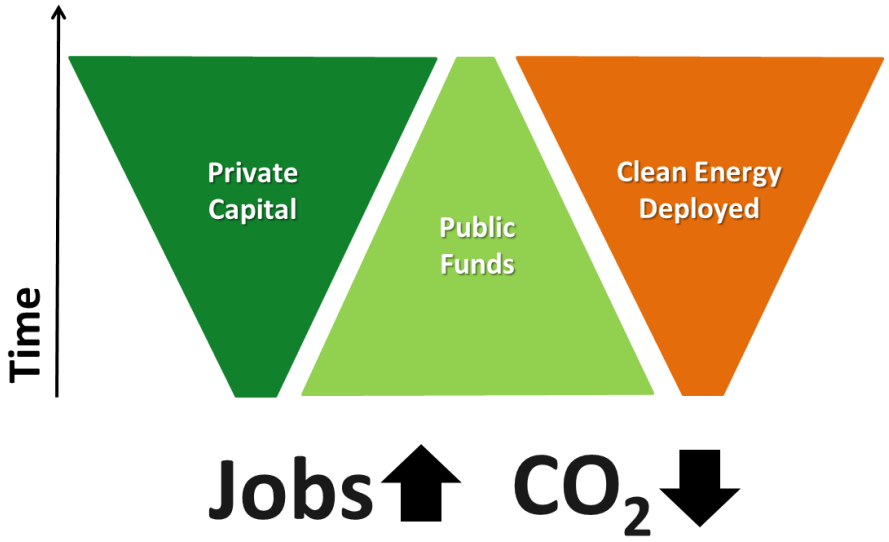


Evaluation Framework
"Big Picture" or Architecture



Evaluation Framework Contents

- Program Logic Model
- Program Impact Indicators
- Evaluation Plan Development – Process
- Net Impact Analysis
- Cost-Benefit Analysis
- Statutory Reporting Requirements
- Program Performance Indicators – C-PACE and Smart-E
- Data Release Forms



CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #8

2016 Legislative and Regulatory Update

May 25, 2016

Regular Meeting

Connecticut Green Bank
2016 Legislative and Regulatory Update

Senate Bill 366 – Passed Senate and House

Administrative Authority

- Redrafts authorizing statute so Green Bank is not within CI for administrative purposes. Will help streamline future deal structures making use of SPVs.

C-PACE

- Modifies the consent language to clarify an existing mortgage holder signs consent only for their own lien and *not* on behalf of other parties.

SHREC

- Clarifies that EDC purchase obligations do not stop after 2022 or 300 MW, just the initiation of new 15-year obligations. Adjusts MPA submission date.
- Makes PPAs eligible for RSIP incentives; adjusts RSIP to only apply to first 20 kW of installed solar PV.

Connecticut Green Bank
2016 Legislative and Regulatory Update

RPACE - House Bill 5563 – Passed Banking and E&T Committees

- Updates PACE statute for 1-4 family residential properties, enabling R-PACE for longer-term improvement financing
- Makes Green Bank the central administrator for municipal opt-in program
- Established loss reserve, consumer protections with Department of Banking. Subordinates R-PACE lien to prior liens, first mortgages, property taxes.
  - Negotiated with DoB, bankers, Governor's Office, PACE industry, title attorneys
- *As amended*: No loans may be issued until FHFA affirmatively states it will purchase PACE-encumbered properties.
  - No expectation this happens in the foreseeable future
  - Bankers required certainty from federal mortgage market regulator that they could sell/liquidate mortgage assets with R-PACE liens attached

Connecticut Green Bank
2016 Legislative and Regulatory Update

Proposed Raid

Majority Proposed Budget –

$15 Million from Green Bank

$27 Million from RGGI (which Green Bank receives 23%)

Final Approved Budget

$0 Directly from Green Bank

$3.3 Million from RGGI

End Result

$759,000 of Green Bank funds moved to general fund

Plus Reduced Bonding Authority

$8 Million voluntarily from Renewable Energy & EE Finance Account

$2.5 Million Reduction from Green Loan Guaranty Fund

Connecticut Green Bank
2016 Legislative and Regulatory Update

Regulatory Changes

- **Agricultural Virtual Net Metering** – *Docket No. 15-09-08*
  - Agricultural VNM hosts no longer need to fully own systems. Rather, they can directly own less than 100%, or own equity in deal structures with special purpose vehicles.

- **Residential Solar PV REC Aggregation** – *Docket No. 13-02-03RE01*
  - Increases nameplate capacity of NEPOOL-certificated systems eligible for PURA approval. Green Bank can file bundled applications of up to 1,000 systems each for remaining 240 MW under RSIP. Also requires development of post-RSIP process for individuals to self-certify for Class I RECs.
    - Green Bank currently engaging with PURA on the need to develop homeowner process.

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #9

Discuss FY 2016 Compliance Reporting

May 25, 2016

Regular Meeting

Connecticut Green Bank
FY 2016 Compliance Reporting

Connecticut Green Bank **Statutory Reporting Requirement Checklist**

Report Coordinator: Matt Macunas

Date Filed with OFA:

	Individual Responsible for Filing with OFA	FY14				FY15				FY16			
		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
Section 1-123 subsection(b): Quarterly Financial Cash Flow Report. 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 estimated at the end of the fiscal year.	G. Bellas	03/14/14	03/14/14	04/21/15	04/21/15								
Section 1-123 subsection (c): Quarterly Personnel Status Report. 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		

Date Filed with:

	Individual Responsible for Filing of Complete Report	FY14				FY15				FY16			
		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)	
Section1 -123 subsection (a): Annual Report 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 having cognizance of matters relating to energy and commerce. The report shall include a description of the programs and activities undertaken during the reporting period jointly or in collaboration with the Energy Conservation and Load Management Funds established pursuant to section 16-245m.	M. Dykes	12/30/2014	12/30/2014	12/30/2014	12/30/2014	12/31/2015	12/31/2015	12/31/2015	12/31/2015				

	B. Garcia	January 1, 2013	January 1, 2014	January 1, 2015	January 1, 2016
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 [REEFA UPDATE to E&T CLERK]	Date Filed:	2/8/2013	1/15/2014	15-Mar-2015	12/23/2015

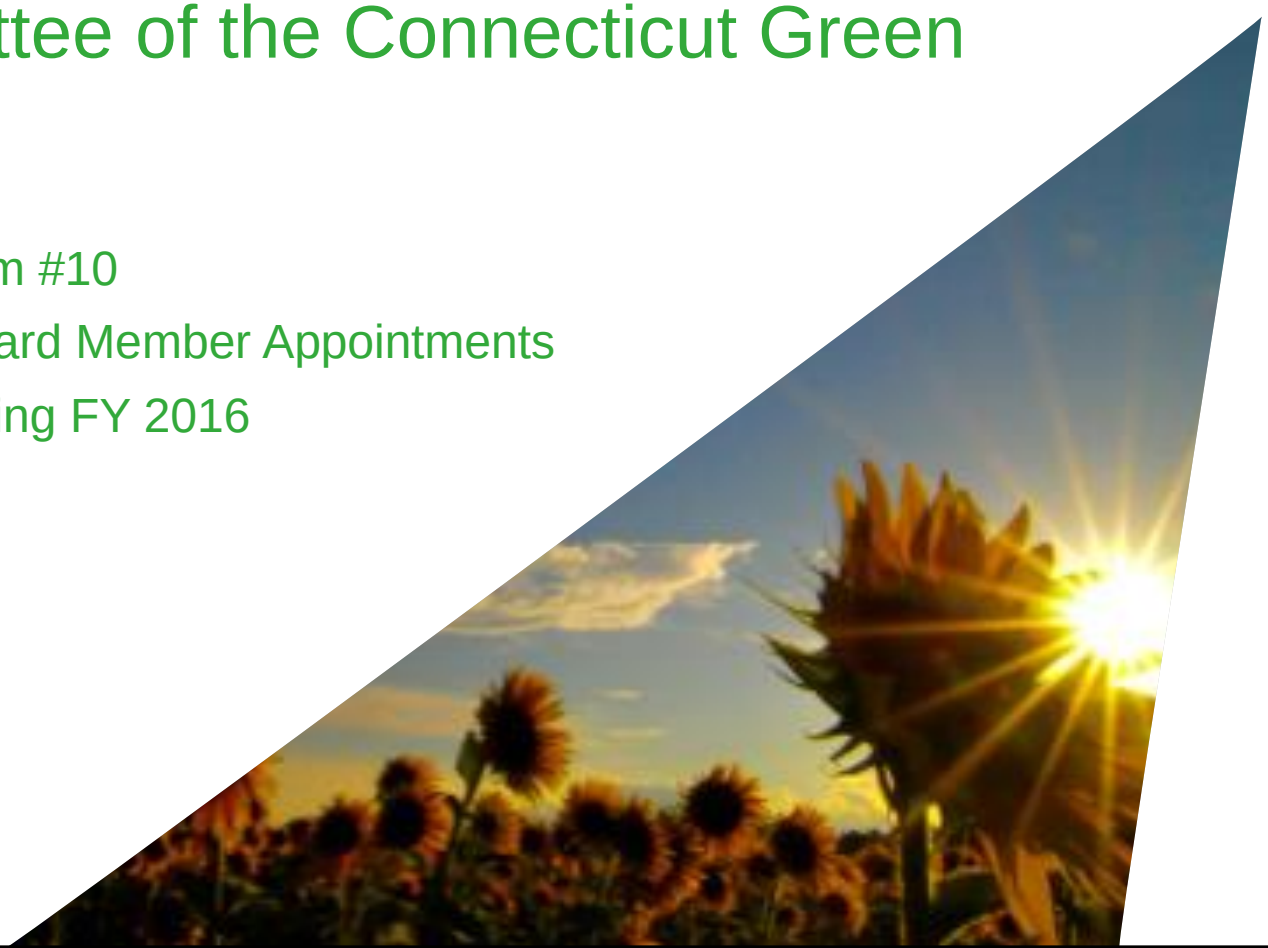
Section 16-245ff report by January 1, 2017 and every two years thereafter to the Legislative Energy and Technology Committee on its progress toward deploying 300 MW of residential solar PV

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #10

Discuss Board Member Appointments Ending During FY 2016



May 25, 2016

Regular Meeting

Connecticut Green Bank
2016 Legislative Agenda

Green Bank BOD Members Current Expiring Appointments

Patricia Wrice June 30, 2015

Green Bank BOD Members FY 2017 Expiring Appointments

- Reed Hundt June 30, 2017

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #11

Discuss Draft Succession Plan

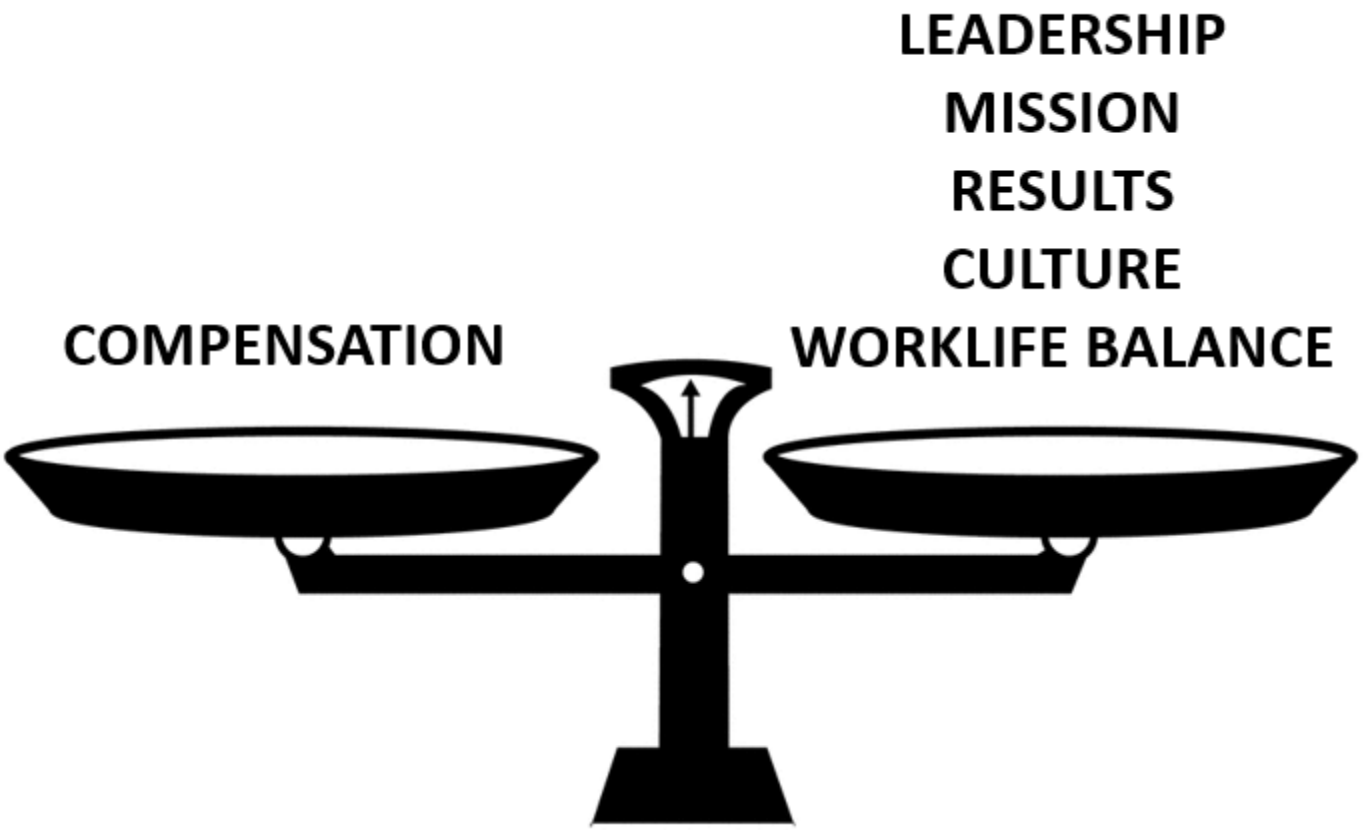
May 25, 2016

Regular Meeting

Succession Plan Background

- **Request** – BOD requested in late 2014 that the President and CEO put a succession plan in place in 2015 to manage the retention and succession of senior leadership within the organization
- **Implementation** – 1st plan worked exceptionally well with the departure of two senior staff positions in early 2016 – one position replaced with internal staff transfer and that position was replaced with a new hire
- **Revision** – this 2nd plan updates the 1st and prepares the organization to respond in the unlikely event that senior leadership is unable to be retained

Succession Plan
Talent Attraction and Retention



Succession Plan Findings

- **Status** – no senior leaders are likely to depart the organization in the near-term (i.e., within the next year)
- **Replacements** – in the unlikely event that senior leadership leaves before anticipated, there are many internal replacements who can step-in on an interim or permanent basis to continue the work
- **Retention** – issues that threaten retention include
  - ✓Incapable of managing work-life balance
  - ✓Inability to recognize that they are valued
  - ✓Adverse external impacts on the organization beyond its control (e.g., budget transfer)
  - ✓Bureaucratic barriers preventing progress
  - ✓Lack of competitive compensation

CONNECTICUT GREEN BANK

Audit, Compliance and Governance Committee of the Connecticut Green Bank

Agenda Item #12

Adjourn

May 25, 2016

Regular Meeting

AUDIT, COMPLIANCE, & GOVERNANCE COMMITTEE OF THE CONNECTICUT GREEN BANK
Minutes – Regular Meeting
Friday, December 4, 2015

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 December 4, 2015, 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 8:31 a.m. Audit Committee members participating: Matthew Ranelli & John Harrity.

   Members Absent: Patricia Wrice.

   Staff Attending: Bryan Garcia, Brian Farnen, George Bellas, Cheryl Samuels, Mackey Dykes (by phone), Bill Sawicki (Marcum LLP), Suzanne Kaswan, Jane Murphy, Michael Brooder (Marcum LLP) (by phone), and Adam Canosa (Marcum LLP) (by phone).

2. **Public Comments**

   There were no public comments.

3. **Approve meeting minutes for April 22, 2015 Regular Meeting**

   Upon a motion made by Mr. Harrity, seconded by Mr. Ranelli the Committee unanimously approved the minutes from the April 22, 2015 meeting.

4. **Discuss proposed draft Comprehensive Annual Financial Report (CAFR)**

   Mr. Ranelli took a moment to congratulate Mr Bellas and his team on the Green Bank's being awarded the Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association for its FY2014 CAFR.

   Mr.Bellas provided an update on the status of the current FY2015 CAFR. The draft CAFR being presented to the Committee is essentially complete with respect to the audited financial information. The completion of some footnote disclosures remains. The statistical section of the CAFR which provides information on the Green Bank's programs, and is not audited, is approximately 80% completed. The remaining sections will be completed prior to the CAFR being presented to the Board of Directors at their next meeting. Mr Bellas then provided the Committee with an overview of the financial position of the Green Bank as presented in the CAFR. Mr. Bellas then asked Bill Sawicki of Marcum LLP to provide the Committee with a summary of the results of their audit of the financial statements.

   Mr. Sawicki stated that the audit had been conducted under the Generally Accepted Government Auditing Standards. He reviewed the remaining steps that Marcum had to complete before the audit opinion can be formally issued.

Mr. Sawicki reviewed the responsibilities of Green Bank management as well as the responsibility of the auditor, Marcum LLP when conducting the audit engagement. He also explained the new accounting standard implemented this year, GASB 68 *Accounting and Financial Reporting for Pensions*. He reviewed the required disclosures made by the Green Bank to comply with this standard. Mr. Bellas stated that the Green Bank's net pension liability as of June 30, 2015 was approximately $14.9 million and that the footnotes to the financial statements explain in greater detail how that amount was arrived at. The Committee engaged in further discussion with staff to gain a more complete understanding of how the Green Bank calculates its monthly pension liability and expense and how funds are remitted to the State to satisfy its pension obligations Mr. Sawicki concluded by stating that the amount of the net pension liability will be adjusted each year going forward as part of the audit process.

Mr. Ranelli asked if there were any changes to the way the Green Bank and its component units, specifically its leasing affiliate, Connecticut Solar Lease 2 LLC were presented in this year's CAFR when compared to the prior year. Both Mr. Bellas and Mr. Sawicki stated that the presentation of the conpent units was consistent with the prior year and in conformity with guidelines established by the Government Accounting Standards Board (GASB)

Mr. Harrity questioned the open items and the timeline for completion. Mr Sawicki stated that the audit and final assembly of the CAFR will be complete prior to the end of December. Mr. Bellas stated that the Green Bank plans to submit the CAFR to the GFOA prior to December 31st for consideration under its Certificate of Achievement award program discussed above.

Mr. Garcia discussed the various statistical sections of the CAFR and why the reasons behind the Green Bank's effort to provide detailed programmatic as well as financial information to its constituents.. He explained that this section provides information on the outcomes and outputs for societal benefits with respect to how the organization utilizes its financial resources. He explained that the Connecticut Green Bank has developed its current model to leverage private investment. .

Mr Garcia explained that once this year's CAFR is complete, the Green Bank will engage Marcum LLP to review in greater detail the methods used to compile programmatic data throughout the organization. He explained that they will look at data collection systems, project status, and project reporting. Mr Ranelli questioned when this project will commence. Mr. Bellas stated that he anticipated beginning this engagement in January or February of 2016.

Upon a motion made by Mr. Harrity, and seconded by Mr. Ranelli the Committee voted unanimously in favor.

Resolution #2

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.

5. Discuss Annual Governance Review

Brian Farnen discussed the bylaws, operating procedures and other governance documents of the Green Bank. He explained that the Green Bank has implemented an annual governance review, and upon review of our governance documents, staff wants to clean up the Employee Handbook. Suzanne Kaswan explained that there are title changes, as well as phone number changes that they would like to make within the handbook. She explained that they had added a statement regarding the promotion policy that needed to be clarified to be consistent with the operating procedures. Matt Ranelli questioned the employee acknowledgement form. Suzanne Kaswan explained that it was incorrect in the last handbook. She stated that they are just cleaning it up and make it correct for this version. Brian Farnen stated that if these changes/corrections are acceptable they would request approval from the Board.

Upon a motion made by John Harrity, seconded by Matt Ranelli, the Committee voted unanimously in favor of the changes/corrections.

Resolution #3

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 Employee Handbook materially consistent with this memorandum dated November 23, 2015.

6. 2016 Legislative Agenda

Brian Farnen discussed the Legislative Agenda for 2016. He explained that there are four main items, C-PACE and SHREC technical fixes, establishing the Connecticut Green Bank as its own authority that is not within CI for administrative purposes, and residential (RESI)PACE. He explained that they would like to make RESI-PACE work without being the senior lien position as industry is moving in this direction on the residential side and the senior lien position was the biggest hurdle to adoption in Connecticut. He explained that they see RESI-PACE as a real economic and jobs opportunity.

Bryan Garcia stated that the team met with Commissioner Perez of the Department of Banking to discuss all of the developments at HUD, FHA, and the White House. He explained that post ITC world, they're looking at the PACE structure to bring in low cost capital. Brian Farnen explained that this is a big challenge, because of the short session and the focus on the budget. Matt Ranelli questioned if this can be positioned as a Job's Bill. Brian Farnen stated that they are going to position it as both a jobs and clean energy bill.

Brian Farnen stated that they want to clarify the consent language in C-PACE. He explained that they would also like the ability to be able to finance the cost of natural gas expansion. Matt Ranelli stated that he is not convinced that this would be a good thing. Brian Farnen explained that if it were to become a drag on getting the other technical fixes that they would drop it or break out the C-PACE technical fix related to consent from the natural gas component of the bill.

John Harrity questioned the status of Shared Solar. Brian Farnen explained that they are trying to show the success of the pilot program. Brian explained that the SEC had opined on Crowd Funding and the ability for the Connecticut Green Bank to set forth Legislation is going to be difficult since there is now a federal framework to address crowd funding.

Brian Farnen explained the SHREC technical fix. He explained that the Green Bank has been actively negotiating a Master Purchase Agreement (MPA) with both utilities. He explained that this has been slow, but that they have closed out every single issue, but one that being in relationship to the 15 term of the SHREC. He explained that 15 years is what the Connecticut Green Bank needs to make it work from a financing/securitization standpoint. Brian explained that they are trying to propose to the utilities to bring the MPA to PURA in a coordinated approach and providing a legal memo to support it. He explained that the EDC's would not agree to that. They felt that the statute was clear. He stated that we are working with DEEP and the Governor's office on next steps. He stated that they want to get the MPA approved and get everything tied up and agreed upon but still bring it to forward next Legislative Session as a technical fix.

Matt Ranelli asked if there is a schedule of reports due to the Legislature. Brian Farnen said yes and that they will get it to the Board. Matt Ranelli explained that he would like to keep it as a regular agenda item. Brian Farnen agreed.

7. A**djourn**

Upon a motion made by John Harrity, seconded by Matt Ranelli, the Audit Committee members voted unanimously in favor of adjourning the December 4, 2015 meeting at 9:40 a.m.

Respectfully Submitted,

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

CT SOLAR LEASE 2 LLC

FINANCIAL STATEMENTS

DECEMBER 31, 2015 AND 2014

CT SOLAR LEASE 2 LLC

CONTENTS

MARCUM
ACCOUNTANTS ▲ ADVISORS

INDEPENDENT AUDITORS' REPORT

To the Members
CT Solar Lease 2 LLC

We have audited the accompanying financial statements of CT Solar Lease 2 LLC (the Company), which comprise the balance sheets as of December 31, 2015 and 2014, and the related statements of operations and comprehensive loss, changes in members' equity and cash flows for the years then ended, and the related notes to the financial statements.

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 an opinion 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. 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 fair 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 opinion.

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Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of CT Solar Lease 2 LLC as of December 31, 2015 and 2014, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Marcum LLP

Hartford, CT
May 11, 2016

CT SOLAR LEASE 2 LLC

BALANCE SHEETS

DECEMBER 31, 2015 AND 2014

	2015	2014
Assets		
Current Assets		
Cash and cash equivalents	$ 7,604,289	$ 758,929
Accounts receivable	555,583	45,381
SREC receivable	82,108	--
Performance assurance deposit	30,543	16,882
Prepaid expenses	517,579	122,169
Total Current Assets	8,790,102	943,361
Solar Facilities		
Solar facilities - placed in service (net of accumulated depreciation of $1,038,846 in 2015 and $94,087 in 2014)	49,354,421	8,797,784
Solar facilities - in process	14,994,720	5,901,088
Total Solar Facilities, Net	64,349,141	14,698,872
Other Assets		
Restricted cash	4,500,000	4,500,000
Deferred financing fees (net of accumulated amortization of $71,700 in 2015 and $43,020 in 2014)	415,863	444,543
Total Other Assets	4,915,863	4,944,543
Total Assets	$ 78,055,106	$ 20,586,776

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

CT SOLAR LEASE 2 LLC

BALANCE SHEETS (CONTINUED)

DECEMBER 31, 2015 AND 2014

	2015	2014
Liabilities and Members' Equity		
Current Liabilities		
Current maturities of sponsor note payable	$ 113,835	$ 22,672
Accrued expenses	232,053	194,998
Accrued interest payable	200,033	86,898
Deferred revenue	939,522	561,914
Due to related parties	14,910,868	6,382,561
Due to members	9,223,319	2,883,667
Total Current Liabilities	25,619,630	10,132,710
Non-Current Liabilities		
Line of credit	14,869,950	--
Sponsor note payable, less current maturities	2,186,165	2,277,328
Fair value of interest rate swap	887,607	647,497
Asset retirement obligation	2,155,776	336,300
Total Non-Current Liabilities	20,099,498	3,261,125
Total Liabilities	45,719,128	13,393,835
Members' Equity		
Members' equity	32,850,470	7,595,047
Accumulated other comprehensive loss	(514,492)	(402,106)
Total Members' Equity	32,335,978	7,192,941
Total Liabilities and Members' Equity	$ 78,055,106	$ 20,586,776

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

CT SOLAR LEASE 2 LLC

STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	2015	2014
Revenues		
Rental income	$ 373,944	$ 30,558
Power purchase agreements	58,199	--
SREC Revenue	82,108	--
Production based incentive income	537,512	59,196
Total Revenues	1,051,763	89,754
Operating Expenses		
Professional fees	192,520	195,013
Project administration	124,538	121,500
Depreciation expense	946,470	94,087
Insurance	133,960	57,027
Lease servicing and origination fees	170,488	48,668
Warranty management	433,692	42,174
Accretion expense	109,022	3,764
General and administrative	84,081	12,878
Total Operating Expenses	2,194,771	575,111
Operating Loss	(1,143,008)	(485,357)
Other Income (Expenses)		
Commitment fees	(186,498)	(284,431)
Interest expense	(398,427)	(86,488)
Unrealized loss on interest rate swap	(127,724)	(245,391)
Other income	22,978	--
Interest income	13,111	8,604
Total Other Expenses	(676,560)	(607,706)
Net Loss	(1,819,568)	(1,093,063)
Other Comprehensive Loss		
Unrealized loss on interest rate swap	(112,386)	(402,106)
Comprehensive Loss	$ (1,931,954)	$ (1,495,169)

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

CT SOLAR LEASE 2 LLC

STATEMENTS OF CHANGES IN MEMBERS' EQUITY

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	Managing Member	Investor Member	Accumulated Other Comprehensive Loss	Total
	$ 3,532,116	$ (1,049,830)	$ --	$ 2,482,286
	3,605,097	2,681,826	--	6,286,923
	--	(81,099)	--	(81,099)
	(10,931)	(1,082,132)	--	(1,093,063)
ıte swap	--	--	(402,106)	(402,106)
	7,126,282	468,765	(402,106)	7,192,941
	13,146,603	14,077,117	--	27,223,720
	--	(148,729)	--	(148,729)
	(18,196)	(1,801,372)	--	(1,819,568)
ıte swap	--	--	(112,386)	(112,386)
	$ 20,254,689	$ 12,595,781	$ (514,492)	$ 32,335,978

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

CT SOLAR LEASE 2 LLC

STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	2015	2014
Cash Flows from Operating Activities		
Net loss	$ (1,819,568)	$ (1,093,063)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	975,150	122,767
Accretion of asset retirement obligation	109,021	3,764
Unrealized loss on interest rate swap	127,724	245,391
Administrative fee liability	124,538	181,500
Changes in operating assets and liabilities:		
Accounts receivable	(510,202)	(45,381)
SREC Receivable	(82,108)	--
Performance assurance deposit	(13,661)	(16,882)
Prepaid expenses	(395,410)	(100,964)
Accrued expenses	37,055	110,720
Accrued interest payable	113,135	57,808
Deferred revenue	377,608	542,871
Net Cash (Used in) Provided by Operating Activities	(956,718)	8,531
Cash Flows from Investing Activities		
Purchase of solar facilities	(48,886,284)	(14,352,328)
Net Cash Used in Investing Activities	(48,886,284)	(14,352,328)
Cash Flows from Financing Activities		
Capital contributions from members	27,223,720	6,286,923
Distributions to investor member	(148,729)	(81,099)
Proceeds from line of credit	14,869,950	--
Advances from related parties	8,528,307	6,022,986
Advances from members	6,215,114	2,495,773
Net Cash Provided by Financing Activities	56,688,362	14,724,583

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

CT SOLAR LEASE 2 LLC

STATEMENTS OF CASH FLOWS (CONTINUED)

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	2015	2014
Net Increase in Cash and Cash Equivalents	$ 6,845,360	$ 380,786
Cash and Cash Equivalents - Beginning	758,929	378,143
Cash and Cash Equivalents - Ending	$ 7,604,289	$ 758,929
Supplemental Information:		
Cash paid for interest expense	$ 285,292	$ --

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

CT SOLAR LEASE 2 LLC

NOTES TO FINANCIAL STATEMENTS

FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

NOTE 1 – ORGANIZATION AND NATURE OF OPERATIONS

ORGANIZATION

CT Solar Lease 2 LLC (the Company), a Connecticut limited liability company, was formed on May 28, 2013 as a subsidiary of CEFIA Solar Services Inc. for the purpose of acquiring title to solar photovoltaic and solar thermal equipment and their related leases with Connecticut homeowners and businesses, as well as power purchase agreements (PPAs) for not-for-profits, commercial enterprises and municipalities, from CEFIA Holdings LLC (the Developer and parent company to CEFIA Solar Services Inc.) using capital from its members along with non-recourse funding from participating banks. The members' liability with regard to the limited liability company is limited to their capital accounts plus any amounts guaranteed.

As detailed in the Operating Agreement dated June 28, 2013 and amended October 16, 2013, the Company has two members, CEFIA Solar Services Inc., its Managing Member, and Firstar Development, LLC, its Investor Member, who was admitted as a member in the Company as of June 28, 2013. As Managing Member, CEFIA Solar Services Inc. is required to oversee the overall operations of the Company. The Investor Member committed to making capital contributions up to $23,659,490 (the Investor Member Contribution Cap) in exchange for 99% of the Company's membership interests. Through December 31, 2015 and 2014, the Investor Member had contributed $16,995,537 and $2,918,420, respectively. The Managing Member holds 1% of the Company's membership interests. The Managing Member committed to making capital contributions up to $22,637,769. Through December 31, 2015 and 2014, the Managing Member has contributed $20,288,189 and $7,141,586, respectively.

Pursuant to the operating agreement, the Managing Member shall have the right to acquire 100%, but not less than 100%, of the Investor Member interests at any time during the six-month period following either (1) the "Flip Date" which is January 1 of the year which is five years after the date the last system is installed, which is anticipated to be January 1, 2021 or (2) the fifth anniversary of the Flip Date. Both six-month periods are defined as a Call Period.

The Investor Member shall have the right at any time during the six-month period after each Call Period to resign and voluntarily withdraw from the Company, in whole, but not in part, and receive an amount from the Managing Member equal to the sum of any unpaid Priority Return and accrued and unpaid Prepaid Priority Return plus the lesser of the fair value of the Investor Member's interest or $2,000,000.

The Company shall continue indefinitely unless sooner dissolved by law or in accordance with the terms of the Operating Agreement.

NOTE 1 - ORGANIZATION AND NATURE OF OPERATIONS (CONTINUED)

NATURE OF OPERATIONS

The Company acquires from the Developer residential and commercial-scale solar photovoltaic (PV) and residential solar thermal systems (the Projects), which have been installed on the property of both residential and commercial-scale customers in the State of Connecticut before the Projects have been placed in service. As part of the transfer and assignment of the Projects to the Company, the Company also acquires the related operating lease agreements, or where applicable, power purchase agreements, warranties, waivers and easements which allow the Company to inspect, access, maintain and improve the equipment as necessary. Following acquisition by the Company, the Developer remains obligated to complete the construction of the Projects and for some post-construction activities.

The Company maintains and operates the Projects in such a manner that each project qualifies the Company to receive investment tax credits pursuant to Section 48 of the Internal Revenue Code.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF PRESENTATION

The accompanying financial statements have been prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America (GAAP).

USE OF ESTIMATES

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenue and expenses for the period presented. Actual results could differ from these estimates.

CASH AND CASH EQUIVALENTS

The Company considers all cash accounts, which are not subject to withdrawal restrictions or penalties, and all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

RESTRICTED CASH

In accordance with the terms of the Credit Agreement described in Note 4, the Company is required to maintain a Reserve Account of not less than $3,500,000 and a Supplemental Reserve Account of not less than $1,000,000. These funds are completely restricted from use by the Company's operations until July 2015, at which time some portions may be released if certain conditions detailed in the Credit Agreement are met. At December 31, 2015 and 2014, restricted cash amounted to $4,500,000.

ACCOUNTS RECEIVABLE

Accounts receivable are recorded net of any allowance for doubtful accounts. The allowance is estimated from historical performance and projections of trends. There was no allowance for doubtful accounts at December 31, 2015 and 2014.

SREC RECEIVABLE

SREC receivables are recorded at the time of generation by the solar facility which is installed at commercial customer locations. The corresponding utility company of the commercial customer pays the SREC receivable. The allowance is estimated from historical performance and projections of trends. There was no allowance for doubtful accounts at December 31, 2015 and 2014.

SOLAR FACILITIES

All solar facilities 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. For systems placed in service, the Company provides for depreciation utilizing the straight-line method by charges to operations over estimated useful lives of 30 years. Additions, renewals, and betterments that significantly extend the life of an asset are capitalized. Expenditures for warranty maintenance and repairs 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.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

IMPAIRMENT OF LONG-LIVED ASSETS

The Company 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 in 2015 or 2014.

DEFERRED FINANCING FEES

Deferred financing fees of $487,563 consist of costs incurred in connection with securing the long-term debt described in Note 4. These costs are amortized using the straight-line method, which approximates the effective interest rate method, over the maximum term of the credit facility, which is through July 1, 2030. Amortization expense, included in depreciation expense on the accompanying statements of operations and comprehensive loss, was $28,680 in 2015 and $28,680 in 2014. Total accumulated amortization was $71,700 at December 31, 2015 and $43,020 at December 31, 2014.

Amortization expense will be as follows for the years ending December 31:

2016	$ 28,680
2017	28,680
2018	28,680
2019	28,680
2020	28,680
Thereafter	272,463
	$ 415,863

ASSET RETIREMENT OBLIGATIONS

The Company 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 the Project leases or PPAs initial or extended terms, customers generally have the option to purchase the solar facilities at fair market value or require the Company to remove the solar facilities at the Company's expense.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

ASSET RETIREMENT OBLIGATIONS (CONTINUED)

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 the Company. 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, the Company 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. The Company routinely reviews and reassesses its estimates to determine if an adjustment to the value of the asset retirement obligations is required.

The aggregate carrying amount of asset retirement obligations recognized by the Company was $2,155,776 at December 31, 2015 and $336,300 at December 31, 2014. The following table shows changes in the aggregate carrying amount of the Company's asset retirement obligation for the years ended December 31:

	2015	2014
Balance - January 1	$ 336,300	$ --
Additional accruals	1,703,052	332,536
Accretion expense	116,424	3,764
Balance - December 31	$ 2,155,776	$ 336,300

REVENUE RECOGNITION

The Company will derive revenue from the following sources: operating leases, energy generation through Power Purchase Agreements (PPAs), Production 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.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

REVENUE RECOGNITION (CONTINUED)

PBI payments on residential solar photovoltaic systems are received through an incentive program funded by the Connecticut Green Bank (CGB), formerly known as the Clean Energy Finance and Investment Authority (CEFIA), a quasi-public agency of the State of Connecticut. Payments are based on actual production.

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.

The Company earned $82,108 in SREC revenue for the year ended December 31, 2015. The Company did not earn any SREC revenue for the year ended December 31, 2014.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

DEFERRED REVENUE

Residential solar PV customers have the option of prepaying all, or a portion, of their operating lease at the lease inception at a discounted amount. Prepayments are recognized as revenue on a straight-line basis over the 20 year term of the underlying lease agreements beginning after the system is placed in service and once all required approvals have been received by the Developer. Deferred revenue related to customer prepayments was $939,522 at December 31, 2015 and $561,914 at December 31, 2014.

INCOME TAXES

The Company has elected to be treated as a pass-through entity for income tax purposes and, as such, is not subject to income taxes. Rather, all items of taxable income, deductions and tax credits are passed through to and are reported by its members on their respective income tax returns. The Company's Federal tax status as a pass-through entity is based on its legal status as a limited liability company. Accordingly, the Company is not required to take any tax positions in order to qualify as a pass-through entity. The Company is required to file, and does file tax returns with the Internal Revenue Service (the IRS) and other taxing authorities. Accordingly, these financial statements do not reflect a provision for income taxes and the Company has no other tax positions which must be considered for disclosure.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

INCOME TAXES (CONTINUED)

Management has concluded that there are no uncertain tax positions that would require recognition in the financial statements. If the Company were to incur an income tax liability in the future, interest on any income tax liability would be reported as interest expense and penalties on any income tax would be reported as income taxes. Management's conclusions regarding uncertain tax positions may be subject to review and adjustment at a later date based upon ongoing analysis of tax laws, regulations and interpretations as well as other factors.

NEW ACCOUNTING PRONOUNCEMENTS

Except as described below, the Company has considered all other recently issued accounting pronouncements and does not believe the adoption of such pronouncements will have a material impact on its financial statements.

In May 2014, the FASB issued an ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* (ASU 2014-09) amending revenue recognition guidance and requiring more detailed disclosures to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The guide is effective for annual reporting periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019, with early adoption permitted. Management is currently evaluating the impact the ASU No. 2014-09 will have on the financial statements.

In April 2015, the FASB issued Accounting Standard Update (ASU) No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs* (ASU 2015-03). ASU 2015-03 amends current presentation guidance by requiring that debt issuance costs related to a recognized debt liability be presented in the balance sheets as a direct deduction from the carrying amount of the debt liability, consistent with debt discounts. ASU 2015-03 is effective for interim and annual reporting periods beginning after December 15, 2015, with early adoption permitted. Management is currently evaluating the impact the ASU 2015-03 will have on the financial statements.

On February 25, 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (ASU 2016-02). ASU 2016-02 requires that a lessee recognize the assets and liabilities that arise from operating leases. A lessee should recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. For leases with a term of 12 months or less, a lessee is

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

NEW ACCOUNTING PRONOUNCEMENTS (CONTINUED)

permitted to make an accounting policy election by class of underlying asset not to recognize lease assets and lease liabilities. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. Nonpublic business entities should apply the amendments for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early application is permitted for all nonpublic business entities upon issuance. Management is currently evaluating the impact the ASU 2016-02 will have on the financial statements.

SUBSEQUENT EVENTS

Subsequent events have been considered for disclosure and recognition in these financial statements through May 11, 2016, the date the financial statements were available to be issued. No events have occurred requiring recognition or disclosure in the financial statements.

NOTE 3 - FAIR VALUE MEASUREMENTS

Fair value is defined as is the amount which would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

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). The three levels of the fair value hierarchy are described as follows:

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

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

NOTE 3 - FAIR VALUE MEASUREMENTS (CONTINUED)

Level 2 inputs include the following:

- Quoted prices for similar assets and liabilities in active markets
- Quoted prices for identical or similar assets or liabilities in markets that are not active
- Observable inputs other than quoted prices that are used in the valuation of the asset or liability (e.g., interest rate and yield curve quotes at commonly quoted intervals)
- Inputs that are derived principally from, or corroborated, by observable 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 assumption about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk).

Financial liabilities carried at fair value at December 31, 2015 and 2014 are classified in the following table in one of the three categories described above:

	Liabilities at Fair Value as of December 31, 2015			
	Level 1	Level 2	Level 3	Total
Interest rate swap agreement	$ --	$ 887,607	$ --	$ 887,607

	Liabilities at Fair Value as of December 31, 2014			
	Level 1	Level 2	Level 3	Total
Interest rate swap agreement	$ --	$ 647,497	$ --	$ 647,497

The fair value of the interest rate swap agreement is indicative values based on mid-market levels as of the close of business on December 31, 2015 and 2014. Changes in fair value related to the interest rate swap are included in other income (expense) on the accompanying statements of operations and comprehensive loss. The valuations are derived from proprietary models based upon well recognized financial principles and reasonable estimates about relevant future market conditions.

NOTE 4 - LONG-TERM DEBT

On June 28, 2013, the Company entered into a Credit Agreement, as amended or modified from time to time, with First Niagara Bank, N.A. (First Niagara) as the Administrative Agent and Lender along with our other participating lenders which provides for a $24,000,000 loan facility commitment broken down by lender as follows:

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

Funds may be drawn down in no more than ten total advances by October 1, 2016. With the exception of the final advance, each advance must be in a 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.

Each advance will be amortized separately and will be subdivided for amounts attributable to systems for customers who have made full or partial prepayments. The Company 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%, (b) First Niagara's prime rate, or (c) the LIBOR rate plus 1%. The Company may also elect to convert an advance from one rate to another 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 attributable to traditional and partially prepaid systems will be based on a modified 15 year amortization schedule as outlined in the Credit Agreement. Principal payments on each advance attributable to fully prepaid systems will be base on a modified six year amortization schedule as outlined in the Credit Agreement.

Within one month after each advance, the Company 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.

NOTE 4 - LONG-TERM DEBT (CONTINUED)

Certain obligations of the Company under the Credit Agreement are guaranteed by CGB. This Credit Agreement is secured by all assets of the Company as well as the Managing Member's interest in the Company. There are no prepayment penalties. There are certain debt service coverage ratios the Company 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.

At December 31, 2015 there was $14,869,950 borrowed under this Credit Agreement. There were no borrowings under this Credit Agreement as of December 31, 2014.

NOTE 5 - COVENANTS

The Credit Agreement requires financial statements be submitted to the bank within 120 days after year-end. For the 2015 financial statements, the Company did not comply with the requirement constituting a default. The Company has obtained a waiver of this requirement form First Niagara dated May 3, 2016.

NOTE 6 - INTEREST RATE SWAP AGREEMENT

The Company entered into interest rate swap agreements with First Niagara (the "Swap Agreements") in September 2014, September 2015 and November 2015. The notional amount of the Swap Agreements as of December 31, 2015 was $20,284,725 ($6,000,000 of these Swap Agreements have an effective date in 2016) and as of December 31, 2014 was $15,000,000 ($12,000,000 of these Swap Agreements have an effective date in 2015). Borrowings under the Credit Agreement with First Niagara, see Note 4, hedged by the Swap Agreements totaled $15,000,000 in 2015. There were no borrowings under the Credit Agreement in 2014. An Additional $6,000,000 in borrowings under the Credit Agreement will be incurred in 2016 and hedged under the Swap Agreements. All changes in fair value of outstanding derivatives in cash flow hedges, except any ineffective portion recorded through operations, would be recorded in other comprehensive loss until earnings are impacted by the hedged transaction. The agreement provides for the Company to receive payments based on the 1 month USD-LIBOR-BBA (0.4275% at December 31, 2015) and to make payments based on a fixed interest rate of 2.78%. The agreement matures on December 15, 2025. The fair value of all the interest rate swap agreements at December 31, 2015 was a liability of $887,610 and $647,497 at December 31, 2014, which is represented as the fair value of the interest rate swap on the accompanying balance sheets. The effective portion of the fair value of the swap agreement is included in accumulated other comprehensive loss in the

NOTE 6 - INTEREST RATE SWAP AGREEMENT (CONTINUED)

amount of $112,386 at December 31, 2015 and $402,106 at December 31, 2014. The ineffective portion of $127,728 in 2015 and $245,391 in 2014, associated with the swap agreement is included in other income (expenses) in the statement of operations and comprehensive loss.

NOTE 7 - RELATED PARTY TRANSACTIONS

UNUSED COMMITMENT FEE

In accordance with the Company's operating agreement, the Investor Member 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% 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, 3.50% at December 31, 2015 and 3.25% at December 31, 2014, in effect on the due date plus 2%. The fees due to the Investor Member were $28,343 at December 31, 2015 and $284,432 at December 31, 2014 and are included in due to members on the accompanying balance sheets. These amounts were paid in full in January 2016 and February 2015, respectively.

ADMINISTRATIVE SERVICES FEE

The Managing Member provides administrative and management services to the Company and earns a quarterly fee, which increases 2.5% each July 1st beginning July 1, 2014. Total fees for these services accrued but unpaid were $306,038 at December 31, 2015 and $181,500 at December 31, 2014. These amounts are included in due to members on the accompanying balance sheets.

DUE TO MANAGING MEMBER

The Company owed the Managing Member $8,825,000 as of December 31, 2015 and $2,406,106 as of December 31, 2014 which represented funds advanced to cover working capital requirements in advance of capital contributions and are included in due to members on the accompanying balance sheets. The Company repaid $2,406,150 in 2015 and expects to fully repay $8,825,000 in 2016.

NOTE 7 - RELATED PARTY TRANSACTIONS (CONTINUED)

DUE TO INVESTOR MEMBER

The Company owed the Investor Member $63,938 at December 31, 2015 and $11,629 at December 31, 2014, which represented amounts accrued for the priority return (see Note 9).

Due to members amounted to $9,223,319 at December 31, 2015 and $2,883,667 at December 31, 2014.

DUE TO RELATED PARTIES

At December 31, 2015 and 2014, the Company owed CGB $235,065 for reimbursement of legal, consulting and other costs related to the structuring and syndication of the Company's primary operations.

The Company owed the Developer $14,674,803 at December 31, 2015 and $6,147,496 at December 31, 2014. Of that amount at December 31, 2015 and 2014, $5,564,403 and $2,539,146 related to residential PV systems pending completion and $9,110,400 and $3,576,800 related to commercial PV systems pending completion, respectively. An additional $1,000 in 2015 and $31,550 in 2014 representing customer deposits on systems for which ownership had not yet been transferred to the Company.

Due to related parties amounted to $14,910,868 at December 31, 2015 and $6,382,561 at December 31, 2014.

SPONSOR NOTE PAYABLE

In accordance with provisions of the operating agreement, the Company entered into a subordinated promissory note with CGB. CGB is the 99% majority shareholder of the Developer, which in turn is the sole shareholder of the Company's Managing Member. The principal amount of the note is $2,300,000 and interest of 2.5% accrues and is compounded annually. Interest only payments are due quarterly commencing September 1, 2013 through July 1, 2015. Principal and interest payments will be due quarterly commencing September 1, 2015 in equal installments sufficient to fully amortize the principal balance of the note by its maturity date, which is July 1, 2035. All required payments on this note are subordinate to there being no events of default with the Credit Agreement. Accrued interest payable was $146,141 at December 31, 2015 and $86,898 at December 31, 2014.

Interest expense was $59,243 in 2015 and $57,808 in 2014. No interest payments were made in 2015 or 2014.

NOTE 7 - RELATED PARTY TRANSACTIONS (CONTINUED)

The aggregate future maturities of sponsor note payable at December 31, 2015 is as follows:

Years ending December 31,	
2016	$ 113,835
2017	93,657
2018	96,020
2019	98,443
2020	100,927
Thereafter	1,797,118
	$ 2,300,000

NOTE 8 - PREPAID PRIORITY RETURN

In accordance with the operating agreement, the Investor Member receives a priority return to be paid with respect to residential systems for which the customer prepaid 50% or more of their total lease payments at the beginning of the lease term (the Prepaid Projects). The prepaid priority return is paid as a one-time distribution equal to 4.2055% of the purchase price of the Prepaid Projects. Payments are payable to the Investor Member on or before the date which the Investor Member makes their final capital contribution for the acquisition of the Prepaid Projects. All prepaid priority returns are classified as member distributions. The Investor Member received $5,009 in 2015 and $69,470 in 2014 in prepaid priority return payments.

NOTE 9 – PRIORITY RETURN

In accordance with the operating agreement, the Investor Member is also due a cumulative, quarterly distribution equal to 0.5% of its paid-in capital contributions in respect of all Projects, other than Prepaid 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 due $63,938 at December 31, 2015 and $11,629 at December 31, 2014. These amounts were paid in full in January 2016 and March 2015, respectively.

NOTE 10 - COMMITMENTS

LEASE SERVICING AGREEMENT

The Company has entered into a lease servicing agreement with AFC First Financial Corporation dated June 28, 2013 for the sourcing and servicing of its customer lease portfolio. Fees outlined in the agreement are paid monthly based on the number of leases in place. The lease servicing and origination fee included in operating expenses amounted to $170,488 in 2015 and $48,668 in 2014.

SOLAR FACILITIES WARRANTY AND INSURANCE

The Company entered into a Warranty Agreement with the Federal Warranty Service Corporation in January 2014, which provides for warranty management services for all Project equipment and components (excluding solar hot water equipment, which is warranted by the manufacturer) that have at least a 20 year original equipment manufacturers' warranty, as well as providing annually renewable property and liability insurance coverage for all solar PV and solar hot water projects. Annual warranty management fees outlined in the agreement are paid for systems as they are placed in service. Prepaid warranty management expense was $422,636 at December 31, 2015 and $94,327 at December 31, 2014. The Company amortized $433,692 in 2015 and $42,174 in 2014 of prepaid warranty management expense.

PROPERTY AND LIABILITY INSURANCE COVERAGE

In accordance with the requirement of the Credit Agreement, the Company maintains property and liability insurance coverage on all in-service and projected solar PV and solar thermal projects. The Company had $94,943 at December 31, 2015 and $27,842 at December 31, 2014, of prepaid insurance premiums. The Company amortized $133,960 in 2015 and $57,027 in 2014 of prepaid insurance premiums.

NOTE 11 - CONCENTRATIONS

The Company maintains cash with various financial institutions. At times, these balances may exceed insurance limits provided by the Federal Deposit Insurance Corporation (FDIC); however, the Company has not experienced any losses with respect to its bank balances. Amounts exceeding FDIC limits at December 31, 2015 totaled $11,413,388. Funds held by financial institutions on behalf of the Company include a contractual requirement to maintain $4,500,000 with First Niagara and Webster Bank which represent loan loss and lease maintenance reserves. Management believes that no significant credit risk exists with respect to these cash balances.

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CONNECTICUT GREEN BANK

Memo

To: Audit, Compliance and Governance Committee

From: George Bellas (VP Finance and Administration)

Date: May 18, 2016

Re: Proposed revisions to Internal Control Procedures

The Green Bank recently hired Eric Shrago as its Director of Operations to replace Mackey Dykes who has moved from his position as VP and Chief Operating Officer to VP Commercial and Industrial Programs. As a result, some technical changes are required to be made to the following Internal Control Procedures to reflect this change:

CGB 101 – Purchasing and Accounts Payable

CGB 102 – Consulting and Advisory Services

CGB 103 – Credit Card Policy and Procedures

RESOLVED, that the Audit, Compliance and Governance Committee hereby recommends to the Board of Directors for approval the proposed revisions to Internal Control Procedures CGB101, CGB102 and CGB103.

Second. Discussion. Vote

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CONNECTICUT GREEN BANK

CGB - 101
Revised March 25, 2016~~February 3, 2015~~

Purchasing and Accounts Payable Policies and Procedures

I. Purpose: To provide procedures for procurement methods and completion of related documents.

II. Scope: This procedure applies to the purchase of supplies, materials, services, sponsorships, memberships, software and capital assets for all departments within the Connecticut Green Bank (CGB) as well as for all ~~affilities~~affiliates for which CGB provides accounting and financial reporting services, whether operating or programmatic in nature.

III. Responsibility:

Procurement of supplies will be facilitated through the department of finance and administration. Procurement of services will be facilitated by the person requiring the services. Subscriptions will be facilitated by the marketing and outreach department. All named parties are responsible for using good purchasing methods for optimizing price savings, quality and value of products, vendor working relationships, and for assuring proper control and inspection as required by these policies. All named parties will utilize purchase orders or such other purchasing documents that are developed and revised from time to time as necessary by the department of finance and administration.

IV. Procedure:

A. ORDER PLACEMENT AND APPROVALS

1. Office supplies - and other goods and services used in the normal course of business are approved by the VP, Finance and Administration ("VPF") or the Director of Operations ("DOO") ~~VP and Chief Operating Officer ("COO")~~ .
2. Office furniture, fixtures and equipment - must be approved by the President & CEO or the DOO~~COO~~.
3. Subscriptions and Reference Materials – Subscriptions to magazines, newspapers, on-line reference and search services, etc. must be approved by the President and CEO or the DOO~~COO~~.

4. Computer Equipment and Software - All purchases of computer equipment, software and related items must be in writing. All purchases under $1,000 will be approved by the Office Manager~~Managing Director, Information Technology~~. All purchases $1,000 or greater will follow the approval process outlined in B1 below.
5. Travel and Entertainment – All business travel and entertainment must be approved by the employee's immediate supervisor. All requests for reimbursement of T&E expenses greater than $1,000 must follow the approval guidelines set forth in Section B below. All international travel must be pre- approved by the President &CEO. All international travel by the President & CEO must be pre- approved by the Chairperson of the CGB Board. See the Company Travel and Entertainment Policy for guidelines on business expenditures that will be reimbursed.
6. Financial Assistance- The process of approving financial assistance consisting of grants, loans, loan guarantees, debt and equity investments or other financial products is outlined in the bylaws and operating procedures of the CGB.
7. Sponsorships and Memberships – All CGB sponsorships and memberships must be approved by Director ~~-~~level staff and the DOO~~COO~~.
8. Consulting and Advisory Services – See CGB – 102 for procedures related to internal management of consulting and advisory services.
9. Legal Fees – Due to the nature of legal fees, approval for fees is obtained when the invoice is received. All invoices will be forwarded to the Chief Legal Counsel and DOO~~COO~~ for their approvals before payment is made.

B. PROCESSING OF VENDOR INVOICES FOR GOODS AND SERVICES
   1. Approval of Invoices – must be obtained prior to sending to Accounts Payable for payment processing.
      a. Goods and Services –
         - Invoice < $1000 – requires signature of project/department manager level or higher.
         - Invoice equal to or greater than $1,000 –requires the signature of one of the following: VPF; DOO~~COO~~; Chief Legal Officer; President & CEO; EVP and Chief Investment Officer; ; collectively named " Management".
         - Invoice equal to or greater than $5,000 – requires 2 signatures from Management.
         - Invoice equal to or greater than $25,000 – requires 2 signatures from. Management, one of which must be the President and CEO.
         - Non-budgeted items –requires signature of VPF as well as approval according to $ limit approval procedures noted above.

- Finance Assistance up to $25,000 – requires 2 signatures from Management, one of which must be the President & CEO or the DOO~~COO~~ or, in both their absence, the VPF.
- Finance Assistance (~~-~~as defined in A6 above) equal to or above $25,000 – requires 2 signatures from Management, one of which must be the President & CEO or in his or her absence the VPF.
- Consulting and Advisory Services – See CEFIA – 102
- Re-occurring charges – for disbursements that occur on a regular basis (rents, equipment lease payments, etc. the VPF must approve the invoice A second signature from a member of ~~-~~M~~m~~anagement is not required.
- Transfers of funds between CGB and its affiliates for working capital purposes – transfers of funds between CGB and its affiliates for working capital purposes will only require the approval of the VPF at time of transfer. Documentation of the transfer will be forwarded to the President and CEO for review and sign off within 2 business days after transfer. All transfers will be executed by wire transfer which require approval and release by 2 authorized check signers.

2. Approval in the absence of the President ~~-~~&CEO – If the President & CEO is unavailable for a period of time to approve invoices or purchases enumerated in section A above, he/she may delegate his/her authority to approve such purchases and invoices to the VPF or in the absence of the VPF, the DOO~~COO~~, Chief Investment Officer or Chief Legal Officer in writing. The VPF or such other designee listed above must then submit all such items to the President & CEO upon his/her return to the office and obtain approval from the President & CEO at that time.

3. Payment of invoices –
   a. Accounts Payable will process invoices for payment when all approvals are obtained by requestor.
   b. Payment of invoices will be made based on vendor terms.
   c. Check signing:
      - Invoice and all related documents are submitted to Accounts Payable.
      - Check amounts equal to or greater than $5,000 require 2 signatures
      - The Board of Directors will authorize specific senior level positions to sign checks on behalf of the Company. This authorization will be documented in the Board meeting minutes.

4. Check requests

a. A check request may be used as approval documentation for invoices. Invoices may be signed directly as well. The finance and administration~~stion~~ department will develop and maintain check request forms.

5. Wire/ACH transfers
   a. The processing of wire/ACH disbursements ~~-~~will follow the same process for checks as documented in section 3c. above with the exception that all wires or ACH transactions require that 2 authorized check signors are required to execute the transaction: one to initiate and approve and one to release the transaction.

   b. Financial Assistance – No wire/ACH will be initiated until the VPF has reviewed all appropriate executed legal documents to verify that the disbursement is being made in accordance with the requirements of such documents. .

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CONNECTICUT GREEN BANK

CGB – 102
Revised May~~February~~ 25~~03~~,
201~~6~~6

Consulting and Advisory Services

I Purpose: Pursuant to operating procedures initially adopted by the Board of Directors of the Connecticut Green Bank (CGB) on December 16, 2011 as amended from time to time; CGB ~~-~~may contract for consulting and advisory services as part of its operations and programs.

II. Scope: These services may include expertise or specialized advice, training, research or analysis, special projects or other work where the (a) appropriate experience, skills or expertise is not then available among the staff because of workload or other constraints, (b) the time duration, frequency of need or other nature of the services does not justify employing staff to provide such services, or (c) Board of Directors has determined that the use of such services is warranted and in the best interest of CGB. These procedures also apply to all affiliates of CGB for which CGB provides accounting and financial reporting services. CGB and its affiliates are collectively referred to as the "Company" in these procedures.

III. Responsibility: All staff contracting for consulting and advisory services must follow this procedure.

IV. Procedure:

A. Request for Services - All such services will be requested through the use of the Company's standard Approval Release Slip (ARS). The ARS will be attached to a draft Professional Service Agreement (PSA) developed and revised from time to time as necessary by the Company's legal department. Upon the approval of the ARS by staff as outlined below in section B, a PSA will be executed between the Company and the provider of the services requested.

B. Approval of ARS and execution of PSA:

1. Approval of ARS: All ARS forms require the following sign offs before the Company's legal department will process the related PSA: 1) the manager who has budget responsibility for the program seeking the services, 2) the VPF, 3) the DOO~~COO~~ and 4) the Chief Legal Officer.

2. Execution of the PSA: The President & CEO will execute all PSA's on behalf of the company. However, see 5 below.
3. ARS requests greater than $75,000 to $150,000 must be approved in writing by the President and CEO and Chairperson of the Board prior to execution of PSA under B1 above.

4. ARS requests greater than $150,000 must follow the RFP requirements in section C prior to execution of PSA under B1 above.

5. Execution of PSA's and approval of ARS requests the absence of the President & CEO – If the President & CEO is unavailable for a period of time to execute PSAs or approve ARS's as required, he/she may delegate his/her authority to approve purchases to the VPF or in the absence of the VPF the DC~~C~~OO, Chief Investment Officer or Chief Legal Officer in writing. The VPF must then forward all items approved under this section to the President ~~-~~& CEO upon his/her return to the office and obtain approval from the President and CEO at that time.

6. All ARS requests will be reviewed by the DC~~C~~OO and VPF to ensure that the requested disbursement falls within the appropriate departmental budget for the current fiscal year prior to approval**.**

C. PSA duration and RFP requirements

1. Duration - The duration of PSAs for consulting or advisory services will generally not exceed one year without ~~-~~written approval of the President & CEO.

2. ~~.~~ Whenever possible, an RFP is to be completed prior to entering into any contract ~~-~~in an amount over $150,000 in any one fiscal year.

3. Contractors with multiple contracts - CGB may engage the same contractor for several different projects or for continuations of a single project during a fiscal year. A PSA which will, if executed, result in cumulative expenditures to the contractor exceeding $150,000 in any one fiscal year will require, whenever possible, that an RFP be completed prior to the execution of the PSA.

D. Recordkeeping

1. The department of finance and administration will prepare and maintain a summary of all outstanding contracts. The summary will include the name of the contractor, a brief description of the services/project, the total amount of the contract and actual amount paid to date.

2. The VPF will be responsible for monitoring the status of approved contracts and ensuring that all contracts are in compliance with these operating procedures.

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CONNECTICUT GREEN BANK

CGB – 103
Revised May~~February~~ 25~~3~~,
201~~6~~5

Credit Card Policy and Procedures

I. Purpose:

To provide procedures for the use of Connecticut Green Bank, the "Company" owned credit cards by authorized employees of the Company.

II. Policy/Scope:

Company owned credit cards will be issued to those employees who are designated as purchasing agents for the Company by the President and CEO. Company owned credit cards will be used for official Company business to purchase goods and services on behalf of the Company or to make travel arrangements on behalf of Company employees who are traveling on Company business. Company owned credit cards shall not be used for personal or private business. Intentional misuse or fraudulent abuse of any company owned credit card may result in disciplinary action, up to and including dismissal. In addition, the authorized holder of the company owned credit card shall promptly reimburse the Company for any unacceptable or unauthorized purchases.

III. Responsibility:

The Vice President, Finance and Administration ("VPF") shall be responsible for the administration of the Company credit card account.

IV. Procedures:

1. The President and CEO ("CEO") and the Director of Operations~~VP and Chief Operating Officer~~ ("DOO~~COO~~") are authorized purchasing agents of the Company. The CEO shall provide the VPF with a list of additional employees who are authorized purchasing agents for the Company. This list will be updated from time to time by the CEO as circumstances warrant. A credit card dollar limit will be approved by the CEO for each authorized purchasing agent.

2. The VPF as administrator of the Company credit card account will approve and submit an application to the credit card issuer requesting that a card be issued (with the authorized dollar limit) to the Company purchasing agent.

3. Once the Company credit card is issued to the authorized purchasing agent, the purchasing agent will be responsible for maintaining adequate documentation supporting

all purchases made with the credit card. This documentation shall be attached to the monthly credit card invoice and submitted to the VPF for review and approval. The VPF will review the documentation submitted to determine that the expenditure was for an appropriate business purpose. The credit card invoice will be approved by the VPF and the CEO.

4. It is the purchasing agent's responsibility to monitor his or her account for unauthorized activity. All unauthorized activity should immediately be reported to the credit card issuer and VPF for appropriate action.

5. Purchasing agents who have been issued a Company owned card will be responsible for safeguarding the card at all times. The purchasing agent is responsible for immediately and properly reporting a lost or stolen card to the credit card issuer and the VPF.

6. A copy of this policy will be provided to each purchasing agent. The purchasing agent will be required to acknowledge receipt of the policy.

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CONNECTICUT GREEN BANK

Memo

To: Audit, Compliance and Governance Committee

From: Bryan Garcia (President and CEO)

Date: May 18, 2016

Re: Draft "Evaluation Framework: Assessing, Monitoring, and Reporting of Program Impacts and Processes"

With technical assistance from Opinion Dynamics and Dunsky Energy Consulting,[1] review and guidance from various utility evaluation experts,[2] and feedback from the Board of Directors of the Connecticut Green Bank as well as the Joint Committee of the Connecticut Green Bank and Energy Efficiency Board, the staff proposes the attached Evaluation Framework to discern the societal benefits (e.g., energy savings, clean energy production, investments, etc.) and market transformation impacts the organization is contributing.

This "Evaluation Framework: Assessing, Monitoring and Reporting on Program Impacts and Processes" document represents an effort by the Connecticut Green Bank to formalize how we evaluate the societal impacts and benefits we are helping create as a result of our investments. This evaluation framework was developed to assist the Connecticut Green Bank present appropriate evaluation approaches to estimate the impacts and benefits of its programs and to help it communicate them to key stakeholders – through reporting mechanisms such as the "Non-Financial Statistics" section of the "Comprehensive Annual Financial Report" or in the future through the issuance of "Green Bonds".

The document includes four (4) key parts, with associated details, including:

- Program Logic Model;
- Program Impact Indicators;
- Evaluation Plan Development; and
- Net Impact Analysis and Cost-Benefit Analyses.

This document is not intended to be microscopic or investigative in nature, but instead it is intentionally macroscopic and a tool to improve management decision-making in real-time. From understanding the market and developing and implementing programs and products, to collecting, analyzing and reporting data, this document provides a basis for guiding the organization in meeting its Comprehensive Plan and relevant public policies.

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[1] Through a RFQ issued in August of 2013, the Connecticut Green Bank qualified several firms and individuals with expertise in program evaluation, measurement and verification to support our strategies.

[2] Paul Horowitz of PAH Associates and Chris Kramer of the Energy Futures Group

Resolution

RESOLVED, that the Audit, Compliance and Governance Committee hereby recommends to the Board of Directors for approval the proposed draft Evaluation Framework.

Second. Discussion. Vote

Evaluation Framework

Assessing, Monitoring, and Reporting of Program Impacts and Processes

July 1, 2016

Table of Contents

1. Contributors and Acknowledgements

In a Request for Qualifications (RFQ) issued on August 28, 2013, the Connecticut Green Bank ("the Green Bank") sought to identify qualified firms and individuals with expertise in program evaluation, measurement, and verification (EM&V) that could be engaged on an as needed basis to complete certain EM&V projects ranging from researching and developing strategies for EM&V and data collection and analysis to conducting in-depth market, process, or impact evaluations.

For its evaluation framework development and data collection efforts, the Green Bank selected the Opinion Dynamics and Dunsky Energy Consulting team, including:

- Philippe Dunsky, President of Dunsky Energy Consulting
- Antje Flanders, Vice President of Opinion Dynamics
- Alex Hill, Senior Consultant of Dunsky Energy Consulting
- Jake Millette, Project Manager of Opinion Dynamics

The consulting team was selected to assist the Green Bank in developing a strategy for an evaluation framework to assess, monitor and report program impacts and processes. Given their industry leading expertise in the area of financing programs, they were engaged in an effort to assist us in first defining and testing key indicators and associated metrics for impact evaluation with a focus on market transformation, and developing a data collection protocol. This document is the output of the first engagement.

The Green Bank would like to acknowledge the Opinion Dynamics and Dunsky Energy Consulting for contributing to this important work for our organization.

The Green Bank, Opinion Dynamics, and Dunsky Energy Consulting are also grateful for the guidance and feedback from the Board of Directors of the Green Bank and the Joint Committee of the Energy Efficiency Board and the Green Bank.

We also appreciate the feedback and guidance from several individuals and specifically would like to acknowledge:

- Matt Gibbs, former Director of Energy Efficiency at Eversource Energy
- Paul Horowitz, President at PAH Associates
- Chris Kramer, Senior Consultant at Energy Futures Group (and Financing Consultant to the Connecticut Energy Efficiency Board)
- Pat McDonnell, Director of Conservation and Load Management at the United Illuminating Company

As a founding member of the Green Bank Network,[1] we would also like to acknowledge our colleagues who have been advancing best practices for assessing, monitoring, and reporting the impact of public-

[1] http://greenbanknetwork.org/

private partnership models – Australian Clean Energy Finance Corporation,[2] New York Green Bank,[3] and the UK Green Investment Bank.[4] We look forward to continuing to collaborate with them – through the Coalition for Green Capital and the Natural Resources Defense Council – to advance public-private partnerships and clean energy investing in our communities and worldwide.

This "Evaluation Framework: Assessing, Monitoring and Reporting on Program Impacts and Processes" document represents an effort by the Green Bank to formalize how we evaluate the societal impacts and benefits we are helping create as a result of our investments. We thank and acknowledge all of the contributors who have helped us produce this evaluation framework.

[2] http://www.cleanenergyfinancecorp.com.au/reports.aspx
[3] New York Public Service Commission Case 13-M-0412
[4] http://www.greeninvestmentbank.com/green-impact/

2. Introduction

The Green Bank, a quasi-public agency created by state legislation and governed by a Board of Directors, is the first state-level green bank in the United States. The Green Bank uses limited public dollars to attract and deploy private capital to accelerate the deployment of clean energy[5] in Connecticut. Note, the definition of "clean energy" includes "financing energy efficiency projects" and "alternative fuel vehicles and associated infrastructure" – and thus the term "clean energy," when used throughout this document, also includes renewable energy, energy efficiency, and clean fuels for transportation.

The Green Bank's goal is to create a thriving marketplace with low-cost and long-term private capital to accelerate the adoption of efficient use of energy and of clean energy technologies in Connecticut by making clean energy more accessible and affordable for homeowners, businesses and institutions. By attracting and deploying private capital at leverage ratios of 5, 10, or 20 to 1 of public funds, through public-private partnerships the Green Bank can support the successful implementation of Connecticut's ambitious clean energy policy goals. For example, through statute (i.e. Public Act 15-194), regulation (i.e. Conservation and Load Management Plan), and planning (i.e. Comprehensive Energy Strategy and Integrated Resources Plan), the Comprehensive Plan of the Green Bank seeks to support the clean energy policies of the state.[6]

Beyond the contributions that Green Bank projects and programs can deliver within its near term Comprehensive Plan, to a large extent through the use of private sector capital, we are mindful that significant deployment of clean energy resources and strategies will be required over the coming decades as the state continues to encourage the successful attainment of its long term greenhouse gas emissions reduction target, of 80 percent below 2001 levels by 2050. The Green Bank's ability to continue to attract and deploy increasing amounts of low-cost and long-term private capital will be an essential element toward attaining this target while helping to mitigate the associated costs that would potentially be recovered from residents, businesses, and industry through electric or gas rates.

In this document, the Green Bank presents a framework through which to evaluate the impacts of its programs. These impacts can broadly be viewed within two categories:

1) Energy savings and clean energy production supported by Green Bank programs and the resulting societal impacts or benefits arising from clean energy investments; and

2) Market transformation impacts from Green Bank programs that lead to new opportunities to support clean energy projects, ultimately through the increase in private capital investment in clean energy.

[5] Clean energy means solar photovoltaic energy, solar thermal, geothermal energy, wind, ocean thermal energy, wave or tidal energy, fuel cells, landfill gas, hydropower that meets the low-impact standards of the Low-Impact Hydropower Institute, hydrogen production and hydrogen conversion technologies, low emission advanced biomass conversion technologies, alternative fuels, used for electricity generation including ethanol, biodiesel or other fuel produced in Connecticut and derived from agricultural produce, food waste or waste vegetable oil, provided the Commissioner of Energy and Environmental Protection determines that such fuels provide net reductions in greenhouse gas emissions and fossil fuel consumption, usable electricity from combined heat and power systems with waste heat recovery systems, thermal storage systems, other energy resources and emerging technologies which have significant potential for commercialization and which do not involve the combustion of coal, petroleum or petroleum products, municipal solid waste or nuclear fission, financing of energy efficiency projects, projects that seek to deploy electric, electric hybrid, natural gas or alternative fuel vehicles and associated infrastructure, any related storage, distribution, manufacturing technologies or facilities and any Class I renewable energy source, as defined in section 16-1.

[6] FY 2017 and 2018 Comprehensive Plan of the Connecticut Green Bank – click here

This evaluation framework focuses primarily on assessing the market transformation impacts of the green bank model. However, it also recognizes the importance of regularly evaluating the program impacts along the way (e.g., of the Residential Solar Investment Program).[7]

The Green Bank currently derives a majority of its capital sources from electric ratepayers,[8] although increasingly it is accessing more and more private capital through various for-profit,[9] non-profit,[10] and public finance[11] sources and transactions. Unlike the State's energy utilities, the Green Bank is not required by statute to evaluate its programs' impacts and thus Green Bank programs are not subject to the evaluation requirements to which the electric and gas utilities who are incentivized to deliver energy efficiency programs to customers are subject. However, many of the Green Bank's programs co-exist in the market alongside ratepayer supported clean energy incentive and other programs; in many cases, they are in a mutually supporting relationship with the utility sponsored programs.

While the Green Bank is not obliged to evaluate its programs in the same manner as are the utilities' energy efficiency programs, the Green Bank is committed to evaluating its programs in order to ensure that the Clean Energy Fund, cap-and-trade allowance proceeds, and other investments are yielding value to the Green Bank's objectives and that the Green Bank's programs effectively and efficiently operate and deliver their services to customers. The Green Bank sees assessing, monitoring and reporting of program impacts and processes as a normal function of operating an organization focused on delivering societal impact. In addition, there are varying degrees of statutorily required auditing and reporting requirements for the Connecticut Green Bank and its programs, including:

- **Independent Audit** – Public Act 11-80 requires that the Clean Energy Fund,[12] which is administered by the Connecticut Green Bank be audited annually by independent certified public accountants; and

- **Reporting** – Public Act 15-194 requires the Green Bank to report to the Energy and Technology Committee of the General Assembly on progress toward the goals of the Residential Solar Investment Program (RSIP).

For more details on the statutory reporting requirements of the Green Bank – see Appendix I.

[7] Cost-Effectiveness Assessment of the Residential Solar Investment Program (March 26, 2016) by Cadmus click here

[8] Through the Clean Energy Fund, a 1 mil surcharge (i.e., $0.001/kWh) is charged to electric ratepayers in Eversource Energy and United Illuminating service territories. This surcharge aggregates to approximately $27 million a year in capital for the Connecticut Green Bank. The Connecticut Green Bank also receives cap-and-trade allowance proceeds of about $5 million a year through the Regional Greenhouse Gas Initiative to support clean energy projects.

[9] Through a public-private partnership with Hannon Armstrong, the Connecticut Green Bank through contract has access to $100 million of private capital to support its C-PACE program.

[10] Through a public-private partnership with the MacArthur Foundation, the Connecticut Green Bank and its partner the Housing Development Fund have access through contract to $5 million of program related investment capital to support their low income and multifamily programs.

[11] Through Sections 159-166 of SB 501 (i.e., 2012 Special Session of the Connecticut General Assembly), the Connecticut Green Bank will begin to issue revenue bonds – or green bonds – to raise private capital to support its programs in 2016.

[12] On and after July 1, 2004, the Public Utility Regulatory Authority requires the electric IOU utilities to assess a charge of not less than one mill per kilowatt hour to each end use customer of electric services in Connecticut and that those funds be deposited into the Clean Energy Fund. The Clean Energy Fund is within the Connecticut Green Bank.

This evaluation framework was developed to assist the Green Bank to present appropriate evaluation approaches to estimate the impacts and benefits of its programs and to help it communicate them to key stakeholders.

2.1 Program Evaluation Objectives

Several objectives guided the development of this evaluation framework, including:

- Identify and estimate quantitative and market impacts resulting from Green Bank financing and Green Bank supported clean energy programs;
- Provide insights into program efficiency and effectiveness that can support program design and process improvements, including coordination with other Energize CT programs;
- Track progress toward Green Bank's market transformation objectives;
- Where appropriate to the program being evaluated, estimate the extent to which the program produced savings or clean energy generation that would not have happened in its absence;
- Provide an assessment, monitoring and reporting mechanism to support the issuance of green bonds that provide increased capitalization to the Green Bank for clean energy investment; and
- Report progress toward objectives and impacts to internal and external stakeholders through the Comprehensive Annual Financial Report (CAFR) of the Green Bank.

2.2 Framework Elements

The evaluation framework presented in this document was developed based on a review of the Green Bank's overall program goals as outlined in the Comprehensive Plan, through discussion with program administrators and Green Bank leadership, and through a review of Green Bank reporting and program documentation, including its audited and unaudited statements.[13] This evaluation framework can be incorporated into the operations of the organization and used as a template for Green Bank programs. The remainder of this document presents the following framework elements:

- Program Logic Model (PLM)
- Program Impact Indicators
- Evaluation Plan Development
- Net Impact Analysis and Cost-Benefit Analyses

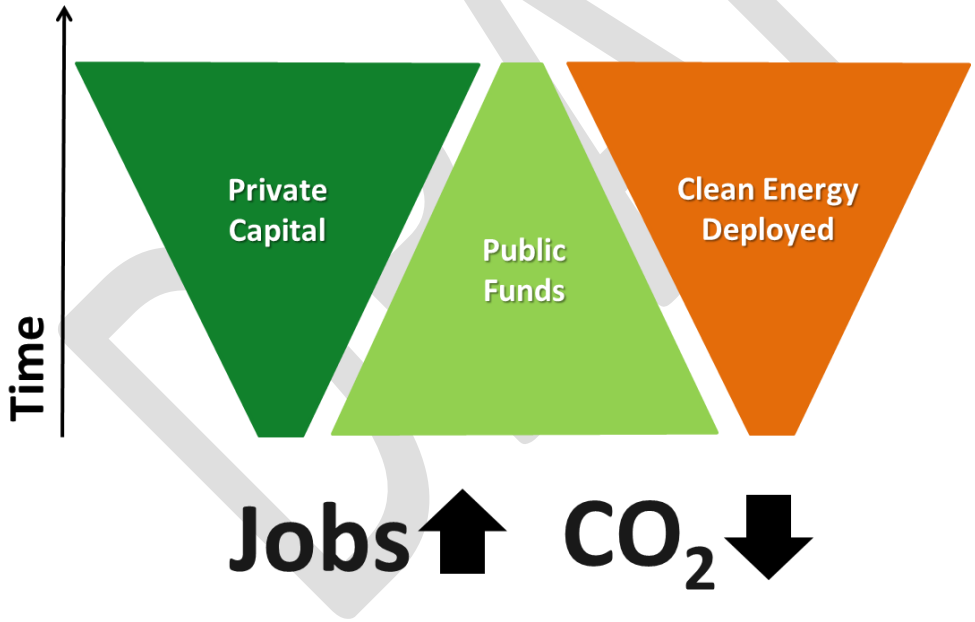
[13] Comprehensive Annual Financial Report for FY 2015 for the Connecticut Green Bank

3. Program Logic Model

A Program Logic Model (PLM) is a "graphical representation of the causal links between program activities, short-term responses to those activities among market actors and longer-term market effects. Logic models flow from decision-makers' hypotheses of how a program intervention strategy addresses barriers or market failures. A logic model can provide the basis for establishing metrics that indicate progress toward program goals and help program administrators, policymakers, and stakeholders assess the likely timeframe within which the theorized transformation might be realized."[14]

The high level, long term Green Bank market transformation objective – to rely increasingly on private capital to deploy increasing amounts of clean energy resources, increase jobs and reduce greenhouse gas emissions – can be graphically represented by the following (see Figure 1). The green bank model of public-private partnerships depicts public funds being leveraged more and more over time by private capital – for example, achieving a high leverage ratio for every $1 of public funds invested by the Green Bank by attracting $10 of private capital investment. The Green Bank also seeks to recover its investments over time through its financing programs achieving even greater leverage on the $1 of public funds invested.

Figure 1. Green Bank Model of Public-Private Partnerships for Clean Energy Deployment



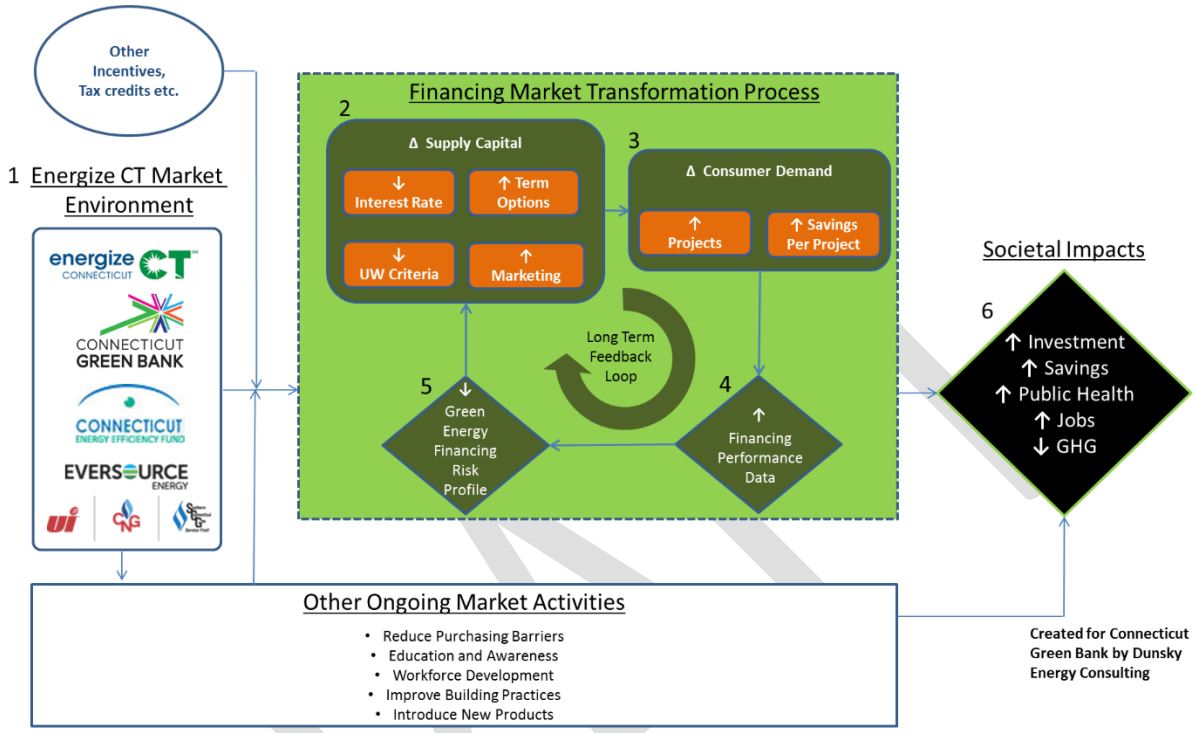
This organizational objective can serve as the general framework within which the PLM for the Green Bank's overall strategy to increase the use of private capital financing to accelerate the deployment of clean energy can be developed and presented. The focus of the Connecticut Green Bank's PLM is on its role in effecting this transformation (see Figure 2).[15] However, as noted above, the Green Bank's programs and associated financing elements are for the most part marketed and deployed in the same environment as the utilities' energy efficiency and renewable energy (i.e., zero emission renewable

[14] State and Local Energy Efficiency Action Network (2015). *Making it Count: Understanding the Value of Regulated Energy Efficiency Financing Programs*. Prepared by: Chris Kramer, Emily Martin Fadrhonc, Charles Goldman, Steve Schiller, and Lisa Schwartz of Lawrence Berkeley National Laboratory (pp 53). click here

[15] The Green Bank recognizes that a more formalized and detailed structure is typical of industry logic models, and that this is a high level display.

energy credit and low emission renewable energy credit) programs, and they often intersect and interact at the Green Bank's individual project level.

Figure 2. Green Bank Program Logic Model



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 market transformation process at work with one of its products is the CT Solar Loan.[16]

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.

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

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

3.1 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. [17]

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.[18] It is important to note that there are a number 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.

[17] 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.

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

3.2 Financing 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.

- **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)[19] 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

[19] Section 52 of Public Act 13-298

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 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.[20]

[20] 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

3.3 Societal Impacts

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,[21] increase in the creation of local in-state jobs,[22] and the reduction of greenhouse gas emissions[23] for society. The impacts may also include consideration of secondary or indirect benefits such as GDP growth and energy savings supported by investment from other lenders who have leveraged Green Bank data or marketing efforts.

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.

[21] 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

[22] 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. – click here

[23] 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. Program Impact Indicators

For an extensive list of potential program performance indicators that will be used to assess the pace and extent of the movement toward the market transformation objectives, see Appendix II. Each indicator is a numerical value that, in relation both to a stated value for that indicator that would represent success and to previous values that would indicate the extent of progress over time, provides the Green Bank with quantitative feedback on its progress toward transforming the clean energy markets with respect to more customers and deeper energy savings with the use of greater proportions of private financing.

These program impact indicators are organized to correspond to four key impact areas of the PLM (see Figure 3):

1. Capital Supply
2. Consumer Demand
3. Loan Performance / Risk
4. Impacts / Benefits

Figure 3. Key Program Impact Indicators

1. Capital Supply

- Available private loan pool
- Green Bank funds available for credit enhancements
- Ratio of public to private capital deployed
- Weighted average interest rate
- Weighted average loan term

2. Consumer Demand

- Awareness of financing options
- Total capital deployed (total amount of the loan)
- Number of customer applications
- Application approval rate
- Green Bank customer acquisition costs
- Number of active enrolled contractors

3. Loan Performance / Risk

- Annual default rate
- Average delinquency rate
- Early repayment rates
- Average and minimum FICO
- Average and maximum DTI ratio

4. Impacts / Benefits

- Clean energy capacity installed
- Energy savings from clean energy
- Jobs created
- Improvement in public health
- Greenhouse gas emission reductions
- Savings-to-investment ratio (SIR)
- Total net benefits

The first three categories in blue, present the key market transformation performance impacts of Green Bank programs, following the market transformation process described in Section 3.2. This process involves 1) the provision of capital supply, which facilitates 2) consumer demand, allowing collection of data to improve the 3) risk profile of clean energy investments, improving the capital supply and unlocking greater demand for clean energy, ultimately 4) increasing energy savings, clean energy production, and positive societal impacts. The financing market transformation process can be entered at any point. The category in green, captures the program's ultimate clean energy benefits for economic development and environmental protection. An important step in developing an evaluation plan for any Green Bank program will be to review the lists of indicators and select those that are most relevant to that program and measurable in order to formulate the program's key performance indicators (KPIs).

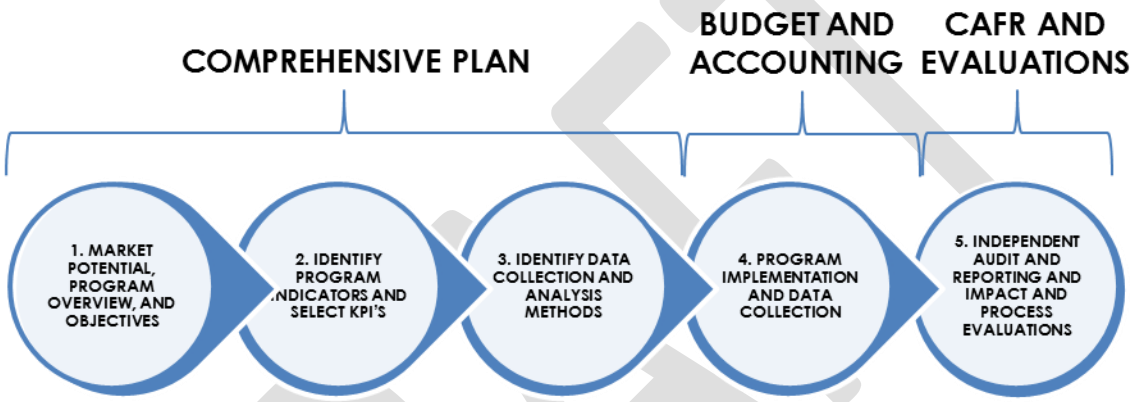
An associated timeline would also need to be developed to indicate expected levels of progress toward near-term and long-term metrics at specific points in time.

While this framework focuses on the evaluation of Green Bank program impacts, assessing market transformation effects may best be accomplished by also including some process evaluation. The direct program impacts represent the specific energy savings or economic benefits stemming from the program financing or supported financing (i.e. third-party financing that benefits from program credit enhancements). Aside from measuring the impacts that are supported by the program, it will be important to make some assessment of the portion of the supported clean energy projects and measures that would likely not have happened in the absence of the Green Bank program. Methods for assessing this are addressed in more detail below in the Net Impact Analysis section to follow.

5. Evaluation Plan Development

An important element of applying the evaluation framework is incorporating it within the operations of the organization. This section outlines five steps in the plan development and implementation process. The first three steps can be incorporated into the Green Bank's multi-year Comprehensive Plan, the fourth step is within the annual Budget and ongoing Accounting processes for the organization, and the fifth and final step is through either the independently audited Comprehensive Annual Financial Report (CAFR) or program evaluation, initiated through a statutory requirement, Board of Director requests, or at the discretion of the Green Bank management– see Figure 4.

Figure 4. Evaluation Plan Development and Implementation Process



5.1 Step 1 – Market Potential, Program Overview, and Objectives

Within the Comprehensive Plan of the Green Bank, for each sector programs and products, it is important to clearly state the market in which the program operates – that is, its market potential or Total Available Market (TAM) and the Serviceable Addressable Market (SAM) – how much of the universe is the market for my programs and products?[24] From there, providing an overview of the programs and products as well as the specific targets or objectives will provide a foundation for evaluation. Understanding how the programs and products address market barriers should be part of this first step, in order to then select program KPIs and subsequent evaluation methods. A program logic model for each program, typically an implementation tool used by program managers to observe and track performance, should also be prepared. It can also serve as an input into the development of individual program evaluation plans.

5.1.1 Market and Program Baseline Assessments

As part of its evaluation activities, the Green Bank may conduct baseline assessments to understand current energy savings and clean energy production levels being supported by Green Bank programs and products and to establish baseline values for the key performance and market indicators. These assessments may help establish benchmark values against which to measure the impacts of future

[24] The National Action Plan for Energy Efficiency (2007) describes technical potential (i.e., theoretical maximum), economic potential (i.e., cost effective), and achievable potential (i.e., aggressive and effective implementation).

activity, while simultaneously serving as near-term assessments of goals achieved through Green Bank programs. Baseline assessments may also characterize current private market practices in providing capital for clean energy, to provide a benchmark for measuring future impacts on the broader market. Some of these baseline characterizations may be conducted collaboratively with the Department of Energy and Environmental Protection, the state's utilities, or other parties.

5.2 Step 2 – Identify Program Indicators, Select KPI's and MPI's

The evaluation framework draws from a table of indicators (see Appendix I) which captures various program impacts and market transformation metrics. For each program outlined within the Comprehensive Plan, these indicators are of varying relevance and may be more or less measurable depending on the nature of the financing program's features and available data. The program logic models can serve as a guide on which indicators, key performance indicators (KPIs) and market transformation or market performance indicators (MPIs) to select for each program.

- **Indicator** – A measurable metric of program performance (e.g., the number of loans issued, total estimated energy savings).

- **Key Performance Indicator** – a measure of the program's progress toward its core objectives. KPIs may simply be a single indicator (e.g., annual loan volume) or they may combine multiple indicators to develop a metric that captures a relationship among indicators. For example, the leverage ratio of private to public capital is comprised of the ratio of the total private capital employed to the total public capital invested through the program. In this case, an increasing leverage ratio indicates that the program is making progress toward its core objective of leveraging private capital.

- **Market Performance Indicator** – a measure of the program's contribution towards the financing market transformation process and program logic model of the Green Bank.

For a given program, the framework can be applied to develop a list of indicators, KPIs, and MPIs as follows:

1) Identify the relevant indicators from the provided list and remove indicators that do not apply to the program;
2) Assess the relevance and measurability of each indicator to the program;
3) Select the indicators to be measured in the evaluation; and
4) Identify the indicators that best represent progress toward the program's objectives and green bank model and formulate measurable KPIs and MPIs.

5.3 Step 3 – Identify Data Collection and Analysis Methods

Once the program indicators, KPIs, and MPIs have been established, the Comprehensive Plan should outline the data collection and analytical methods that will be used. Selected methods will depend on a number of factors, including the selected KPIs and MPIs, the type of program, the status of projects within the program (i.e., approved, in construction, closed, or completed transactions), the installed measures, the expected magnitude of savings, the level of program participation, and the evaluation timeline. Within the Comprehensive Annual Financial Report process an independent auditor will assess

the data collection systems, project status, and project reporting to provide a formal opinion as to whether these data are fair and accurate.

In addition to program materials, evaluations will typically require additional data. Data collection can be broadly grouped into primary and secondary data collection methods. Primary data collection might include in-depth interviews, surveys, real-time metered data, access to utility bill data, and/or on-site measurement and verification. Every effort will be taken to collect customer, contractor, and capital provider data (e.g., through surveys and other means) during the project implementation phase so as to ensure that the information is captured on time as opposed to a future point in time. Examples of secondary data include evaluation plans or reports from other programs/jurisdictions, market reports, or publicly available data (e.g., Census data, EIA data).

5.4 Step 4 – Program Implementation and Data Collection

As programs are being implemented, continuous data collection, analysis, and reporting are being done. With the approval of the Comprehensive Plan and Budget, the accounting department and data collection efforts are constantly tracking and monitoring program performance towards objectives. Lean process improvements are constantly being conducted, and performance is being regularly communicated to staff and the Board of Directors. Having ongoing data collection, analysis, and reporting alongside quarterly communications to stakeholders will lead to continuous improvement of programs and processes.

It should be noted that the Green Bank does require customers that utilize its financing programs (e.g., C-PACE and the Smart-E Loan) to sign data release forms (see examples provided in Appendix III and Appendix IV). The Green Bank anticipates that the use of actual energy consumption data pre (i.e., 1 to 3 years before) and post project completion (i.e., through the life of the financing) will help the Green Bank communicate the value of financing clean energy improvements to existing and prospective customers. The Green Bank is also in the process of establishing an official customer privacy policy that balances the need to protect customer privacy while at the same time providing information that can be used for public disclosure including, but not limited to auditing, reporting, and evaluation. Collecting data through surveys during the financing process should also be pursued. In an effort to support national data standardization and collection efforts, consideration should also be given to the Connecticut Green Bank being a pilot participant in the State Energy Efficiency Action Network (SEEAction Network) Financing Solution Working Group's residential loan data standardization efforts.[25]

5.5 Step 5 – Independent Audit and Reporting, and Impact and Process Evaluation

Once select indicators and KPIs, and data collection and analysis methods have been established, and various programs and products have been implemented, the independently audited Comprehensive

[25] 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

Annual Financial Report (CAFR) will be the mechanism to publicly report on results, and as appropriate independent evaluation of programs will be conducted.

5.5.1 Independent Audit and Reporting

A CAFR is a set of government financing statements comprising the financial report of a state, municipal or other government entity that complies with the accounting requirements promulgated by the Governmental Accounting Standards Board (GASB). GASB provides standards for the content of a CAFR in its annually updated publication *Codification of Governmental Accounting and Financial Reporting Standards*. A CAFR is compiled by a state, municipal or other governmental accounting staff and "audited" by an external American Institute of Certified Public Accountants (AICPA) certified accounting firm utilizing GASB requirements. It is composed of three sections – Introductory, Financial, and Statistical.

- **Introductory** – contains the Letter of Transmittal, Board of Directors, and Organization Chart;
- **Financial (Audited)** – contains the Independent Auditor's Report, Management's Discussion and Analysis (unaudited), Basic Financial Statements (i.e., Statement of Net Position, Statement of Revenues, Expenditures, and Changes in Net Position, State of Cash Flows, and Notes to Financial Statements), and other required supplementary information; and
- **Statistical (Unaudited)** – contains various Financial Statistics (e.g., Financial Trends, Revenue Capacity, Debt Capacity, Demographic and Economic Information, and Operating Information) and Non-Financial Statistics (e.g., Governance, Income, Measures of Success, Market Transformation, etc.).

As the "gold standard" in government reporting, the CAFR is the mechanism the Green Bank uses to report its fiscal year financial and statistical performance to its stakeholders.

5.5.2 Impact Evaluation

With respect to the independent evaluation of programs, some of the work might be done in-house (e.g., data collection, surveys, etc.) as part of the project implementation process, while a majority of the work (e.g., interviews, sampling, etc.) will be done at a later point by an independent evaluation contractor. To ensure quality assurance and quality control given the evaluative use of the data and its implications regarding the assessment of programs, having the ability to retain independent evaluators is important in order to examine the impacts of a particular program. As with financial audits, independent evaluation of program results can help instill confidence in stakeholder support, insights, and observations of the Green Bank.

5.5.3 Process Evaluation

In the context of the Green Bank programs, a process evaluation is a systematic assessment of a program for the purposes of 1) documenting program operations at the time of the examination and 2) identifying and recommending improvements that can be made to the program to increase the

program's efficiency or effectiveness for acquiring energy resources while maintaining high levels of participant satisfaction.[26]

[26] Adopted from New York State Process Evaluation Protocols Dr. Katherine Johnson, April 2013, and California Energy Efficiency Evaluation Protocols The TecMarket Works Team, April 2006

6. Net Impact Analysis

Net impact analysis attempts to identify the impacts (e.g., energy savings, job creation, etc.) that would not have happened in the absence of a program. Net impact analysis thus tries to determine what share of savings can be attributed to a program. For example, Green Bank program participants might have implemented their clean energy project even without the loan for two reasons:

1. They also received a rebate or an incentive, which was equally or more important in their decision to go ahead with the project than the loan; and/or

2. They might have used alternative sources of financing, e.g., through private lenders or equipment vendors, or may have paid for the project using their savings.

In order to have an indication of the Green Bank programs' true impacts, when necessary, efforts should be made to determine what portion of the Green Bank supported projects (and the resulting savings) would not have happened in the absence of the program. Thus, some form of attribution analysis, either quantitative or qualitative, should be included in the Green Bank evaluation plans. The results can be used to inform both program reporting and consideration of program design adjustments.

6.1 Quantitative Assessment: Net-to-Gross Ratio (NTGR)

Rigorous determination of net impacts requires establishing a NTGR that represents the share of the savings that are directly attributable to the program. This typically includes consideration of both free-ridership and spillover. Free-ridership and participant spillover are often assessed through questions in a participant survey; consideration of non-participant spillover is less common in net impact evaluations and would require a non-participant or market actor survey.

Many of the Green Bank programs co-exist with utility administered energy efficiency programs or other government incentives, which creates challenges to establishing a NTGR or its components for the Green Bank's programs. This should not, however, dissuade attempts to consider and implement approaches to estimate these effects.

6.2 Qualitative Assessment

An alternative to establishing a NTGR is to perform a qualitative assessment of the impact of Green Bank financing on the completed projects. This could include asking participants about the relative importance of different factors (e.g., including the loan and any rebates or incentive received) on their decision to complete the clean energy project or asking about the likelihood of completing the project in the absence of the financing.

In the absence of surveys, an expert opinion may provide qualitative assumptions to assign savings. Although this is not an accepted attribution technique, it may provide a framework to assess progress toward increasing the uptake of measures types specifically targeted in the program objectives (e.g., longer payback or non-incented measures).

While these qualitative approaches do not provide a value to be applied to program savings, they provide insights into the importance of the Green Bank financing in completing the clean energy projects.

7. Cost-Benefit Analysis

Assessing the costs and benefits of the Green Bank's programs plays an important role to demonstrate the effectiveness of the Green Bank investments and provides a tool for comparing results among Green Bank programs. These can be assessed from the customers' perspective (i.e., the participant), the program administrator's (i.e., the Green Bank) perspective, or a wider societal perspective. Each perspective provides an important measure of the Green Bank's overall impact, and the cost-benefit ratio for each can be derived and tracked over time for Green Bank's individual programs and overall portfolio.

The three cost-benefit ratios presented below attempt to relate the costs borne by each stakeholder to the primary benefit sought or objective:

- **Societal Objective:** Economic development (e.g., jobs supported) and environmental protection (e.g., GHG emissions reduced)
- **Green Bank Objective:** Maximize clean energy production (i.e., energy savings and clean energy production) and optimize investments (i.e., total investment)
- **Participant Objective:** Optimize financial returns (i.e., absolute reduction in energy costs)

This results in three different perspectives on the Green Bank program or portfolio cost-benefit ratios that collectively provide a picture of Green Bank's effectiveness in delivering on each key objective – see Appendix V for C-PACE project example results.

7.1 Societal Perspective: Environmental and Economic Objectives

The societal perspective cost-benefit analysis attempts to capture the Green Bank's effectiveness in achieving its overarching goals of supporting economic development and environmental protection.

- **Employment Objective ($ invested / job-year supported)**[27]
  = Green Bank Investments / estimated direct, indirect and induced job-years supported
- **GHG Reduction Objective (tons CO_2 eq. / $1,000 invested)**[28]
  = Estimated GHG reductions resulting from clean energy supported / Green Bank Investments

If Green Bank applies the Carbon Count methodology, then the GHG reductions are attributed simply by the portion of the overall project costs financed by the Green Bank investment. At a minimum, the portion of the overall project implementation costs covered by utility incentives should be calculated, and the corresponding portion of GHG reductions removed from the total. The value of other state and federal incentives (RECs and tax credits) should be noted in the results to support full disclosure, and it

[27] The framework presents the investment value per job-year supported to express the employment cost-benefit – that is, the cost to acquire a unit of the benefit, here one job-year supported by the Green Bank. For some audiences it may be more appropriate to present the result as a benefit-cost ratio – that is, the inverse of the Employment Objective metric as presented above (job-years supported per $1,000 invested)

[28] For cross state and other comparison purposes the equation above presents the metric from the benefit-cost perspective. For other purposes it may be valuable to derive the cost to acquire a ton of CO_2 eq. (i.e., the inverse of the above equation).

should be determined whether the associated portion of GHG reductions should be removed from the total credited to Green Bank.[29]

7.2 Green Bank Perspective: Public Cost of Clean Energy (PCCE)

The PCCE captures the ratio of the present value of public monies invested to the overall savings achieved by Green Bank supported projects.

- **Public Cost of Clean Energy ($ / MMBTU)**
  = Present Value of Public Costs / Total Clean Energy Delivered

Public Costs include the Net Present Value (NPV) of Green Bank investment in the program, as well as the present value of all state incentives (e.g., utility and RECs) and federal incentives (e.g., investment tax credits, depreciation, etc.) received by program participants.

Total Clean Energy Delivered includes the total of all financed project lifetime energy saved or clean energy generated.

In the cases where Green Bank can successfully attribute savings between its programs (i.e., financing), state and federal incentives (e.g., utility efficiency programs, REC's, tax credits etc.), then a more precise measure of Green Bank's own cost per unit of clean energy delivered can be defined as such:

- **Green Bank Cost of Clean Energy ($ / MMBTU)**
  = NPV of Green Bank Investments / Attributable Clean Energy Delivered[30]

The Green Bank Cost of Clean Energy captures just the Green Bank's direct cost (or net return) for delivering clean energy. Comparison between this result and the PCCE result provides a tool to assess the degree to which Green Bank program can deliver clean energy at a reduced public cost.

7.3 Participant Perspective: Savings to Investment Ratio (SIR)

The participant's SIR is the ratio of the present value of the benefits accrued to the participant to the present value of the costs incurred to implement and finance the project. Benefits may include energy and demand cost savings, as well as state and federal incentives paid to the participant. Some quantifiable non-energy benefits, such as operations and maintenance savings, may also be included. Costs typically include financing repayment costs, any unfinanced portion of the overall investment (not covered by utility incentives) and maintenance costs. In general, a project or program is deemed cost-effective to participants if the SIR is greater than one.

- **Average Project SIR** = $\sum SIR_n \times \text{loan value}_n / \sum \text{loan value}$

The sum of all participant project NPVs provides a cost-benefit indicator that expresses the magnitude of net economic benefits returned to the pool of program participants. It should be calculated across

[29] The inclusion or exclusion of the portion of GHG financed through tax credits and RECs should be determined by following the rules of any third-party green bond assessment methodology applied by Green Bank, such as the Carbon Count method referenced above.

[30] In the absence of savings attribution data, the Green Bank Cost of Clean Energy may be expressed per unit energy *supported.* However, it is essential to note that the Green Bank Cost of Clean Energy (supported) is not directly comparable to the Green Bank Cost of Clean Energy (attributable).

the same group of participants as the average project SIR above (i.e. specific year or years, project type, program lifetime, etc.)

- **Total Program Participant NPV** = ∑NPV (for all participants)

8. Appendix I – Statutorily Required Reporting

Per statute, the Connecticut Green Bank is required to file the following organizational reports:

- **Annual Report** – per C.G.S. Section 1-123(a), an annual report to the Governor, the Auditors of Public Accounts, and two copies to the Legislative Program Review and Investigations Committee.[31] Per C.G.S. Section 245n(f)(1), the Green Bank must also file an annual report to DEEP, the Legislative Commerce Committee, and the Legislative Energy and Technology Committee on its activities including those undertaken in collaboration with the Energy Conservation and Load Management Fund. The Green Bank also provides every chief elected official within Connecticut's cities and towns once a year a cover letter, fact sheet, and annual report.

- **Quarterly Financial Cash Flow Reports** – per C.G.S. Section 1-123(b), a quarterly report to the Office of Fiscal Analysis and shall include, but not be limited to, for each fund and account of the agency:

    1. Beginning fiscal year balance;
    2. All funds expended and all revenue collected by the end of the quarter; and
    3. Total expenditures and revenues estimated at the end of the fiscal year.

- **Quarterly Personnel Status Reports** – per C.G.S. Section 1-123(c), a quarterly report to the Office of Fiscal Analysis and shall include, but not be limited to the total number of employees by the end of the quarter.

Per statute, the Green Bank is required to file the following programmatic reports:

- **Anaerobic Digester and Combined Heat and Power** – per Public Act 15-152, a report on the anaerobic digester pilot program and whether it should continue. This is due on or before January 1, 2018 to the Legislative Energy and Technology Committee, with additional copies to the clerks of the Senate and House, the Office of Legislative Research, and the State Librarian.

- **REEEFA Report** – per C.G.S. Section 16-245aa(d), an annual report on the effectiveness of the Renewable Energy and Efficient Energy Finance Account (REEEFA) to the Legislative Energy and Technology Committee.

- **Residential Solar Investment Program** – per C.G.S. Section 16-245ff, files a 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.

Per the Green Bank's enabling statute, the Green Bank:

[31] The annual report includes information detailed in the audited annual Comprehensive Annual Financial Report.

- **Develop Standards** – must develop standards to govern the administration and investments of the Green Bank before providing financing support.[32]

- **Disclosure** – must make information regarding the rates, terms and conditions for all of its financing support transactions and annual reviews available to the public.[33]

- **Clean Energy Expertise** – may expend funds for evaluations that support clean energy technologies and expand the expertise of individuals, businesses and lending institutions with regard to clean energy technologies.[34]

[32] C.G.S. Section 16-245n(d)(B)
[33] C.G.S. Section 16-245n(d)(F)
[34] C.G.S. Section 16-245n(c)

9. Appendix II – Program Performance Indicators

The following program performance indicators were identified through interviews with staff of the Green Bank from various programs and products. These indicators are important from the perspective of the Connecticut Green Bank – the program administrator. There are other actors (e.g., lenders, policy-makers, rating agencies, and investors) and use cases (e.g., program design, eligibility criteria, loan and cash management, loan refinance, and securitization) outside of the Connecticut Green Bank's evaluation framework,[35] but this represents a beginning to data that will be collected, analyzed and reported.

Financing Supply

The following is a list of the program performance indicators for financing supply, including if it is an indicator of market transformation or market performance indicator (MPI), its measurability, and the source of data:

CODE	INDICATOR	MPI	MEASURABILITY	DATA SOURCE
S1	Total Available Program Loan Pool		High	= S2 + S3
S2	Available Public Loan Pool		High	GB Program Data
S3	Available Private Loan Pool	x	High	GB Program Data
S4	Ratio of Available Public to Private Loan Pool	x	High	= S2 / S3
S5	Total Public Funds Invested		High	= S6 + S7 + S8 + S9
S6	Total GB Loans to Participants		High	GB Program Data
S7	Other Public Loans to Participants		Low	Program Data
S8	Total Public Incentives Provided to Program Participants (IOU, RECs etc.)		Medium	GB Program Data, Incentive Program Data
S9	Total Tax Credits Issued to Program Participants (Federal ITCs, etc.)		Low	Program Data
S10	Green Bank Funds Available for Credit Enhancements		High	GB Program and Planning Data
S11	Total Private Funds Invested		High	= S12 + S13
S12	Private Third-Party Loans Delivered		Medium	Lender data and surveys
S13	Participant Funds Leveraged		Medium	GB program data, EM&V (participant survey)
S14	Bond Sales to Support Program Lending		Medium	GB Financial Data
S15	Total Public Loans to Participants		High	= S6 + S7
S16	Ratio of Public to Private Capital Deployed (Leverage Ratio)	x	Medium	= S5 / S11
S17	Ratio of GB Financing to Incentives		High	= S6 / S8
S18	Interest Rate: Weighted Average and Distribution	x	High	GB Program and Lender Data
S19	Loan Term: Weighted Average and Distribution	x	High	GB Program and Lender Data
S20	Customer Cost of Capital through GB		Medium	GB Program and Lender Data
S21	Financing Delivered for Energy Improvements (EE/RE)		Medium	GB Program and Lender Data
S22	Financing Delivered for Non-Energy Improvements		Low	GB Program and Lender Data
S23	Non-Debt Financing Delivered (Participants)		Medium	GB Program Data, EM&V (Participant Survey)
S24	Geographic Coverage of Private Lenders	x	High	GB Program Data

[35] 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.

S25	Number of PACE Towns Opting In	x	High	GB Program Data
S26	% of Eligible Population Located in PACE Towns	x	High	GB program Data, Secondary Data

Financing Demand

The following is a list of the program performance indicators for financing demand, including if it is an indicator of market transformation, its measurability, and the source of data:

CODE	INDICATOR	MPI	MEASURABILITY	DATA SOURCE
D1	Total Value of Loans Issued	x	High	GB Program Data
D2	Number of Loans Issued	x	High	GB Program Data
D3	Loan Amount: Average and Distribution	x	High	GB Program and Lender Data
D4	Number of Customer Applications	x	Medium	GB Program and Lender Data
D5	Application Approval Rate	x	High	Program Data + GB Administration Data
D6	Green Bank Customer Acquisition Cost		High	GB Program Data
D7	Number of Customer Inquiries	x	Medium	GB Program Data
D8	% of Target Customers Aware of EE Loans	x	Medium	EM&V (General Population Survey)
D9	Number of Active Enrolled Contractors	x	High	GB Program Data
D10	Geographic Coverage of Active Contractors	x	High	GB Program Data
D11	% of Active Contractors with > X Applications	x	High	GB Program Data
D12	Number of New Contractors Bringing in Applications	x	High	GB Program Data
D13	% of Eligible Contractors Aware of EE Loans	x	Medium	EM&V (Contractor Survey)
D14	% of Active Contractors Growing their EE Business	x	Medium	EM&V (Contractor Survey)
D15	% of Active Contractors Cooperating with Others to Achieve Deeper Savings	x	Medium	EM&V (Contractor Survey)
D16	Portion of Total Addressable Market (TAM) Reached		Medium	GB Program Data, EM&V, Secondary Data
D17	Portion of Serviceable Addressable Market (SAM) Reached	x	Medium	GB Program Data, EM&V, Secondary Data

Loan Performance and Risk Profile

The following is a list of the program performance indicators for loan performance and risk profile, including if it is an indicator of market transformation, its measurability, and the source of data:

CODE	INDICATOR	MPI	MEASURABILITY	DATA SOURCE
P1	Annual Default Rate		High	GB Program and Lender Data
P2	Average Delinquency Rate (Days Past Due)		Medium	GB Program and Lender Data
P3	Early Repayment Rate		Low	GB Program and Lender Data
P4	FICO Scores: Average and Distribution	x	High	GB Program and Lender Data
P5	Debt-to-Income (DTI) Ratio: Average and Distribution	x	Medium	GB Program and Lender Data
P6	Loan-to-Value (LTV) Ratio: Average and Distribution		Medium	GB Program and Lender Data
P7	Other Borrower Credit Quality Indicators (TBD)		Medium	GB Program and Lender Data
P8	Maximum Loan Term Offered		High	GB Program and Lender Data
P9	Minimum Interest Rate Offered		High	GB Program and Lender Data

Impacts and Benefits

The following is a list of the program performance indicators for impacts and benefits, including if it is an indicator of market transformation, its measurability, and the source of data:

CODE	INDICATOR	MPI	MEASURABILITY	DATA SOURCE
I1	Capacity of Renewable Energy Systems Financed		High	GB Program Data
I2	Verified Demand Reduction from Renewable Energy Systems		Medium	GB Program Data / EM&V
I3	Estimated Energy Generated from Renewable Energy Systems		High	GB Program Data
I4	Verified Energy Generated from Renewable Energy Systems		Medium	GB Program Data / EM&V
I5	Estimated Demand Reduction from Energy Efficiency		High	GB Program Data
I6	Verified Demand Reduction from Energy Efficiency		Medium	GB Program Data / EM&V
I7	Estimated Energy Savings from Energy Efficiency		High	GB Program Data
I8	Verified Energy Savings from Energy Efficiency		Medium	GB Program Data / EM&V
I9	Project Depth: Average Energy Savings		High	GB Program Data
I10	Project Depth: % Projects With Multiple Measures		High	GB Program Data
I11	Jobs Created		Low	GB Program Data and Macro-Economic Factors
I12	Greenhouse Gas Emissions Reductions		Medium	GB Program Data and Energy GHG Intensity Factors
I13	Participant Non-Energy Benefits (TBD)		Low	GB Program Data
I14	Program Attribution		Low	EM&V (Participant survey)
I15	Average Project Savings-to-Investment Ratio (SIR)		High	GB Program Data
I16	Total Program SIR		High	GB Program Data
I17	Public Cost of Energy		High	GB Program Data

10. Appendix III – Example Data Release Form (C-PACE)

CUSTOMER RELEASE OF UTILITY DATA FORM

Utility and Fuel Supplier Information

Customer Name: _____

Electric Utility: _____ Account #:_____

Gas Utility: _____ Account #:_____

Other Fuel Supplier: _____ □ Oil □ Propane Account #:_____

If necessary, attach additional account numbers to this form.

Utility and Fuel Supplier and Program Information Release

Utility Customer Doing Business on the Property ("Company") **(only necessary if different from C-PACE Borrower)**	**C-PACE Borrower ("Borrower")**
Company Name:	**Borrower Name:**
Company Address:	**Borrower Address:**

PROJECT INFORMATION RELEASE – As a participant in the Connecticut Property Assessed Clean Energy (C-PACE) program and pursuant to Section 3.1(g) of the Financing Agreement between the Connecticut Green Bank ("Green Bank") and the Borrower dated _____, 2015 (the "Agreement"), I certify that I am a duly authorized representative of the Company/Borrower that is a customer of the above-named utility and that I hereby authorize and give permission to the utilities and/or fuel suppliers named above to release to the Green Bank and to any of its program partners, for their confidential use in connection with recording and calculating energy savings resulting from clean energy measures made pursuant to the Agreement at the Utility Service Address identified below. This permission is given for the following Data:

1) The monthly and interval usage, charges, and sales for fuels and/or utilities for the Release Period set forth below; and
2) Any supporting project documentation pertaining to calculating energy savings for efficiency measures.

In addition to the use of this Data for the Project, the Data may also be anonymized or aggregated to be used for non-commercial research purposes.

RELEASE PERIOD – This authorization covers Data for the period starting with the completion of the project and ending on the date of the complete repayment of the benefit assessment pursuant to the Agreement.

I hereby release and hold harmless the Green Bank, any Green Bank program partners, the above-named utilities and energy suppliers, and their affiliates and their respective directors, employees, officers and agents from any and all liabilities, damages, losses, penalties, claims, demands, suits and proceedings of any nature whatsoever associated with the dissemination and use of such account and program information and this authorization. An electronic copy of this authorization may be accepted with the same authority as the original.

Customer Signature: _____ Date: _____

Printed Name: _____

Email & Phone Number: _____

Mailing Address (if different)**: _____**

Utility Service Address (if different): _____

11. Appendix IV – Example Data Release Form (Smart-E Loan)

CUSTOMER RELEASE OF UTILITY DATA FORM

WHY WE NEED A RELEASE – For Connecticut Green Bank to offer more Smart-E Loans over time, we need access to utility account and actual energy usage data for your home, energy costs, underwriting and loan repayment records, as well as data on energy saving measures installed in your home (collectively "Data"). This Data will allow us to aggregate and understand estimated and actual savings for home energy improvements provided by participating contractors, ensure that installed measures are delivering the expected energy savings, and understand the performance of these loans. This Data will also be used by the Connecticut Green Bank to evaluate the effectiveness of Smart-E Loans. We take the security and privacy of your information very seriously. The Connecticut Green Bank will protect the confidentiality of your Data in compliance with all applicable laws. Data may be anonymized and released in the aggregate, but we will never release personal data, and we will never sell or rent aggregated data.

ENERGY USAGE, CONSERVATION, UNDERWRITING and REPAYMENT INFORMATION RELEASE – As the holder of the above accounts, I hereby authorize and give permission to the utilities, energy suppliers, and loan providers named above to release the Data to Connecticut Green Bank or its agents for confidential use in connection with calculating estimated and actual energy savings, tracking my loan repayment record, and for evaluating the effectiveness of this financial product. This permission is given for 1) my historic and future energy usage and monthly and total amount of energy used at my utility service address; 2) the total monthly price charged for fuels used by my household; 3) my loan repayment record; and 4) program-related information. In addition to the use of the Data for the evaluation of the Smart-E Loan product, the Data may also be anonymized and released in the aggregate.

PROGRAM DATA RELEASE – As a recipient of financing supported by the Connecticut Green Bank, a quasi-public agency of the State of Connecticut, I hereby authorize Connecticut Green Bank to access my Data and release it to program partners for confidential use in connection with calculating estimated and actual energy savings, evaluation of the effectiveness of this product, and understanding performance of this type of financing in the aggregate; and, in addition, I authorize Connecticut Green Bank to use my anonymized data or anonymized aggregated energy usage data.

RELEASE PERIOD – This authorization covers Data for the period starting 18 months before the date below and ending at the time of repayment of the loan.

I certify that I have read and understand the program requirements and that I must use proceeds I obtain through a Smart-E loan to install energy-related measures based on, or non-materially modified from, the individual contractor(s)' proposal(s), which are submitted with this Proposal Cover Sheet and Data Release Form for eligibility approval. I understand that my contractor must submit this sheet, along with a proposal for energy upgrades to the Connecticut Green Bank for technical approval. A list of Participating Lenders, including a summary of applicable fees and charges, can be obtained at www.EnergizeCT.com/smarte. However, I understand that receipt of a loan is contingent upon the eligibility of the measures proposed for financing, and I must obtain a signed, itemized proposal from an approved contractor.

The actual amount of the Loan will be determined by the actual costs of all approved measures. The loan amount may be net of any additional state rebates from my utility company, the Connecticut Energy Efficiency Fund and/or Connecticut Green Bank.

I understand that completing this Proposal Cover Sheet and Data Release Form does not guarantee approval for a loan or membership in a participating lending institution. Loans must be provided directly by a Participating Lender. I understand that I should not complete any measures listed in my application or otherwise rely on the funds of the Loan until I receive a formal commitment from a Participating Lender.

Connecticut Green Bank is a "public agency" for purposes of the Connecticut Freedom of Information Act ("FOIA"). Information received pursuant to this proposal will be considered public records and will be subject to disclosure under the FOIA, except for information falling within one of the exemptions in Conn. Gen. Stat. Sections § 1-210(b) and § 16-245n(d), which may be withheld at Connecticut Green Bank's discretion.

HOMEOWNER:

I hereby release and hold harmless the Connecticut Green Bank, the above-named utilities and energy suppliers and loan account holders, and their affiliates, employees, officers and agents from any and all liability associated with the dissemination and use of such account and program information and this authorization.

I have read, understood, and agree to the Terms and Conditions above.

*Loan Applicant signature(s):*_____ *Date:*_____

Printed Name: _____

Mailing Address: _____

Utility Service Address: _____

CONTRACTOR:

By my signature below, I certify that, to the best of my knowledge, the information listed on this form is correct.

Contractor Signature: _____ *Date:*_____

12. Appendix V – Sample Cost-Benefit Analysis (C-PACE)

Based on the cost-benefit assessment framework presented in the Evaluation Framework, a sample analysis is presented for a C-PACE project that includes energy efficiency, renewable energy, and fuel switching measures within a single financing package. A summary of the results is presented immediately below in Table 1; the calculation details and sources references follow Table 1.

Table 1: Summary of Cost-Benefit Analysis Results for Sample C-PACE Project

Societal Perspective	**Results**		
GHG Reduction Objective	3.07	tons CO_2 eq. per $1,000	(lifetime)
	0.19	tons CO_2 eq. per $1,000	(annual)
Employment Objective	$ 53,363	per job-year	(invested)
Green Bank Perspective	**Results**		
PCCE	$ 10.93	per MMBTU	(net public cost)
GB cost of energy	$ -0.12	per MMBTU (supported)	(net return to GB)
Customer Perspective	**Results**		
Net Present Value	$ 490,927		(lifetime)
SIR	1.08		(financing period)
SIR	1.19		(lifetime)

Calculation Details and Sources

The results summarized above were generated by applying the best available data on the project and C-PACE program, based largely on the *ex-ante* estimates of project performance, and organization-wide program delivery costs.

Table 2: Project Financing Details Provided in the C-PACE Scenario Report

Total project implementation costs		$2,689,570	
Utility incentives		$234,860	
Portion financed		91%	
C-PACE capital (Green Bank investment)		$2,454,710	
C-PACE interest rate		5.60%	
C-PACE financing term		16	years
Estimated project lifetime (longest lasting measure)		25	years
Portion of project financed		100%	
Discount rate applied for present value analysis		6%	
Energy inflation rate		3%	
Employment supported (direct + indirect)	*(lifetime)*	46	job-years
Energy savings	*(lifetime)*	66,327	MMBTU
Estimated GHG reductions	*(lifetime)*	8,266	tons CO_2

1. **Societal Perspective: Environmental and Economic Objectives**

The societal perspective cost-benefit analysis was performed using data readily available from the C-PACE Scenario report as such:

Employment Objective ($ invested / job-year supported)
= Green Bank Investments / estimated direct, indirect and induced job-years supported

GHG Reduction Objective (tons CO_2 eq. / $1,000)
= Estimated GHG reductions resulting from clean energy supported / Green Bank Investments

The GHG reductions are dependent on the energy performance of the supported systems, and will be influenced by fluctuations in the electrical utility grid intensity throughout the lifespan of the project; thus there is some degree of uncertainty to the GHG reduction estimates. The total GHG reductions delivered was reduced by the portion of the project implementation costs covered by utility incentive (9%).

2. **Green Bank Perspective: Public Cost of Clean Energy (PCCE)**

The PCCE for the sample project was calculated through a present value analysis of all cash flow streams, including energy savings, C-PACE program costs, ZREC payments, utility incentives and tax credits (including accelerated depreciation). These collectively totaled $725,009. The total clean energy delivered was provided in the Scenario Report, and is stated in **Table *1*** above.

Public Cost of Clean Energy ($ / MMBTU)
= Present Value of Public Costs / Total Clean Energy Delivered

The analysis assumes the performance of the systems will provide the expected energy cost savings, and that energy prices will increase steadily; in this case a 3% per year assumption was applied in the C-PACE Scenario Report which provided a portion of the input data used in this analysis.

The Green Bank Cost of Clean Energy was assessed based on an estimation of overall C-PACE program costs from the 2013 FY Green Bank Audited Financial Statement, Town Administration Costs, and total C-PACE Program Capital Advanced from 2013-2015 (provided from the C-PACE database). In the absence of attribution results, the results represent the average cost (or return) per MMBTU *supported* by Green Bank financing.

Green Bank Cost of Clean Energy ($ / MMBTU)
= NPV of Green Bank Investments / Total Clean Energy Delivered (Supported)

Table 3: C-PACE and Green Bank Program Cost Data

Net GB commitments June 2014	*Total*	$63,529,051
	C-PACE	$14,294,826
	% for C-PACE	23%
2013 FY GB Administration	*(from audited financial statements)*	$1,811,000
2013 FY GB Organizational Costs	*(from audited financial statements)*	$1,180,000
C-PACE municipal costs 2013-2015		$100,228
GB Capital Advanced for C-PACE Program Financing	*2013-2015*	$33,613,832
Portion of GB Capital Advanced for Sample Project	*(Project's portion of 2013-2015 C-PACE total)*	7%

The data presented in

Table ***3*** above represents available inputs used to determine the C-PACE program costs, which are presented in Table 4 below. With time it is expected that the Green Bank will develop more precise measures of the C-PACE (and other financing program) administrative and running costs, and possibly be able to attribute file management and customer acquisition costs to specific projects. This will support a more accurate assessment of the overall cost/return of individual C-PACE project financing to Green Bank.

Table 4: Estimated Program Costs Attributable to the Project

NPV Loan to Green Bank	*$93,460.53*	(net return for GB)
Attributable Municipal Costs	*-$36,596.51*	
Attributable GB Admin + Org. Costs	- $49,147.91	
Net GB costs/benefit	$7,716.10	(net return for GB)

The results suggest that Green Bank generates a small net return for this project, which helps to slightly lower the overall PCCE result above. However, this result does not account for Green Bank's impact to enable or to increase the scope or size of the project. If attribution studies were performed, it may show that Green Bank's influence to lower the PCCE is much greater than the small net return generated for Green Bank indicates in Table 4.

Participant Perspective: Savings to Investment Ratio (SIR)

The lifetime SIR was calculated for this project based on the ratio of the total present value of the C-PACE assessment repayments, and the present value of the energy bill savings. The project NPV is also presented to show the extent of the participating customer's return for the C-PACE investment over the operating period of the measure with the longest EUL (25 years) for the solar PV system.

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CONNECTICUT GREEN BANK

Memo

To: Audit, Compliance and Governance Committee
From: Matt Macunas, Legislative Liaison and Marketing Manager; Brian Farnen, General Counsel and CLO
Date: May 16, 2016
Re: 2016 Legislative and Regulatory Summary

The Connecticut Green Bank ("Green Bank") engaged with the Connecticut General Assembly during its 2016 Regular Session of February through May.[1] The 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. This year also saw several state regulatory rulings that that affect the operations of the Green Bank.

Legislative Proposals
The following agency proposals were offered to the General Assembly:

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.
4. Overhauls the existing Residential PACE ("R-PACE") statute to operationalize the program

Proposals 1, 2 and 3 were combined into Senate Bill 366, which passed the General Assembly. Proposal 4 became House Bill 5563, which received committee votes but was not voted out of the General Assembly.

Senate Bill 366

This bill removes the Green Bank from CI for administrative purposes and gives the Green Bank direct statutory authority for its operations, essentially maturing the agency into its own, fully standalone authority as viewed in the statute books. This will be essential for streamlining the structure of certain financial deals. The bill also had key provisions allowing for the continued smooth operation of the C-PACE program, and for the Residential Solar Investment Program to be capitalized with future funding flows. When signed into law, the State of Connecticut will be affirming its confidence in the Green Bank and its aptitude as an accelerator of economic development.
SB 366 passed the Senate unanimously on April 27th. It passed the House on the final Regular Session day of May 4th by being added to a consent calendar – a package of bills that all receive one vote.

[1] Historically called "budget adjustment sessions," legislative sessions in even-numbered years last just three months instead of five, and legislators may only propose budget-related bills without the direct support of joint standing committees.

House Bill 5563

The R-PACE policy as proposed would have obligated repayments from a benefitted property using a real estate tax lien subordinate in payment priority to first mortgages and municipal property taxes. It also included a loss reserve requirement, and various conformity provisions for state and federal regulators. Throughout the 2016 legislative session, Green Bank staff engaged stakeholders to gain support for R-PACE and evolve the proposal to address particular concerns, including with the Department of Banking, municipalities, third-party financiers, title attorneys, and the Connecticut Bankers Association. The bankers' lobby was most cautious around R-PACE, indicating that an R-PACE lien should be altogether cleared from a property upon transfer, or else it is not truly subordinate to other encumbrances. Behind this is a concern that mortgages sold to secondary market purchasers – particularly Fannie Mae and Freddie Mac – will be considered non-compliant with their purchasing standards and that this will remove a source of liquidity from banks' mortgage transactions.

HB 5563 was negotiated first through the Banking Committee, and then through the Energy and Technology Committee. During its last action with an Energy and Technology Committee vote, it was amended to appease the bankers by postponing program implementation until the Federal Housing Finance Agency issued certain affirmations; many stakeholders doubted that these "triggers" to start the program would be forthcoming in the foreseeable future.

The message of private sector job creation and economic development was used extensively in promoting R-PACE. However if there is a renewed push in 2017 to revisit the policy, it would also benefit from continued emphasis on the unmet need that R-PACE fills in the product spectrum for residential home improvement financing; e.g., that it enables longer-term improvement financing and opens the market to new populations of borrowers.

REGULATORY CHANGES

There were several positive Public Utilities Regulatory Authority ("PURA") rulings this year:

- **Agricultural Virtual Net Metering**[2] – The Green Bank petitioned PURA for a declaratory ruling on behalf of agricultural customers on September 4, 2015. Though they were allowed to virtually net meter their generation, agricultural hosts had to own their systems under the law as construed; this badly limited the market for agricultural hosts. The Green Bank proposed alternative constructions of "ownership." On February 3, 2016 PURA ruled in favor, finding that systems could also be less than 100% directly owned, and that hosts could own them indirectly through deal structures involving special purpose entities.

- **Residential Solar PV REC aggregation**[3] – On March 18, 2015 the Green Bank petitioned PURA to reopen a previous proceeding certifying bundled REC production from Class I systems, increasing nameplate capacity from 30 MW to 60 MW. After overcoming historical and procedural confusion with PURA on whether REC-producing systems could be grouped into one application – and after helping PURA overcome concerns with double-counting of RECs - PURA approved of the Green Bank's application on April 20, 2016. Under the ruling, the Green Bank can file bundled applications (limited to 1,000 facilities per application) for the remaining 240 MW under RSIP. The Green Bank must also file a proposed internal process to ensure homeowners who go solar after RSIP ceases at 300MW will file individual Class I REC certifications with PURA.

[2] Docket Number 15-09-08
[3] Docket Number 13-02-03RE01

Public Policy Summary

Public Act 98-28

Direct Green Bank Involvement

- **Section 44 (Creation of the Clean Energy Fund)**[4] – establishes the Renewable Energy Investment Fund (later renamed the Clean Energy Fund or "CEF") to be administered by Connecticut Innovations ("CI") through a 1 mill per kWh surcharge on utility bills.

Indirect Green Bank Involvement

- **Section 25 (Class I and II RPS)**[5] – establishes a Class I and II renewable portfolio standard for renewable sources of generation.

- **Section 33 (Creation of the Conservation and Load Management Fund) – Conn. Gen. Stat. § 16-245m** – establishes the Energy Conservation and Load Management Fund ("EC&LM Fund") to be administered by the electric distribution companies through a 3 mill per kWh surcharge on utility bills.

- **Section 45 (Residential Property Tax Exemption)**[6] – establishes a property tax exemption for Class I renewable energy sources or hydropower facilities installed for the generation of electricity for private residential use (single family dwelling or multifamily dwelling consisting of two to four units).

Public Act 05-01

Direct Green Bank Involvement

- **Section 5 (Coordination with ECMB)**[7] – requires the Energy Conservation Management Board ("ECMB") to:

    - Establish a joint committee of the ECMB and the Renewable Energy Investments Advisory Committee (later renamed CEFIA and then the Green Bank) to examine opportunities to coordinate the programs and activities funded by the CEF with the programs and activities contained in the C&LM Plan to reduce the long-term cost, environmental impacts and security risks of energy in the state.

    - Consult with the Renewable Energy Investments Advisory Committee (later renamed CEFIA and then the Green Bank) to conduct an evaluation of the performance of the programs and activities of the EC&LM Fund.

[4] Conn. Gen. Stat. § 16-245n
[5] Conn. Gen. Stat. § 16-245a
[6] Conn. Gen. Stat. §12-81(57)
[7] Conn. Gen. Stat. § 16-245m

- **Section 6 (Coordination with ECMB)**[8] - requires the Renewable Energy Investments Advisory Committee (later renamed CEFIA and then the Green Bank) to:

    - Participate in the joint committee with the ECMB to carry out the tasks described in Section 5 of the Act (described above).

    - Develop a comprehensive plan and expenditure of funds that gives preference to projects that maximize the reduction of federally mandated congestion charges and are consistent with the comprehensive energy plan of the Connecticut Energy Advisory Board.

- **Section 13 (Time-of-Use Rates)**[9] **-** mandates that electric distribution companies implement time-of-use rates approved by PURA for commercial and industrial customers.

- **Section 15 (On Bill Repayment Cost Recovery)**[10] – Allows electric distribution companies to recover their costs and investments that have been prudently incurred under the requirements of certain general statutes.

- **Section 26 (Project 100)**[11] – establishes a process for the electric utilities to sign long-term power purchase agreements for projects that receive funding from the Renewable Energy Investment Fund for no less than 100 MW of Class I projects to be sited in Connecticut.

Indirect Green Bank Involvement

- **Section 16 (Class III RPS)**[12] – establishes a Class III renewable portfolio standard to support CHP and energy efficiency measures.

- **Section 17 (Municipal EC&LM Fund)**[13] – requires municipal electric utilities to create a Municipal Energy Conservation and Load Management Fund ("Municipal EC&LM Fund") with a plan that is consistent with the comprehensive plan of the ECMB.

Public Act 07-242

Direct Green Bank Involvement

- **Section 15 (Definition of Clean Energy)**[14] – expands the definition of "clean energy" for the CEF to include solar thermal, geothermal, hydropower that meets low-impact standards of the Low-Impact Hydropower Institute, and alternative fuels used for electricity generation derived from agricultural produce, food waste, or waste vegetable oil (i.e. biodiesel, ethanol, etc.).

[8] Conn. Gen. Stat. § 16-245n
[9] Conn. Gen. Stat. § 16-243n
[10] Conn. Gen. Stat. §16-243p
[11] Conn. Gen. Stat. § 16-244c
[12] Conn. Gen. Stat. § 16-243q
[13] Conn. Gen. Stat. § 7-233y
[14] Conn. Gen. Stat. § 16-245n

- **Section 41 (Municipal Renewable Energy)**[15] – requires any municipal electric energy cooperative (e.g. the CMEEC) to submit a comprehensive report to the Renewable Energy Investments Advisory Committee (later renamed CEFIA and then the Green Bank) on the activities taken to promote renewable energy sources, including the encouragement and expansion of the deployment and use of renewable energy sources and development of standards to promote renewable resources.

- **Section 91 (Municipal Renewable Energy and Efficient Energy Grant Account)**[16] – establishes a $50 million non-elapsing account within the CEF for CI, in consultation with DPUC (later renamed PURA), the Department of Education, and the Department of Emergency Management and Homeland Security to make grants-in-aid for renewable energy-efficient generation projects giving priority to disaster relief centers and high schools.

- **Section 118 (Demand Charge Waivers for Fuel Cells)**[17] – electric suppliers and distribution companies are to waive demand charges for the operators of a fuel cell during a loss of power due to problems at any distribution resource or a scheduled or unscheduled shutdown of the fuel cell if the shutdown occurs during off-peak hours.

- **Section 124 (Project 150)**[18] – expands Project 100 by an additional 50 megawatts for Project 150.

Indirect Green Bank Involvement

- **Section 13 (Hardship Provisions)**[19] – establishes the collection of a system benefit charge which shall be used to fund, among other things, the cost of hardship protection measures including, but not limited to, electric service bill payment programs.

- **Sections 21-36 (Energy Improvement Districts)**[20] – authorizes any municipality to form an Energy Improvement District Board which shall fund distributed resource projects within such district.

- **Section 38 (Interconnection Standards)**[21] – requires the Department of Public Utility Control (later renamed PURA) to issue a final decision, no later than January 1, 2008, approving interconnection standards for all platforms behind the meter that meet or exceed national standards of interconnectivity.

- **Section 39 (Net Metering)**[22] – Requires electric suppliers and electric distribution companies to

[15] Conn. Gen. Stat. § 7-233z
[16] Conn. Gen. Stat. § 16-245aa
[17] Conn. Gen. Stat. 16-245cc
[18] Conn. Gen. Stat. 16-244c
[19] Conn. Gen. Stat. § 16-245l
[20] Conn. Gen. Stat. §§ 32-80a; 32- 80B; 32-80c
[21] Conn. Gen. Stat. § 16-243a
[22] Conn. Gen. Stat. § 16-243h

interconnect and give a credit for any electricity generated by customers from Class I renewable energy sources or hydropower facility of less than two megawatts. The amount of electricity the customer produces shall be deducted from the amount the customer uses in each monthly billing period and any excess generation shall be credited toward the next monthly billing period. At the end of each year, the electric distribution company or electric supplier shall compensate the customer-generator for any excess kilowatt-hours generated, at the avoided cost of wholesale power.

- **Section 40 (Class I RPS)**[23] – amends the Class I RPS by increasing the amount necessary starting in 2011 at no less than 8% and increases to no less than 20% in 2020.

- **Sections 42-44 (Class III RPS)**[24] – appends to the Class III RPS how Class III RECs are established and distributed to customers based on incentives received from the C&LM Fund and the process for determining whether or not a resource qualifies. It also changes the definition to remove Class III RECs from applying to only commercial and industrial facilities, opening up the RPS to residential as well.

- **Sections 46-47 (Residential Property Tax Exemption)**[25] – adds passive or active solar water or space heating system or geothermal energy resource to the existing property tax exemption for Class I renewables and hydropower.

- **Section 67 (Shut-Off Provisions)**[26] – amends electric and gas distribution company restrictions on terminating service in financial hardship cases, extending the covered period to May first.

- **Section 68 (Sales and Use Tax Exemption)**[27] – Establishes a sales and use tax exemption for solar energy electricity generating systems and passive or active solar water or space heating systems, geothermal resource systems, and ice storage systems used for cooling, including equipment related to such systems.

- **Section 69 (Definition of Weatherization)**[28] – amends the definition of "residential weatherization products" to include oil furnaces and boilers that are not less than eighty-four per cent efficient and ground-source heat pumps that meet the minimum federal energy efficiency rating.

- **Section 71 (Utility Procurement of Class I, II, and III Renewable Sources)**[29] – authorizes each electric distribution company to procure renewable energy certificates from Class I, Class II, and Class III renewable energy sources through long-term contracting mechanisms.

[23] Conn. Gen. Stat. § 16-245a
[24] Conn. Gen. Stat. § 16-243t
[25] Conn. Gen. Stat. §12-81(57)
[26] Conn. Gen. Stat. § 16-262c
[27] Conn. Gen. Stat. § 12-412
[28] Conn. Gen. Stat. § 12-412k
[29] Conn. Gen. Stat. § 16-245a(g)

- **Section 72 (Low-Income Energy Conservation Project Investment Tax Credit)**[30] – amends the percentage of the tax credit granted for investing in energy conservation projects directed toward properties occupied by low- income persons, charitable corporations, foundations, or trusts.

- **Section 73 (Bond Funds for State Projects)**[31] – authorizes bond funding of up to $30 million per year to support Department of Public Works projects resulting in increased energy efficiency measures in state buildings.

- **Section 82 (Fundraising for CT Residents in Need of Emergency Energy Assistance)**[32] – requires electric distribution companies, gas companies and municipal utilities to request donations from their customers to Operation Fuel, Inc., a state-wide nonprofit organization designed to respond to people within the state who are in financial crisis and need emergency energy assistance.

- **Sections 87-88, 111 (State-Wide Energy Efficiency and Outreach Marketing Campaign)**[33] – requires that the DPUC (later renamed PURA), in coordination with the ECMB, establish a state-wide energy efficiency and outreach marketing campaign as well as a real-time energy report by daily use by media which, among other things, gives visibility to communities and businesses that have implemented energy saving changes or have installed and are operating renewable energy resources. Authorizes the establishment of an account separate from the General Fund for DPUC (later renamed PURA) to use in carrying out this program.

Public Act 11-80

Direct Green Bank Involvement

- **Section 99 (Creation of the Green Bank)**[34] – renames the Renewable Energy Investment Fund as the Clean Energy Fund ("CEF") and creates a successor agency of the Renewable Energy Investments Advisory Board in the quasi- public organization called the Clean Energy Finance and Investment Authority ("CEFIA") and later the Connecticut Green Bank to use funds for expenditures that promote investment in clean energy in accordance with a comprehensive plan. The Green Bank shall: (A) develop separate programs to finance and otherwise support clean energy investment in residential, municipal, small business and larger commercial projects and such others as it may determine; (B) support financing or other expenditures that promote investment in clean energy sources in accordance with a comprehensive plan developed by it to foster the growth, development and commercialization of clean energy sources and related enterprises; and (C) stimulate demand for clean energy and the deployment of clean energy sources with the state that serve end-use customers in the state.

- **Section 103 (Anaerobic Digesters and Combined Heat and Power)** – requires the Green Bank to develop a three-year pilot program for combined heat and power (CHP) and anaerobic

[30] Conn. Gen. Stat. § 12-635
[31] Conn. Gen. Stat. § 16a-38m
[32] Conn. Gen. Stat. § 16a-41h
[33] Conn. Gen. Stat. §§ 16a-47a; 16a-47b; 16a-47c
[34] Conn. Gen. Stat. § 16-245n

digesters (AD) by setting aside $2 million each year per program for a total of $6 million. The Green Bank can use funds for grants, PPA's or loans.

- **Section 106 and 109 (Residential Solar Investment Program)**[35] – requires the Green Bank to establish a residential solar investment program ("RSIP") which shall result in at least 30 MW of new residential solar PV installations located in Connecticut on or before December 31, 2022. The cost of the RSIP shall not exceed one-third of the total surcharge collected annually and shall offer expected performance-based buydown and performance-based buydown incentives for the purchase or lease of qualifying solar PV systems. Section 109 provides an additional incentive through PURA of 5% for major system components manufactured or assembled in Connecticut and an additional 5% if manufactured or assembled in a distressed municipality.

- **Sections 124 and 137-138 (Green Loan Guaranty Fund)**[36] – authorizes the Green Bank to guarantee loans for eligible energy conservation projects for qualified nonprofit organizations and small businesses. The Green Bank will, in consultation with the ECMB and OPM, identify the types of projects that qualify, integrate the program with other state renewable energy programs, establish performance targets, and administer the program. Authorizes bond funding of up to five million dollars a year to be placed into a fund used to guarantee authorized loans under the program.

Indirect Green Bank Involvement

- **Section 1 (Formation of the DEEP)**[37] – developed the Department of Energy and Environmental Protection as a successor department to the Department of Environmental Protection and the Department of Public Utility Control with the purpose of coordinating energy and environmental protection policy and regulation.

- **Sections 39-40 and 89-90 (Integrated Resources Plan)**[38] – requires DEEP every two years in consultation with the electric distribution companies to review the state's energy and capacity resource assessment and approve an Integrated Resources Plan ("IRP") for the procurement of energy resources, including renewable generating facilities, energy efficiency, and combined heat and power to minimize energy costs on customers and maximize consumer benefits consistent with the state's environmental goals and standards. The Public Utilities Regulatory Authority ("PURA") oversees the implementation of the IRP and procurement plan.

- **Section 51 (Comprehensive Energy Strategy)**[39] – requires DEEP every three years to prepare and adopt a Comprehensive Energy Strategy ("CES") that assesses and plans for all energy needs in the state, including but not limited to electricity, heating, cooling, and transportation, and includes the findings of the IRP, C&LM Plan, the Green Bank Plan, and Energy Assurance Plan.

[35] Conn. Gen. Stat. §§ 16-245ff; 16-245gg
[36] Conn. Gen. Stat. §§ 16a- 40d; 16a-40e; 16a-40f
[37] Conn. Gen. Stat. § 22a-2d
[38] Conn. Gen. Stat. §§ 16a- 3a; 16a-3b; 16a-3c; 16a-3e
[39] Conn. Gen. Stat. § 16a-3d

- **Section 100 (Property Assessed Clean Energy)**[40] – authorizes municipalities to establishes a PACE program to be administered by municipalities for single-family, multifamily, or non-residential buildings.

- **Sections 107-108 and 110 (ZREC and LREC Program)**[41] – establishes a 6-year zero emissions renewable energy credit ("ZREC") and a 5-year low emission renewable energy credit ("LREC") program for long- term 15-year contracts from behind-the-meter installations of Class I resources using a reverse auction process administered by the electric distribution companies and approved by PURA. $720 million and $300 million in long-term contracts are available for ZREC and LREC projects respectively.

- **Section 111 (Condominium Grant Program)**[42] – The Green Bank in consultation with DEEP shall establish a "condominium renewable energy grant program" to provide grants, within available funds, to residential condominium associations and owners for purchasing clean energy sources.

- **Sections 118 and 122-123 (Leading by Example)**[43] – requires DEEP in consultation with DAS to develop a plan to reduce energy use in buildings owned or leased by the state by 20% by January 1, 2018. It allows any state agency or municipality to enter into financing measures through an energy-savings performance contract with the assistance of DEEP and DAS in consultation with OPM.

- **Section 127 (Grid Tied Renewable Energy Projects)**[44] – authorizes electric distribution companies, upon approval of such proposal by the DEEP, to build, own or operate one or more generating facilities up to an aggregate of thirty megawatts using Class I renewable energy sources.

- **Section 128 (Building Permit Fees)**[45] – authorizes any municipality to exempt Class I renewable energy source projects from payment of building permit fees imposed by the municipality.

- **Section 130 (CMEEC)**[46] – requires municipal electric energy cooperatives to submit a comprehensive report to the Green Bank regarding its activities in promoting renewable energy sources. Also requires such cooperatives to develop standards for promotion of renewable energy sources.

Public Act 12-2

[40] Conn. Gen. Stat. § 7-121n
[41] Conn. Gen. Stat. §§ 16- 244r; 16-244s; 16-244t
[42] Conn. Gen. Stat. § 16-245hh
[43] Conn. Gen. Stat. §§ 16a-37u; 7- 148(c)(6)(B); 16a-37x
[44] Conn. Gen. Stat. § 16-244v
[45] Conn. Gen. Stat. § 29-263
[46] Conn. Gen. Stat. § 7-233z

Direct Green Bank Involvement

- **Section 156 (Combined Heat and Power)**[47] – increases the capacity size of any CHP unit from 2 to 5 megawatts and the incentive from $350 to $450 per kilowatt cost, as well as the capacity size of AD from 1.5 to 3.0 megawatts.

- **Section 157 (C-PACE)**[48] – establishes the commercial and industrial property assessed clean energy program to be administered statewide by the Green Bank.

- **Section 158 (Definition of Clean Energy)**[49] – expands the definition of clean energy for the Green Bank to include "any Class I renewable energy source, as defined in section 16-1." It also clarifies that the Green Bank is an independent quasi-public organization with administrative purposes only from CI.

- **Sections 159-162 (Special Capital Reserve Fund and Bonding)**[50] – establishes a special capital reserve fund ("SCRF") of up to $50 million which pledges the full faith and credit of the State of Connecticut to support bonds issued by the Green Bank.

- **Sections 164-166 (Quasi-Public Status)**[51] – designates the Green Bank as an official quasi-public agency operating in the State of Connecticut.

Public Act 12-189

Direct Green Bank Involvement

- **Section 36 (Renewable Energy and Efficient Energy Finance Account)**[52] – changes the "Municipal Renewable Energy and Efficient Energy Grant Account" to the "Renewable Energy and Efficient Energy Finance Account" and redirects the use of bond proceeds from CI to the Green Bank who must work in consultation with DEEP, DECD, and the State Treasurer.

Public Act 13-298

Direct Green Bank Involvement

- **Section 16 (Coordination with ECMB)**[53] – requires the ECMB to:

    - Assist the electric distribution and gas companies in implementing the C&LM Plan and coordinate with the Green Bank to further the goals of the plan.

    - Establish a joint committee of the ECMB and the Board of Directors of the Connecticut Green Bank to examine opportunities to coordinate the programs and activities funded

[47] Modifies Section 103 of PA 11-80
[48] Conn. Gen. Stat. § 16a-40g
[49] Conn. Gen. Stat. § 16-245n
[50] Conn. Gen. Stat. § 16-245kk
[51] Conn. Gen. Stat. §§ 1-79; 1-124; 1-125
[52] Conn. Gen. Stat. § 16-245aa
[53] Conn. Gen. Stat. § 16-245m

by the Clean Energy Fund with the programs and activities contained in the C&LM Plan *and to provide financing to increase the benefits of programs funded by the plan* so as to reduce the long-term cost, environmental impacts and security risks of energy in the state.

- **Section 18 (Condominium Grant Program)**[54] – The Green Bank in consultation with DEEP shall establish a "condominium renewable energy grant program" to provide grants, within available funds, to residential condominium associations and owners for purchasing clean energy sources.

- **Sections 42 and 43 (C-PACE Modifications)**[55] – amends the C-PACE statute to clarify when a benefit assessment is levied on a property (i.e. prior to completion or upon completion of a project) and how benefit assessments are to be paid in the event of a foreclosure.

- **Section 52 (Community-Based Marketing Campaign)** – requires DEEP, the Green Bank, and the ECMB in coordination with the electric distribution and gas companies to establish a pilot program in at least four municipalities, consistent with the policy goals of the Comprehensive Energy Strategy to: (1) ensure that potential customers targeted for conversion to natural gas are incented to install efficient equipment and improve the efficiency of the building envelope at the time of conversion; (2) ensure that customers who cannot cost-effectively convert to natural gas are incented to install efficient equipment and improve the efficiency of the building envelope; and (3) provide access to low-cost financing for natural gas conversion or efficiency upgrades. The pilot shall use a community-based marketing campaign and competitive solicitation for volume pricing on high efficiency heating equipment and insulation.

- **Section 55 (Renewable Energy and Efficient Energy Finance Account)**[56] – requires the Green Bank in consultation with DEEP, DECD, and the State Treasurer to establish a clean energy finance program that offers financial assistance to projects for the purchase or installation of renewable energy sources and energy-efficient generation sources (i.e. CHP). The Green Bank shall give priority to applications for financial assistance to projects that use major system components manufactured or assembled in Connecticut. There is $18 million of bond funds available from the State of Connecticut for the Green Bank to use for this program.

- **Section 58 (On Bill Repayment)**[57] – requires the ECMB and the Green Bank in consultation with the electric distribution companies and gas companies to establish a comprehensive residential clean energy on bill repayment program financed by third-party private capital managed by the Green Bank.

Indirect Green Bank Involvement

[54] Conn. Gen. Stat. § 16-245hh
[55] Conn. Gen. Stat. § 16a-40g
[56] Conn. Gen. Stat. § 16-245aa
[57] Conn. Gen. Stat. § 16a-40m

- **Sections 20 through 22 and 24 (Integrated Resources Plan)**[58] – requires DEEP every two years in consultation with the electric distribution companies to review the state's energy and capacity resource assessment and approve an Integrated Resources Plan (IRP) for the procurement of energy resources, including renewable generating facilities, energy efficiency, and combined heat and power to minimize energy costs on customers and maximize consumer benefits consistent with the state's environmental goals and standards. The PURA oversees the implementation of the IRP and procurement plan.

- **Section 23 (Comprehensive Energy Strategy)**[59] – requires DEEP every three years to prepare and adopt a Comprehensive Energy Strategy (CES) that assesses and plans for all energy needs in the state, including but not limited to electricity, heating, cooling, and transportation, and includes the findings of the IRP, C&LM Plan, the Green Bank Plan, and Energy Assurance Plan.

- **Section 27 (Lead by Example)**[60] – allows any state agency or municipality to enter into an energy-savings performance contract with the assistance of DEEP and DAS in consultation with OPM.

Public Act 14-94

Direct Green Bank Involvement

- **Sections 23 and 24 (C-PACE and Micro Grids and R-PACE Study)**[61] – expands the energy improvements eligible for participation in the C-PACE program to include participation in a microgrid that incorporates clean energy. By law, a "microgrid" is a group of interconnected electricity users and generators that (1) is within clearly defined boundaries and acts as a single controllable entity in respect to the larger grid and (2) can operate as either a part of the grid or independent of it. The bill also requires the Green Bank, by January 1, 2015, to submit a report on a residential property assessed clean energy program. The report must evaluate (1) the potential consistency between such a program and C-PACE and similar national programs and (2) the legal framework and need for such a program. (Current state law allows a residential PACE program, however implementation has been effectively blocked by the Federal Housing Finance Agency.)

- **Sections 29 (Connecticut Green Bank)**[62] – renames CEFIA as the Connecticut Green Bank, and makes conforming changes throughout the statutes. It makes the Connecticut Green Bank a successor agency to CEF for purposes of administering the Clean Energy Fund.

- **Sections 31 (On Bill Repayment Cost Recovery)**[63] – adds costs and investments that have been prudently incurred by electric distribution companies under Sections 16a-40l and 16a-40m of the Connecticut General Statues as eligible sections for cost recovery mechanisms.

[58] Conn. Gen. Stat. §§ 16a-3a; 16a-3b; 16a-3c; 16a-3e
[59] Conn. Gen. Stat. § 16a-3d
[60] Conn. Gen. Stat. § 16a-37u
[61] Section 23 amends Conn. Gen. Stat. § 16a-40g and Section 24 is not codified in the Connecticut General Statutes.
[62] Amends Conn. Gen. Stat. § 16-245n
[63] Amends Conn. Gen. Stat. § 16-243p.

Indirect Green Bank Involvement

- **Section 19 (State Building Standards)**[64] – requires the DEEP, in consultation with the Commissioner of Administrative Services, to adopt regulations for state building construction standards that achieve at least seventy-five points on the EPA national energy performance rating system; such regulations shall include a standard for inclusion of electric vehicle charging stations. There is an exemption from these regulations for facilities that cannot be defined as eligible building types and must therefore meet a different standard.

- **Section 21 (Bridgeport Thermal Loop)**[65] – forms the "The Bridgeport Thermal Limited Liability Company" a thermal energy transportation company, authorizing it to (1) furnish heat or conditioned air from its plant(s) in Bridgeport, (2) lay, install, maintain or erect pipes, mains, conduits or other fixtures and improvements which may be necessary for the purpose of carrying heated or chilled water or other medium from its plant(s) to the locations to be served, and (3) lease to corporations or limited liability companies formed under the general law or specially chartered for the purpose of furnishing heat or air conditioning, or both.

- **Section 25 (Project 150)**[66] – requires PURA to grant, upon request, an extension of the latest of any in-service date or contractual arrangement made as part of Project 100 or Project 150 not more than thirty-six months for any project having a capacity of less than five megawatts, provided any such project (1) commences construction by April 30, 2015, and (2) PURA has provided previous approval of such project.

- **Sections 56 and 57 (Property Tax Exemptions)**[67] – amends the property tax exemption in the case of passive or active solar water or space heating system or any geothermal energy resource, so that such exemption shall apply only to the amount by which the assessed valuation of the real property equipped with such system or resource exceeds the assessed valuation of such real property equipped with the conventional portion of the system or resource.

Public Act 14-136

Indirect Green Bank Involvement

- **Section 1 (Definition of Clean Alternative Fuel)**[68] – adds hydrogen and propane when used as a motor vehicle fuel to the definition of "clean alternative fuel."

Public Act 15-1

Direct Green Bank Involvement

- **Section 228 (Special Capital Reserve Fund)** – increases, from $50 million to $100 million, the

[64] Amends Conn. Gen. Stat. § 16a-38k.
[65] Not codified in the Connecticut General Statutes.
[66] Amends Conn. Gen. Stat. § 16-244c(h)(2).
[67] Section 56 amends Conn. Gen. Stat. § 12-81(57)(A) and Section 57 amends Conn. Gen. Stat. § 12-81(57)(D).
[68] Amends Conn. Gen. Stat. § 4a-59.

amount of bonds the Green Bank may issue that are backed by a special capital reserve fund (SCRF). SCRF-backed bonds are contingent liabilities of the state; if a SCRF is exhausted, the General Fund automatically replenishes it, regardless of the state spending cap.

Indirect Green Bank Involvement

- **Section 48 (EnergizeCT Heating Loan)**[69] – expands an existing furnace and boiler replacement financing program to include financing of propane fuel tank purchases, and extends the program's duration through 2019. The heating loan is a heavily subsidized loan product that creates:
  - A ceiling: The market will only grow to the level of subsidy, if one is offered
  - A roadblock: Local lenders under the Smart-E Program cannot compete with cheap, ratepayer/government subsidized loans

Public Act 15-5

Direct Green Bank Involvement

- **Section 103 (Grid-Side Enhancements)** – allows electric companies to build, own, or operate demonstration projects under DEEP approval to investigate how distributed energy resources can be optimally integrated into the electric grid. The proposal must be complimentary to the existing ecosystem of programs.

Indirect Green Bank Involvement

- **Section 242 (District Heating Incentive Program)**[70] **–** requires each gas company to develop a program providing a one-time incentive payment to end use customers who connect to a district heating system such as a thermal loop. The system's owner is allowed to charge end use customers a connection charge up to an amount equal to the incentive payment.

Public Act 15-21

Direct Green Bank Involvement

- **Section 1 (C-PACE)**[71] – allows third-party capital providers to provide loans directly to property owners participating in the C-PACE program.

Public Act 15-107

Indirect Green Bank Involvement

- **Section 1 (Renewable Energy Procurement)**[72] – allows DEEP to issue multiple solicitations for long-term contracts for various energy resources including Class I renewable resources, demand response, energy storage, natural gas pipeline capacity, liquefied natural gas, and large-scale hydropower. DEEP may select proposals and direct electric companies to enter into long-term contracts. Procurements may also be conducted in concert with other states in ISO-NE territory.

[69] Amends Conn. Gen. Stat. § 16-243v.
[70] Amends Conn. Gen. Stat. § 16-258d.
[71] Amends Conn. Gen. Stat. § 16a-40g.
[72] Amends Conn. Gen. Stat. § 16a-3j.

Public Act 15-113

Indirect Green Bank Involvement

- **Section 1 (Shared Clean Energy Facilities)**[73] **–** requires DEEP to establish a two-year pilot program to develop shared clean energy facilities and issue an RFP. The pilot consists of 2 MW in UI territory and 4 MW in Eversource territory, and directs DEEP to produce guidelines for subscriber participation and billing credit mechanisms.

Public Act 15-152

Direct Green Bank Involvement

- **Section 1 (Anaerobic Digestion)**[74] **–** extends by two years the Green Bank's anaerobic digestion pilot program, and extends the reporting deadline to January 1, 2018.

Public Act 15-194

Direct Green Bank Involvement

- **Section 1 (300 MW)**[75] **–** expands the state's residential solar PV deployment target from 30 MW to 300 MW by the end of 2022 or at the end of 300 MW total deployment under RSIP.
- **Section 2 (SHRECs) –** creates Solar Home Renewable Energy Credits, which are owned by the Green Bank and generated from qualifying residential PV systems. Electric companies are required to purchase SHRECs from the Green Bank under a master purchase agreement negotiated by the parties. The Green Bank may fund its incentive program using the proceeds of the sale, and the electric companies may seek cost recovery from PURA.
- **Section 3 (permitting) –** requires each municipality, by January 1, 2016, to incorporate residential PV systems into their building permit application processes. The Green Bank must implement a permit training seminar for municipalities in consultation with the state building inspector.

[73] Not yet codified in Connecticut General Statutes.
[74] Amends Public Act 11-80 Sec. 103
[75] Amends Conn. Gen. Stat. § 16-245gg.

2016 General Assembly Bills

Direct Green Bank Involvement

Senate Bill 366

- **Sections 1-3 (Green Bank administration)**[76] - Ties the Green Bank to its own quasi-public agency statute rather than derive powers through its link to Connecticut Innovations, Inc., thus removing a potential complication to financial transactions.
- **Section 4 (C-PACE)**[77] - Makes a clarifying change to C-PACE lienholder consent provisions.
- **Sections 5 and 6 (SHREC)**[78] - Clarifies that the EDCs purchase 15-year blocks of credits annually through the end of the SHREC program. Also makes power purchase agreements eligible for RSIP incentives, and adjusts RSIP to only apply to the first 20 kW of installed solar PV.

House Bill 5563

NOT PASSED

- **Section 1 (Residential PACE)** - Updates the Green Bank's PACE statutes for 1-4 family properties, making it the central administer for an opt-in program for municipalities that is funded with private capital investment. Allows for financing a wider range of improvements, and makes the benefit assessment liens subordinate to first mortgages, property tax liens, and any others placed before it. The Green Bank establishes a loss reserve and consumer protections in collaboration with the Department of Banking, which would not regulate PACE financing as mortgage lending. No loans may be issued until the FHFA affirmatively states it will purchase PACE-encumbered properties under the program.

House Bill 5309

NOT PASSED

- **Section 1 (Solar Permitting)** - Requires the Green Bank, in consultation with the state building inspector, to approve a standardized permit application for all solar PV systems for optional adoption by municipalities. Also requires the state building inspector, in consultation with the Green Bank, to develop and distribute a standard best practices document for solar PV system permitting and inspection.

Indirect Green Bank Involvement

House Bill 5242

- **Section 1 (Virtual Net Metering)**[79] - Broadens eligibility for virtual net metering by allowing

[76] Amends Section 16-245n
[77] Amends Section 16a-40g
[78] Amends Sections 16-245ff and 16-245gg
[79] Amends Section 16-244u effective July 1, 2016

agricultural customers to participate in VNM when under lease or long-term contract. No longer limited only to facility ownership.[80]

Senate Bill 394

- **Section 1 (Virtual Net Metering)**[81] - Requires PURA to authorize an additional $6 million of virtual net metering credits per year to municipal customer hosts that have submitted their interconnection and VNM applications to an EDC by April 13, 2016.[82]

House Bill 5496

- **Section 1 (Virtual Net Metering)**[83] - Establishes a clearer timeframe for VNM projects to attain eligibility for virtual net metering. Facilities have 18 months from the date DEEP issues a final permit to become operational.

Senate Bill 272

- **Section 1 (Microgrids)**[84] - Expands DEEP's microgrid grant and loan program to include matching funds or low interest loans for distributed energy projects placed in service after July 1, 2016 for eligible microgrids.[85] The bill narrows eligible generation to Class I and Class III projects. Up to half of the year 6 (2017) REC purchase by EDCs can now come from projects up to 2 MW - double the original size limit; it also allows for low-emission generation.

House Bill 5427

- **Section 2 (Shared Clean Energy Facilities)**[86] - Clarifies that the SCEF pilot can consist of multiple projects in each service area, and that EDCs' monthly billing systems may be used to distribute billing credits. DEEP determines the program's consumer protections and its billing credits, which are approved by PURA. The EDCs submit their proposed SCEF tariff schedules to PURA, and the EDCs receive cost recovery for implementing the program. SCEFs can sell power

[80] The Green Bank petitioned PURA for a declaratory ruling on the same matter of agricultural VNM eligibility for lease/PPA systems in addition to owned systems. The final ruling on PURA Docket 15-09-08 allows for flexible ownership structures where an agricultural end user can either 1) own equity shares of a special purpose vehicle that owns the VNM facility, or 2) directly own less than 100% of the VNM facility.
[81] Amends Section 16-244u effective upon passage
[82] Current law caps the total amount of credits provided to beneficial accounts at $10 million per year and limits the three categories of hosts to 40% of this amount. As under current law, the bill's additional credits must be apportioned to each EDC based on their consumer load (i.e., approximately 80% to eligible Eversource customers and 20% to eligible United Illuminating customers).
[83] Amends Section 16-244u upon passage. Amended to eliminate proposed provisions that allow biomass facility project administrators to request PURA modifications to existing purchase agreements. Such modifications would allow a project to use additional sustainable biomass fuel, helping their financial viability.
[84] Amends Section 16-243y effective July 1, 2016
[85] Under current law, recipients of grants and loans under DEEP's microgrid program can only use the funds for design, engineering services, and interconnection infrastructure (i.e., not for generation).
[86] Amends Section 16-243p effective upon passage

to the grid at terms up to 20 years.

Senate Bill 334

- **Section 3 (Lead By Example)**[87] - The bill extends, from 15 to 20 years, the limit on the financing payback period for energy-savings measures implemented under an energy-savings performance contract by a municipality or state agency. Also applies the limit to a comprehensive package of measures, rather than each energy-savings measure.

House Bill 5510

- **Section 4 (Time of day rates)**[88] – Each EDC and municipal electric company must study various rate designs and determine whether to implement electric vehicle time-of-day rates for residential and commercial customers by July 1, 2017.
- **Sections 5 and 6 (Load planning)**[89] - PURA must require that the EDCs integrate electric vehicle charging load projections into their distribution planning. Also requires an analysis of electric vehicles in the state's integrated resource plan. Establishes various requirements for public electric vehicle charging stations.

Senate Bill 344

NOT PASSED

- **Section 1 (No- and Low-Emission Supply Procurement)** - Allows the DEEP commissioner, in consultation with certain other state officials, to issue one or more solicitations for certain types of power generating facilities to sell power, capacity, or RECs. The facilities include certain Class I renewable facilities, large-scale hydropower, nuclear power plants, or trash-to-energy facilities.

[87] Amends Section 16a-37x effective upon passage
[88] Amends Section 16-19f effective July 1, 2016
[89] Amends Section 16a-3e

Connecticut Green Bank **Statutory Reporting Requirement C**
Report Coordinator: Matt Macunas

	Individual Responsible for Filing with OFA
Section 1-123 subsection(b): Quarterly Financial Cash Flow Report. 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 estimated at the end of the fiscal year.	G. Bellas
Section 1-123 subsection (c): Quarterly Personnel Status Report. Such report shall include, but not be limited to: (1) The total number of employees by the end of the quarter.	C. Baisden

	Individual Responsible for Filing of Complete Report
Section1 -123 subsection (a): Annual Report 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 having cognizance of matters relating to energy and commerce. The report shall include a description of the programs and activities undertaken during the reporting period jointly or in collaboration with the Energy Conservation and Load Management Funds established pursuant to section 16-245m.	E. Shrago
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 [REEFA UPDATE to E&T CLERK]	B. Garcia

Date Filed:

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

hecklist

Date Filed with OFA:

FY14				FY	
9/30/2013	12/31/2013	3/31/2014	6/30/2014	9/30/2014	12/31/2014
03/14/14	03/14/14	04/21/15	04/21/15		
06/17/14	06/17/14	06/17/14	08/05/14	10/02/14	01/12/15

Date Filed with:

FY14				FY	
Governor	Auditors of Public Accounts	Legislative Program Review and Investigations Committee (2 copies)		Governor	Auditors of Public Accounts
12/30/2014	12/30/2014	12/30/2014	12/30/2014	12/31/2015	12/31/2015

January 1, 2013 January 1, 2014 January 1, 2015 January 1, 2016

2/8/2013	1/15/2014	15-Mar-2015	12/23/2015

'15		FY16			
3/31/2015	6/30/2015	9/30/2015	12/31/2015	3/31/2016	6/30/2016

04/12/15	07/09/15	10/09/15	01/08/16		

'15		FY16			
Legislative Program Review and Investigations Committee (2 copies)		Governor	Auditors of Public Accounts	Legislative Program Review and Investigations Committee (2 copies)	
12/31/2015	12/31/2015				

CEFIA BOARD OF DIRECTORS APPOINTMENTS

Appointing Authority	Requirements	Appointee	Organization	Date Appointed/ Reappointed	Statutory Term	Specified Term Date	Expiration Date
Governor (Finance)	One person with experience in the finance of renewable energy	**Kevin Walsh**		9/2/14	2 years, then 4 years	9/2/14 appointment letter from Gov. Malloy. Term ends 6/30/18, or until a sucessor has qualified.	6/30/2018
Minority Leader of House	One person with experience in investment fund management	**Norma Glover**	NJG Associates	6/25/14	4 years	7/26/11 appointment letter from Rep Lawrence Cafero. Term ends 6/30/14.	6/30/2018
Speaker of the House	One person respresenting a residential	**Patricia Wrice**	Operation Fuel	9/1/11	4 years	9/1/11 appointment letter from Speaker of the House Christopher Donovan. Term ends 6/30/15, or until a sucessor has been appointed & qualified.	6/30/2015
Governor (Finance)	One person with experience in the finance of renewable energy	**Reed Hundt**	Coalition for Green Capital	1/10/14	2 years, then 4 years	9/22/11 appointment letter from Gov. Malloy. Term ends 6/30/13, or until sucessor is appointed and has qualified. Reappointed until 6/30/17 or until sucessor is appointed and has qualified.	6/30/2017
Governor (R&D)	A representative who sahll have experience in research & development or manufacturing of clean energy	**Mun Choi**	University of Connecticut	6/2/15	4 years, then 4 years	9/22/11 appointment letter from Gov Malloy. Term ends 6/30/15, or until a sucessor has been appointed & qualified.	6/30/2019
President Pro Tempore of Senate	One person representing an environmental organization	**Matt Ranelli (Secretary)**	Shipman & Goodwin	11/9/15	4 years	7/14/11 appointment letter from Senate President Pro Tempore, Donald Williams. Coterminous with the appointing authority.	6/30/2019
Governor (Labor)	A representative of organized labor	**John Harrity**	CT State Council of Machinists	6/2/15	4 years, then 4 years	7/16/13 appointment letter from Gov Malloy. Term ends 9/12/15, or until a sucessor has been appointed & qualified.	6/30/2019
Minority Leader of Senate	One person with experience in the finance or deployment of renewable energy	**Tom Flynn**	Town of Fairfield	7/21/15	4 years	7/21/15 appointment letter from Senate Minority Leader Len Fasano. Term ends 6/30/19	6/30/2019
Statute (PA11-80)	Comissioner of DECD or designee	**Catherine Smith (Chair)**	DECD	9/13/2011	ex officio	ex officio	12/31/2099
Statute (PA11-80)	Commissioner of DEEP or designee	**Rob Klee (Vice Chair)**	DEEP	not required	ex officio	ex officio	12/31/2099
Statute (PA11-80)	Treasurer or designee	**Denise Nappier**	Office of the State Treasurer	8/3/2011	ex officio	ex officio	12/31/2099
Non-voting members	The President of the Authority and a member of the Board of Connecticut Innovations, appointed by the Chairperson shall serve on the board in an ex-officio, nonvoting capacity,						
CEFIA President	The President of the Authority	**Bryan T. Garcia**	CEFIA		ex officio	ex officio	12/31/2099
Member of CI Board	A member of the Board of Connecticut Innovations, appointed by the	**TBD**			ex officio	ex officio	12/31/2099