

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



June 12, 2015

Dear Connecticut Green Bank Board of Directors:

We have a regular meeting of the Board of Directors scheduled for Friday, June 19, 2015 from 8:30 to 11:00 a.m. in the Colonel Albert Pope Board Room of the Connecticut Green Bank at 845 Brook Street, Rocky Hill, CT 06067.

Please note that because of the extensive agenda, we will be starting the meeting a half-hour earlier than normal.

On the agenda we have the following items:

- **President's Update** – I will report out with Brian Farnen on the end of the legislative session.
- **Consent Agenda** – We have several items, including the meeting minutes for April 17, 2015, transactions under \$300,000 and no more in aggregate than \$1,000,000 (memo with full project descriptions coming next week), and several requests from the Audit, Compliance and Governance Committee to revise internal accounting control procedures and banking signatories.
- **Commercial and Industrial Sector Programs** – we are bringing forth six (6) C-PACE transactions for your review and approval – totaling about \$3.7 million in financing in Bridgeport, Stratford, Bristol, Stamford, and Windsor Locks. We will also be requesting approval to sell down our second tranche of C-PACE transactions through Clean Fund.
- **Statutory and Infrastructure Sector Programs** – we are bringing forth our fifth and final anaerobic digester project that is located in Milford. The project uses a GE technology that takes food waste to produce onsite renewable energy through a 3 MW combined heat and power facility.
- **Residential Sector Programs** – we are advancing several of our multifamily programs for affordable and market rate customers. We will be proposing support for a low-to-moderate income solar PV lease with energy efficiency ESA product through a specialized provider that was solicited through a competitive RFP. And we will also be proposing a predevelopment loan program for affordable and market rate multifamily properties.
- **FY 2016 Targets and Budget** – we will be proposing through the Budget and Operations Committee our recommendations for the FY 2016 targets and budget for the Connecticut Green Bank. Included in the budget is a request to access funds through several legislatively approved

bond funds through the Green Connecticut Loan Guaranty Fund and the Renewable Energy and Energy Efficient Finance Program.

- **Executive Session** – we will go into executive session to discuss commercially sensitive information with respect to the C-PACE private capital RFP.
- **Other Business** – if we have any time left over after executive session, we will provide updates on several items deserved of report outs, including our succession plan, multifamily and affordable housing lean exercise we participated in with DEEP and partners, status update on the Colebrook wind project, and other items.

If you have any questions, comments or concerns, please feel free to contact me at any time.

We look forward to seeing you next week.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Bryan Garcia', with a long horizontal flourish extending to the right.

Bryan Garcia  
President and CEO



## AGENDA

Board of Directors of the  
Connecticut Green Bank  
845 Brook Street  
Rocky Hill, CT 06067

Friday, June 19, 2015  
8:30-11:00 a.m.

Staff Invited: George Bellas, Andy Brydges, Craig Connolly, Mackey Dykes, Brian Farnen,  
Bryan Garcia, Dale Hedman, Bert Hunter, Kerry O'Neill, and Genevieve Sherman

1. Call to order
2. Public Comments – 5 minutes
3. Consent Agenda\* – 5 minutes
  - a. Approval of Meeting Minutes for April 17, 2015\*
  - b. Revisions to Banking Signatories\*
  - c. Revisions to Internal Accounting Control Procedures\*
  - d. Under \$300,000 and No More in Aggregate than \$1,000,000\*
4. Update from the President – 5 minutes
5. Commercial and Industrial Sector Program Updates and Recommendations\* – 30 minutes
  - a. C-PACE Transactions\*
    - i. Bridgeport – C-PACE Transaction\*
    - ii. Stratford – C-PACE Transaction\*
    - iii. Bristol – C-PACE Transaction #1\*
    - iv. Bristol – C-PACE Transaction #2\*
    - v. Stamford – C-PACE Transaction\*
    - vi. Windsor Locks – C-PACE Transaction\*
  - b. C-PACE Sell Down to Clean Fund “Tranche 2”
  - c. C-PACE Selection of Private Capital Warehouse Provider
6. Statutory and Infrastructure Sector Program Updates and Recommendations\* – 15 minutes
  - a. Milford – Anaerobic Digestion Transaction\*

7. Residential Sector Program Updates and Recommendations\* – 15 minutes
  - a. Low to Moderate Income Single Family Lease Product\*
  - b. Predevelopment Loan Program for Low Income Multifamily\*
8. Budget and Operations Committee Updates and Recommendations\*\* – 60 minutes
  - a. FY 2016 Comprehensive Plan Targets\*\*
  - b. FY 2016 Budget\*\*
9. Executive Session – 15 minutes
10. Other Business – 5 minutes
  - a. Succession Plan (Update)
  - b. Multifamily and Affordable Housing Lean (Update)
  - c. Colebrook – Wind (Update)
11. Adjourn

\*Denotes item requiring Committee action

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

Join the meeting online at <https://www4.gotomeeting.com/join/911969175>

Or call in using your telephone:

Dial (213) 493-0601

Access Code: 911-969-175



## **RESOLUTIONS**

Board of Directors of the  
Connecticut Green Bank  
845 Brook Street  
Rocky Hill, CT 06067

Friday, June 19, 2015  
8:30-11:00 a.m.

Staff Invited: George Bellas, Andy Brydges, Craig Connolly, Mackey Dykes, Brian Farnen,  
Bryan Garcia, Dale Hedman, Bert Hunter, Kerry O'Neill, and Genevieve Sherman

1. Call to order
2. Public Comments – 5 minutes
3. Consent Agenda\* – 5 minutes
  - a. Approval of Meeting Minutes for April 17, 2015\*

### **Resolution #1**

Motion to approve the minutes of the Board of Directors Regular Meeting for April 17, 2015.

- b. Revisions to Banking Signatories\*

### **Resolution #2**

**RESOLVED**, that the Connecticut Green Bank Board of Directors (the "Board") approves the addition of the position of "Vice President and Chief Operating Officer" to the Connecticut Green Bank's list of authorized bank signatories;

**RESOLVED**, that the Board amends the list of authorized bank signatories to reflect the position change in title from "Director Renewable Energy Deployment" to "Director of Statutory and Infrastructure Programs"; and

**RESOLVED**, that these changes shall be effective for the following entities: Connecticut Green Bank, CEFIA Holdings LLC, CT Solar Loan I LLC, CEFIA Services Inc., and CT Solar Lease 2 LLC. The proper Connecticut Green Bank officers are authorized and empowered to execute and deliver all other documents and instruments necessary to effectuate this resolution.

- c. Revisions to Internal Accounting Control Procedures\*

### **Resolution #3**

**WHEREAS**, On April 22, 2015 the Connecticut Green Bank (the “Green Bank”) staff presented proposed revisions to existing internal accounting control policies and procedures with the Green Bank Audit, Compliance and Governance Committee (the “ACG Committee”). After review and discussion the ACG Committee recommended to the Green Bank Board of Directors (the “Board”) that the Board approve the proposed revisions attached to the Memo to the Board dated June 12, 2015;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the revisions to the following Green Bank, and its affiliates, existing internal accounting control policies: Policy 101, Policy 102, Policy 103, Policy 104, and Policy 104a, as such revisions are more fully described in the Memo to the Board dated June 12, 2015; and

**RESOLVED**, the proper Green Bank officers are authorized and empowered to execute and deliver all other documents and instruments necessary to effectuate this resolution.

d. Under \$300,000 and No More in Aggregate than \$1,000,000 (Update)

### **Resolution #4**

**WHEREAS**, on January 18, 2013, the Connecticut Green Bank (the “Green Bank”) Board of Directors (the “Board”) authorized the Green Bank staff to evaluate and approve funding requests less than \$300,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Green Bank Comprehensive Plan, approved within Green Bank’s fiscal budget and in an aggregate amount not to exceed \$500,000 from the date of the last Deployment Committee meeting, on July 18, 2014 the Board increase the aggregate not to exceed limit to \$1,000,000 (“Staff Approval Policy for Projects Under \$300,000”); and

**WHEREAS**, Green Bank staff seeks Board review and approval of the funding requests listed in the Memo to the Board dated June 19, 2015 which were approved by Green Bank staff since the last Deployment Committee meeting and which are consistent with the Staff Approval Policy for Projects Under \$300,000;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the funding requests listed in the Memo to the Board dated June 19, 2015 which were approved by Green Bank staff since the last Deployment Committee meeting. The Board authorizes Green Bank staff to approve funding requests in accordance with the Staff Approval Policy for Projects Under \$300,000 in an aggregate amount to exceed \$1,000,000 from the date of this Board meeting until the next Deployment Committee meeting.

4. Update from the President – 5 minutes
5. Commercial and Industrial Sector Program Updates and Recommendations\* – 30 minutes

a. C-PACE Transactions\*

i. Bridgeport – C-PACE Transaction\*

**Resolution #5**

**WHEREAS**, pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the "Act"), the Connecticut Green Bank ("Green Bank") is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

**WHEREAS**, the Green Bank Board of Directors (the "Board") has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a **\$629,800** construction and (potentially) term loan under the C-PACE program to Wade Properties, LLC, the building owner of 1316 Barnum Avenue, Bridgeport, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the "Feasibility Study Loan") from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors of the Connecticut Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board of Directors;

**RESOLVED**, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Act, including but not limited to the savings to investment ratio and lender consent requirements; and

**RESOLVED**, that the proper the Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instrument.

ii. Stratford – C-PACE Transaction\*

**Resolution #6**

**WHEREAS**, pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the "Act"), the

Connecticut Green Bank ("Green Bank") is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

**WHEREAS**, the Green Bank Board of Directors (the "Board") has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a **\$418,539** construction and (potentially) term loan under the C-PACE program to Wade Properties, LLC, the building owner of 80 Ferry Boulevard, Stratford, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the "Feasibility Study Loan") from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board of Directors;

**RESOLVED**, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Act, including but not limited to the savings to investment ratio and lender consent requirements; and

**RESOLVED**, that the proper the Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instrument.

iii. Bristol – C-PACE Transaction #1\*

### **Resolution #7**

**WHEREAS**, pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the "Act"), the Connecticut Green Bank ("Green Bank") is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

**WHEREAS**, the Green Bank Board of Directors (the "Board") has approved a \$40,000,000 C-PACE construction and term loan program;



**WHEREAS**, the Green Bank seeks to provide a \$1,085,559 construction and (potentially) term loan under the C-PACE program to Bristol Farms Associates, LLC, the building owner of 1461 Farmington Avenue, Bristol, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the "Feasibility Study Loan") from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Loan and, if applicable, a Feasibility Study Loan in a total amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from June 19, 2015;

**RESOLVED**, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Act, including but not limited to the savings to investment ratio and lender consent requirements; and

**RESOLVED**, that the proper the Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

iv. Bristol – C-PACE Transaction #2\*

### **Resolution #8**

**WHEREAS**, Pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the "Act"), the Connecticut Green Bank ("Green Bank") is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

**WHEREAS**, the Green Bank Board of Directors (the "Board") has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a \$686,231 construction and (potentially) term loan under the C-PACE program to 223 Broad Street, LLC, the building owner of 223 Broad Street, Bristol, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the "Feasibility Study Loan") from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Loan and, if applicable, a Feasibility Study Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from June 19, 2015;

**RESOLVED**, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Act, including but not limited to the savings to investment ratio and lender consent requirements; and

**RESOLVED**, that the proper the Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

v. Stamford – C-PACE Transaction\*

### **Resolution #9**

**WHEREAS**, Pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the "Act"), the Green Bank is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

**WHEREAS**, the Green Bank Board of Directors has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a \$454,525 construction and (potentially) term loan under the C-PACE program to 1200 High Ridge Company, LLC, the property owner of 1200 High Ridge Road, Stamford, CT (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the "Feasibility Study Loan") from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board of Directors dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from June 19, 2015;

**RESOLVED**, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Act, including but not limited to the savings to investment ratio and lender consent requirements; and

**RESOLVED**, that the proper the Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instrument.

vi. Windsor Locks – C-PACE Transaction\*

#### **Resolution #10**

**WHEREAS**, pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the “Act”), the Connecticut Green Bank (“Green Bank”) is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy (“C-PACE”);

**WHEREAS**, the Green Bank Board of Directors (the “Board”) has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a \$455,775 construction and (potentially) term loan under the C-PACE program to Roberts Realty Inc., the building owner of 27 Longacre Road, Windsor Locks, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State’s Comprehensive Energy Strategy and the Green Bank’s Strategic Plan; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the “Feasibility Study Loan”) from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan and, if applicable, a Feasibility Study Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board of Directors;

**RESOLVED**, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Act, including but not limited to the savings to investment ratio and lender consent requirements; and

**RESOLVED**, that the proper the Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

- b. C-PACE Sell Down to Clean Fund “Tranche 2”
- c. C-PACE Selection of Private Capital Warehouse Provider

6. Statutory and Infrastructure Sector Program Updates and Recommendations\* – 15 minutes

- a. Milford – Anaerobic Digestion Transaction\*

**Resolution #11**

**WHEREAS**, in early 2013, Connecticut Green Bank (“Green Bank”) released a rolling Request for Proposals (“RFP”) for anaerobic digestion projects to participate in a statutorily mandated AD Pilot program pursuant to Section 103 of Public Act 11-80;

**WHEREAS**, the RFP is aimed at reducing landfill waste through the recycling of organics, helping to promote sustainable practices and economic prosperity of Connecticut farms and other businesses by using organic waste with on-site anaerobic digestion facilities to generate electricity and heat;

**WHEREAS**, AgCycle Organics, LLC submitted the New Meadow Power and Earth AD Facility proposal in response to develop, in the City of Milford, a 3.0MW anaerobic digestion and cogeneration project and, after a thorough review, was selected as a project that is consistent with the Green Bank’s Comprehensive Plan and in the best interests of ratepayer;

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors approves and authorizes the Green Bank staff to execute definitive loan documentation materially based on the term sheet set forth in this due diligence package dated June 19, 2015 for financial support in the form of a \$4,565,000 subordinated loan financing;

**RESOLVED**, that this Board action is consistent with Section 103 of Public Act 11-80; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to effect these Resolutions.

7. Residential Sector Program Updates and Recommendations\* – 15 minutes

a. Low to Moderate Income Single Family Lease Product\*

**Resolution #12**

**WHEREAS**, the Connecticut Green Bank (“Green Bank”) has a mandate to deploy its resources to benefit all ratepayers, including low and moderate income (“LMI”) residential households;

**WHEREAS**, LMI households bear a disproportionate burden of the state’s high energy costs as a percentage of their income;

**WHEREAS**, LMI households generally do not benefit from existing federal incentives for clean energy adoption, given that such incentives require sufficient tax liabilities to be of value;

**WHEREAS**, traditional financing for residential solar PV and energy efficiency upgrades rely on credit tests that screen out many LMI households and, specifically, exclude them from the growing third-party ownership model for residential solar PV;

**WHEREAS**, the Green Bank released a Request for Proposals for Residential Solar Financing Partners (the “RFP”) on December 31, 2014;

**WHEREAS**, PosiGen, Inc. (collectively with all affiliates and subsidiaries, “PosiGen”) responded to said RFP with a comprehensive proposal to deliver a solar lease and energy efficiency finance offering to LMI households in Connecticut;

**WHEREAS**, Green Bank staff has reviewed PosiGen’s RFP response and now recommends that the Green Bank make a commitment of \$5,000,000 in debt capital (the “Loan”) and a contingent commitment of another \$5,000,000 in debt capital (the “Contingent Loan”) to support PosiGen in delivering its offering to Connecticut’s LMI households; and

**WHEREAS**, Green Bank staff expects to bring a proposal before the Board of Directors (the “Board”) at its July 2015 meeting to request an elevated Performance Based Incentive (“PBI”) under the Residential Solar Investment Program to support financing for LMI households, which elevated PBI will be critical to opening up this market segment and the success of PosiGen’s efforts to accelerate deployment therein.

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Loan with terms and conditions consistent with the memorandum submitted to the Board dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Contingent Loan with terms and conditions consistent with the memorandum submitted to the Board dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 18 months from the date of authorization by the Board; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

b. Predevelopment Loan Program for Low Income Multifamily\*

**Resolution #13**

**WHEREAS**, the Connecticut Green Bank (“Green Bank”) has a mandate to deploy private capital to support clean energy upgrades across the state’s built environment;

**WHEREAS**, the multifamily sector is an area of active focus for the Green Bank, given the unique challenges of financing clean energy upgrades on multifamily properties, and especially on affordable multifamily properties;

**WHEREAS**, Green Bank staff has determined that a key reason for the lack of progress in financing clean energy upgrades for multifamily properties is a surfeit of upfront support and a lack of the capital needed to navigate the complicated energy upgrade process for these buildings, including but not limited to the steps of benchmarking, assessing, and auditing properties, as well as determining appropriate design and financing solutions; and

**WHEREAS**, given the acuteness of these challenges for affordable multifamily building owners, as well as the high energy burden borne by tenants living in these properties, the Green Bank Board of Directors (“Board of Directors”) authorized staff to accept a Program Related Investment from the MacArthur Foundation on January 23, 2015, in the amount of \$5,000,000, to support financing for these properties;

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to deploy up to \$1,000,000 to create a multifamily pre-development loan fund (the “Loan Fund”), with an initial expectation of \$500,000 of that total to be used for affordable multifamily properties, with terms and conditions consistent with the memorandum and associated exhibits submitted to the Board of Directors dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers, with a fund launch date no later than 120 days from June 19, 2015;

**RESOLVED**, that a portion of the proceeds of the Loan Fund, not to exceed \$280,000, may be used to support a pilot initiative run by New Ecology, Inc. (“NEI”), to drive volume and uptake of the Loan Fund, per NEI’s response to the Green Bank’s Multifamily Housing Clean Energy Financing Program Request for Proposals originally released on April 7, 2014; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

8. Budget and Operations Committee Updates and Recommendations\*\* – 60 minutes

- a. FY 2016 Comprehensive Plan Targets\*\*
- b. FY 2016 Budget\*\*

**Resolution #14**

**RESOLVED**, that the Connecticut Green Bank Board of Directors (the “Board”) approves the Fiscal Year 2016 Targets and Budget;

**RESOLVED**, that the Board approves the reallocation of American Recovery and Reinvestment Act State Energy Program funds outlined in the “Schedule of Credit Enhancements” in the Fiscal Year 2016 budget.

**RESOLVED**, that the Board directs staff to maintain the authorization for the Green Connecticut Loan Guaranty Program and the Renewable Energy and Efficient Energy Finance Program;

**RESOLVED**, that the Board directs staff to bring back a program proposal for review and approval at the July 17, 2015 meeting for the use of proceeds of the Green Connecticut Loan Guaranty Program and the Renewable Energy and Efficient Energy Finance Program;

**RESOLVED**, that the Board directs staff to bring back a revised budget if the funds from the Green Loan Guaranty Fund and the Renewable Energy and Efficient Energy Finance Program are allocated by the state bond commission;

**RESOLVED**, that the Board authorizes Green Bank staff to extend the professional services agreements (PSAs) currently in place with:

- i. METIS, Financial Network, Inc.;
- ii. Concord Servicing Corporation;
- iii. EnergySage Inc.;
- iv. Archaeological and Historical Services, Inc.;
- v. True South Renewables, Inc.;
- vi. Clean Power Research, L.L.C.;
- vii. Locus Energy, LLC;
- viii. SmartPower, Inc.; and
- ix. Sustainable Real Estate Solutions, Inc.

for the remainder of fiscal year 2016 with the amounts of each PSA not to exceed the applicable approved budget line item; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to execute these extensions.

- 9. Executive Session – 15 minutes
- 10. Other Business – 5 minutes
  - a. Succession Plan
  - b. Multifamily and Affordable Housing Lean (Update)
  - c. Colebrook – Wind (Update)

11. Adjourn

\*Denotes item requiring Committee action

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

Join the meeting online at <https://www4.gotomeeting.com/join/911969175>

Or call in using your telephone:

Dial (213) 493-0601

Access Code: 911-969-175





CONNECTICUT  
**GREEN BANK**

# Board of Directors Meeting

June 19, 2015



# Board of Directors

## Agenda Item #1

### Call to Order

Board of Directors  
Agenda Item #2  
Public Comments

Board of Directors  
Agenda Item #3  
Consent Agenda

# Consent Agenda



- **Meeting Minutes** – approval of meeting minutes of April 17, 2015
- **Revisions** – banking signatories and internal accounting control procedures
- **Staff Approvals** – under \$300,000 and no more in aggregate than \$1,000,000

# Board of Directors

## Agenda Item #4

### Update from the President

# Update from the President Legislative Session



- **C-PACE** – passed with unanimous bipartisan support...removes any ambiguity of the role of private sector capital to finance energy improvements.
- **SHREC** – passed with bipartisan support...establishes 300 MW target for Connecticut Green Bank and 15-year contract for Solar Home Renewable Energy Credits (SHRECs) between EDC's and CGB. Also establishes “soft cost” permitting improvements.
- **R-PACE** – submitted study...drafted policy...working with Banking and E&T Committees to convene stakeholders for legislation to be proposed for 2016 session.
- **AD** – extends pilot program by two years.
- **Green Bonds** – working during implementer bill session to have OPM increase SCRF from \$50 to \$100 million to support more LBE projects

# Board of Directors

## Agenda Item #5

### Commercial and Industrial Sector



# C-PACE Update



- \$43.7 million closed (67) deals;
- \$70 million since inception (over 100 approved)
- 110 towns = over 85% eligible market covered
- 36 banks have provided mortgage lender consent
- 42 contractors have approved projects
- Over 100 contractors registered

Board of Directors  
Agenda Item #5ai  
Commercial and Industrial Sector  
Bridgeport

# 1316 Barnum Ave, Bridgeport Ratepayer Payback



**PHOTO REDACTED**

- **\$629,800** to install 100, 64.3 & 61 kW solar PV systems
- Projected savings are **25,849 MMBtu** versus **\$629,800** of ratepayer funds at risk.
- Ratepayer funds will be paid back in one of the following ways
  - ❑ (a) through a take-out by a private capital provider at the end of construction (project completion);
  - ❑ (b) subsequently, when the loan is sold down to a private capital provider; or
  - ❑ (c) through receipt of funds from the City of Bridgeport as it collects the C-PACE benefit assessment from the property owner.

# 1316 Barnum Ave, Bridgeport

## Terms and Conditions



- **\$629,800** construction loan at 5% and term loan set at a fixed 6%\* over the 20-year term
- **\$629,800** loan against the property
  - Property valued at **REDACTED**
  - Loan-to-value ratio equals **REDACTED**; Lien-to-value ratio equals **REDACTED**
- DSCR > **REDACTED**

# 1316 Barnum Ave, Bridgeport

## The Five W's



- **What?** Receive approval for a \$629,800 construction and (potentially) term loan under the C-PACE program to Wade Properties, LLC to finance the construction of specified energy upgrade
- **When?** Project to commence 2015
- **Why?** Allow Green Bank to finance this C-PACE transaction, continue to build momentum in the market, and potentially provide term financing for this project until Green Bank sells it along with its other loan positions in C-PACE transactions.
- **Who?** Wade Properties, LLC, the property owner of 1316 Barnum Avenue, Bridgeport CT
- **Where?** 1316 Barnum Avenue, Bridgeport CT

# 1316 Barnum Ave, Bridgeport Project Tear Sheet



**REDACTED**

# 1316 Barnum Ave, Bridgeport Anticipated Cash Flow



CT Green Bank Pro Forma			
Project Basics		Cash Flows	
		Date	CEFIA, \$
Amount Financed	\$629,800	Jun 2015	\$629,800
Construction Period (years)	0.25	Aug 2015	\$7,873
Term (years)	20	Jan 2016	\$54,493
Construction Financing Rate	5.00%	Jan 2017	\$54,493
Term Financing Rate	6.00%	Jan 2018	\$54,493
		Jan 2019	\$54,493
Construction Interest Payment (bullet)	\$7,873	Jan 2020	\$54,493
Yearly Debt Service Payments (made semi-annually)	\$54,493	Jan 2021	\$54,493
		Jan 2022	\$54,493
		Jan 2023	\$54,493
		Jan 2024	\$54,493
		Jan 2025	\$54,493
		Jan 2026	\$54,493
		Jan 2027	\$54,493
		Jan 2028	\$54,493
		Jan 2029	\$54,493
		Jan 2030	\$54,493
		Jan 2031	\$54,493
		Jan 2032	\$54,493
		Jan 2033	\$54,493
		Jan 2034	\$54,493
		Jan 2035	\$54,493

# 1316 Barnum Ave, Bridgeport

## Key Financial Metrics



**REDACTED**



Board of Directors  
Agenda Item #5aii  
Commercial and Industrial Sector  
Stratford

# 80 Ferry Boulevard, Stratford Ratepayer Payback



- **\$418,539** to install 112.84 kW solar PV system & LED lighting
- Projected savings are **3,585,595 kWh** versus **\$418,539** of ratepayer funds at risk.
- Ratepayer funds will be paid back in one of the following ways
  - ❑ (a) through a take-out by a private capital provider at the end of construction (project completion);
  - ❑ (b) subsequently, when the loan is sold down to a private capital provider; or
  - ❑ (c) through receipt of funds from the City of Stratford as it collects the C-PACE benefit assessment from the property owner.

**PHOTO REDACTED**

# 80 Ferry Boulevard, Stratford

## Terms and Conditions



- **\$418,539** construction loan at 5% and term loan set at a fixed 6%\* over the 20-year term
- **\$418,539** loan against the property
  - Property valued at **REDACTED**
  - Loan-to-value ratio equals **REDACTED**; Lien-to-value ratio equals **REDACTED**
- DSCR > **REDACTED**

# 80 Ferry Boulevard, Stratford

## The Five W's



- **What?** Receive approval for a \$418,539 construction and (potentially) term loan under the C-PACE program to Marina View LLC to finance the construction of specified energy upgrade
- **When?** Project to commence 2015
- **Why?** Allow Green Bank to finance this C-PACE transaction, continue to build momentum in the market, and potentially provide term financing for this project until Green Bank sells it along with its other loan positions in C-PACE transactions.
- **Who?** Marina View LLC, the property owner of 80 Ferry Boulevard, Stratford CT
- **Where?** 80 Ferry Boulevard, Stratford CT

# 80 Ferry Boulevard, Stratford Project Tear Sheet



**REDACTED**

# 80 Ferry Boulevard, Stratford

## Anticipated Cash Flow



CEFIA Pro Forma			
<i>Project Basics</i>		<i>Cash Flows</i>	
		<u>Date</u>	<u>CEFIA \$</u>
Amount Financed	\$418,539	Jul 2015	\$418,539
Construction Period (years)	0.50	Dec 2015	\$10,463
Term (years)	20	Jan 2016	\$36,214
		Jan 2017	\$36,214
Construction Financing Rate	5.00%	Jan 2018	\$36,214
Term Financing Rate	6.00%	Jan 2019	\$36,214
		Jan 2020	\$36,214
Construction Interest Payment (bullet)	\$10,463	Jan 2021	\$36,214
Yearly Debt Service Payments (made semi-annually)	\$36,214	Jan 2022	\$36,214
		Jan 2023	\$36,214
		Jan 2024	\$36,214
		Jan 2025	\$36,214
		Jan 2026	\$36,214
		Jan 2027	\$36,214
		Jan 2028	\$36,214
		Jan 2029	\$36,214
		Jan 2030	\$36,214
		Jan 2031	\$36,214
		Jan 2032	\$36,214
		Jan 2033	\$36,214
		Jan 2034	\$36,214
		Jan 2035	\$36,214

# 80 Ferry Boulevard, Stratford

## Key Financial Metrics



**REDACTED**

Board of Directors  
Agenda Item #5a  
Commercial and Industrial Sector  
Bristol (Transaction #1)



# 1461 Farmington Ave, Bristol

## Ratepayer Payback



**PHOTO REDACTED**

- **\$1,085,559** to install 258 & 50kW solar PV system
- Projected savings are **22,362 MMBtu** versus **\$1,085,559** of ratepayer funds at risk.
- Ratepayer funds will be paid back in one of the following ways
  - ❑ (a) through a take-out by a private capital provider at the end of construction (project completion);
  - ❑ (b) subsequently, when the loan is sold down to a private capital provider; or
  - ❑ (c) through receipt of funds from the City of Bristol as it collects the C-PACE benefit assessment from the property owner.

# 1461 Farmington Ave, Bristol

## Terms and Conditions



- **\$1,085,559** construction loan at 5% and term loan set at a fixed 5.75%\* over the 20-year term
- **\$1,085,559** loan against the property
  - ❑ Property valued at **REDACTED**
  - ❑ Loan-to-value ratio equals **REDACTED**; Lien-to-value ratio equals **REDACTED**
- DSCR > **REDACTED**
  
- *\*This deal is part of a group marketing campaign, therefore the rate will be lower if the campaign reaches a critical dollar value of CPACE deals (5.75% for \$5M)*

# 1461 Farmington Ave, Bristol

## The Five W's



- **What?** Receive approval for a \$1,085,559 construction and (potentially) term loan under the C-PACE program to Bristol Farms Associates, LLC to finance the construction of specified energy upgrade
- **When?** Project to commence 2015
- **Why?** Allow Green Bank to finance this C-PACE transaction, continue to build momentum in the market, and potentially provide term financing for this project until Green Bank sells it along with its other loan positions in C-PACE transactions.
- **Who?** Bristol Farms Associates, LLC , the property owner of 1461 Farmington Ave, Bristol CT
- **Where?** 1461 Farmington Ave, Bristol CT

# 1461 Farmington Ave, Bristol Project Tear Sheet



**REDACTED**

# 1461 Farmington Ave, Bristol

## Anticipated Cash Flow



CEFIA Pro Forma			
<i>Project Basics</i>		<i>Cash Flows</i>	
Amount Financed	\$1,085,559	<u>Date</u>	<u>CEFIA \$</u>
Construction Period (years)	0.50	Feb 2015	\$1,085,559
Term (years)	20	Aug 2015	\$27,139
		Jan 2016	\$92,039
Construction Financing Rate	5.00%	Jan 2017	\$92,039
Term Financing Rate	5.75%	Jan 2018	\$92,039
		Jan 2019	\$92,039
Construction Interest Payment (bullet)	\$27,139	Jan 2020	\$92,039
Yearly Debt Service Payments (made semi-annually)	\$92,039	Jan 2021	\$92,039
		Jan 2022	\$92,039
		Jan 2023	\$92,039
		Jan 2024	\$92,039
		Jan 2025	\$92,039
		Jan 2026	\$92,039
		Jan 2027	\$92,039
		Jan 2028	\$92,039
		Jan 2029	\$92,039
		Jan 2030	\$92,039
		Jan 2031	\$92,039
		Jan 2032	\$92,039
		Jan 2033	\$92,039
		Jan 2034	\$92,039
		Jan 2035	\$92,039

# 1461 Farmington Ave, Bristol

## Key Financial Metrics



**REDACTED**

Board of Directors  
Agenda Item #5aiv  
Commercial and Industrial Sector  
Bristol (Transaction #2)

# 223 Broad Street, Bristol

## Ratepayer Payback



- **\$686,231** to install 175kW solar PV system
- Projected savings are **12,827 MMBtu** versus **\$686,231** of ratepayer funds at risk.
- Ratepayer funds will be paid back in one of the following ways
  - ❑ (a) through a take-out by a private capital provider at the end of construction (project completion);
  - ❑ (b) subsequently, when the loan is sold down to a private capital provider; or
  - ❑ (c) through receipt of funds from the City of Bristol as it collects the C-PACE benefit assessment from the property owner.

**PHOTO REDACTED**



# 223 Broad Street, Bristol

## Terms and Conditions



- **\$686,231** construction loan at 5% and term loan set at a fixed 5.75%\* over the 20-year term
- **\$686,231** loan against the property
  - ❑ Property valued at **REDACTED**
  - ❑ Loan-to-value ratio equals **REDACTED**; Lien-to-value ratio equals **REDACTED**
- DSCR > **REDACTED**
  
- *\*This deal is part of a group marketing campaign, therefore the rate will be lower if the campaign reaches a critical dollar value of CPACE deals (5.75% for \$5M)*

# 223 Broad Street, Bristol

## The Five W's



- **What?** Receive approval for a \$686,231 construction and (potentially) term loan under the C-PACE program to 223 Broad Street, LLC to finance the construction of specified energy upgrade
- **When?** Project to commence 2015
- **Why?** Allow Green Bank to finance this C-PACE transaction, continue to build momentum in the market, and potentially provide term financing for this project until Green Bank sells it along with its other loan positions in C-PACE transactions.
- **Who?** 223 Broad Street, LLC, the property owner of 223 Broad Street, Bristol CT
- **Where?** 223 Broad Street, Bristol CTT

# 223 Broad Street, Bristol Project Tear Sheet



**REDACTED**

# 223 Broad Street, Bristol

## Anticipated Cash Flow



CEFIA Pro Forma			
<i>Project Basics</i>		<i>Cash Flows</i>	
		<u>Date</u>	<u>CEFIA \$</u>
Amount Financed	\$686,231	Jan 2014	<b>\$686,231</b>
Construction Period (years)	0.25	Apr 2014	\$8,578
Term (years)	20	Jul 2014	\$58,562
Construction Financing Rate	5.00%	Jul 2015	\$58,562
Term Financing Rate	5.83%	Jul 2016	\$58,562
		Jul 2017	\$58,562
Construction Interest Payment (bullet)	\$8,578	Jul 2018	\$58,562
Yearly Debt Service Payments (made semi-annually)	\$58,562	Jul 2019	\$58,562
		Jul 2020	\$58,562
		Jul 2021	\$58,562
		Jul 2022	\$58,562
		Jul 2023	\$58,562
		Jul 2024	\$58,562
		Jul 2025	\$58,562
		Jul 2026	\$58,562
		Jul 2027	\$58,562
		Jul 2028	\$58,562
		Jul 2029	\$58,562
		Jul 2030	\$58,562
		Jul 2031	\$58,562
		Jul 2032	\$58,562
		Jul 2033	\$58,562

# 223 Broad Street, Bristol

## Key Financial Metrics



**REDACTED**

Board of Directors  
Agenda Item #5av  
Commercial and Industrial Sector  
Stamford

# 1200 High Ridge Road, Stamford Ratepayer Payback



**PHOTO REDACTED**

- **\$454,525** to install 106.8 kW solar PV system
- Projected savings are **8,392 MMBtu** versus **\$454,525** of ratepayer funds at risk.
- Ratepayer funds will be paid back in one of the following ways
  - ❑ (a) through a take-out by a private capital provider at the end of construction (project completion);
  - ❑ (b) subsequently, when the loan is sold down to a private capital provider; or
  - ❑ (c) through receipt of funds from the City of Stamford as it collects the C-PACE benefit assessment from the property owner.

# 1200 High Ridge Road, Stamford

## Terms and Conditions



- **\$454,525** construction loan at 5% and term loan set at a fixed 6%\* over the 20-year term
- **\$454,525** loan against the property
  - Property valued at **REDACTED**
  - Loan-to-value ratio equals **REDACTED**; Lien-to-value ratio equals **REDACTED**
- DSCR > **REDACTED**



# 1200 High Ridge Road, Stamford



## The Five W's

- **What?** Receive approval for a \$454,525 construction and (potentially) term loan under the C-PACE program to 1200 High Ridge Company, LLC to finance the construction of specified energy upgrade
- **When?** Project to commence 2015
- **Why?** Allow Green Bank to finance this C-PACE transaction, continue to build momentum in the market, and potentially provide term financing for this project until Green Bank sells it along with its other loan positions in C-PACE transactions.
- **Who?** 1200 High Ridge Company, LLC, the property owner of 1200 High Ridge Road, Stamford CT
- **Where?** 1200 High Ridge Road, Stamford CT

# 1200 High Ridge Road, Stamford Project Tear Sheet



**REDACTED**

# 1200 High Ridge Road, Stamford

## Anticipated Cash Flow



CEFIA Pro Forma			
<i>Project Basics</i>		<i>Cash Flows</i>	
		<u>Date</u>	<u>CEFIA \$</u>
Amount Financed	\$454,525	Jul 2015	\$454,525
Construction Period (years)	0.42	Nov 2015	\$11,363
Term (years)	20	Jan 2016	\$39,328
Construction Financing Rate	6.00%	Jan 2017	\$39,328
Term Financing Rate	6.00%	Jan 2018	\$39,328
		Jan 2019	\$39,328
Construction Interest Payment (bullet)	\$11,363	Jan 2020	\$39,328
Yearly Debt Service Payments (made semi-annually)	\$39,328	Jan 2021	\$39,328
		Jan 2022	\$39,328
		Jan 2023	\$39,328
		Jan 2024	\$39,328
		Jan 2025	\$39,328
		Jan 2026	\$39,328
		Jan 2027	\$39,328
		Jan 2028	\$39,328
		Jan 2029	\$39,328
		Jan 2030	\$39,328
		Jan 2031	\$39,328
		Jan 2032	\$39,328
		Jan 2033	\$39,328
		Jan 2034	\$39,328
		Jan 2035	\$39,328

# 1200 High Ridge Road, Stamford

## Key Financial Metrics



**REDACTED**

Board of Directors  
Agenda Item #5avi  
Commercial and Industrial Sector  
Windsor Locks

# 27 Lawnacre Rd, Windsor Locks

## Ratepayer Payback



**PHOTO REDACTED**

- **\$455,775** to install 130kW solar PV system
- Projected savings are **9,936 MMBtu** versus **\$455,775** of ratepayer funds at risk.
- Ratepayer funds will be paid back in one of the following ways
  - ❑ (a) through a take-out by a private capital provider at the end of construction (project completion);
  - ❑ (b) subsequently, when the loan is sold down to a private capital provider; or
  - ❑ (c) through receipt of funds from the Town of Windsor Locks as it collects the C-PACE benefit assessment from the property owner.

# 27 Lawnacre Rd, Windsor Locks

## Terms and Conditions



- **\$455,775** construction loan at 5% and term loan set at a fixed 6%\* over the 20-year term
- **\$455,775** loan against the property
  - Property valued at **REDACTED**
  - Loan-to-value ratio equals **REDACTED**; Lien-to-value ratio equals **REDACTED**
- DSCR > **REDACTED**

# 27 Lawnacre Rd, Windsor Locks

## The Five W's



- **What?** Receive approval for a \$455,775 construction and (potentially) term loan under the C-PACE program to Roberts Realty Inc. to finance the construction of specified energy upgrade
- **When?** Project to commence 2015
- **Why?** Allow Green Bank to finance this C-PACE transaction, continue to build momentum in the market, and potentially provide term financing for this project until Green Bank sells it along with its other loan positions in C-PACE transactions.
- **Who?** Roberts Realty Inc., the property owner of 27 Lawnacre Road, Windsor Locks CT
- **Where?** 27 Lawnacre Road, Windsor Locks CT



# 27 Lawnacre Rd, Windsor Locks Project Tear Sheet



**REDACTED**

# 27 Lawnacre Rd, Windsor Locks

## Anticipated Cash Flow



Green Bank Pro Forma				
<i>Project Basics</i>			<i>Cash Flows</i>	
		<u>Date</u>	<u>Energy Savings</u>	<u>CEFIA \$</u>
Amount Financed	\$455,775			
Construction Period (years)	0.50	Jul 2015		\$455,775
Term (years)	20	Dec 2015		\$11,394
		Jan 2016	\$54,885	\$39,436
Construction Financing Rate	5.00%	Jan 2017	\$55,063	\$39,436
Term Financing Rate	6.00%	Jan 2018	\$55,395	\$39,436
		Jan 2019	\$55,735	\$39,436
Construction Interest Payment (bullet)	\$11,394	Jan 2020	\$56,080	\$39,436
Yearly Debt Service Payments (semiannual, yrs 1-15)	\$39,436	Jan 2021	\$56,433	\$39,436
		Jan 2022	\$34,852	\$39,436
		Jan 2023	\$35,219	\$39,436
		Jan 2024	\$35,593	\$39,436
		Jan 2025	\$35,975	\$39,436
		Jan 2025	\$36,364	\$39,436
		Jan 2025	\$36,761	\$39,436
		Jan 2025	\$37,166	\$39,436
		Jan 2025	\$37,579	\$39,436
		Jan 2025	\$38,000	\$39,436
		Jan 2025	\$22,038	\$39,436
		Jan 2025	\$22,476	\$39,436
		Jan 2025	\$22,922	\$39,436
		Jan 2025	\$23,378	\$39,436
		Jan 2025	\$23,843	\$39,436

# 27 Lawnacre Rd, Windsor Locks

## Key Financial Metrics



**REDACTED**

# Board of Directors

Agenda Item #5b

Commercial and Industrial Sector

C-PACE Sell Down to Clean Fund – Tranche 2

# C-PACE Sell-Down Financial Summary



Project Name	C-PACE Amount Financed
Shagbark	\$485,000
125 Granfield Avenue	\$30,002
Calvary Temple	\$51,116
11 Depot Road	\$53,560
Northeast Tool	\$122,471
Air Temp Mechanical	\$139,050
Larsen Ace Hardware	\$148,500
Bushnell Theatre	\$384,000
Sofia East Windsor (1)	\$750,000
Sofia East Windsor (2)	\$750,000
Polamer Precision	\$2,530,122
Modern Woodcrafts	\$328,145
Carling Technology	\$1,116,624
MJ Sullivan (PID 6652)	\$205,114
MJ Sullivan (PID 6651)	\$725,756
Carriage House Mercedes	\$800,000
390 Birmingham Blvd	\$205,625
Katz Ace Hardware	\$295,291
9 West Broad	\$387,741
Merritt Graphics	\$208,606
All Crate	\$333,510
Manchester Honda	\$596,725
<b>Total Financed Amount</b>	<b>\$10,646,958</b>

## TRANCHE 2

- Buyer: Public Finance Authority / Clean Fund
- Gross Portfolio Value: \$10.647 M
- Sales Price: par
- Proceeds from “A” Bonds: \$8.518M
- Closing: July 2015
- Weighted average yield: 5.69%

# Board of Directors

## Agenda Item #6

### Statutory and Infrastructure Sector

# Milford Anaerobic Digestion Project



# AD Program

## Policy and Program Status



### Policy

- ▶ Green Bank administered 3-yr pilot program for anaerobic digestion (AD)
  - ▶ PA 11-80 § 103 – up to 5 projects, ≤ 3MW each, expired 2/27/15
  - ▶ New house bill (HB 6020) approved – extends the AD pilot program
- ▶ GOAL: promote economic prosperity of Connecticut farms and businesses and reduce the organic waste currently going to resource recovery plants that burn the waste by recycling with on-site anaerobic digestion facilities to generate electricity and heat.

### Program

- ▶ Board approval granted for 4 projects totaling 5.7 MW in size.
- ▶ Milford project (3 MW), being proposed today, would be the 5th and largest
- ▶ Total estimated capital cost of these projects → \$94M.
- ▶ Green Bank's investment in sub debt loans → up to \$18.5M



# Milford Anaerobic Digestion Project



## Project Summary

- ▶ Sponsor: AgCycle Organics, LLC
- ▶ Turnkey Equipment Provider (EPC): GE Power & Water
- ▶ 3 MW AD facility (GE's Monsal Advanced Digestion Technology)
  - ▶ Pre-treatment system separates 95% of organics from contaminating materials
- ▶ Estimated project capital cost ~ **REDACTED**
- ▶ To be co-located on 20 acre parcel with existing composting facility
- ▶ Facility will process ~ 63,000 tons/year of food scraps & other organics
- ▶ System will produce ~ 24,500 MWh of electricity annually
- ▶ Digester will produce ~ 11,000 tons/year of biogas
  - ~ additional 800 tons/year from adjacent WWTF

# Milford Anaerobic Digestion Project



## Project Funding Sources

- ▶ Estimated project capital cost → REDACTED
- ▶ Equity to be provided by GE → REDACTED
- ▶ Additional equity to be provided by others → REDACTED
- ▶ Requested sub-debt loan from Green Bank → \$4,565,000 (% of CapEx)
- ▶ Balance of Capital: Senior Lender → REDACTED

## Ownership & Partners

- ▶ New Meadow Power & Earth, LLC
  - ▶ SPE owned/managed by AgCycle Organics, LLC
- ▶ GE
  - ▶ Equity / co-owner
  - ▶ EPC / turnkey contractor
  - ▶ O&M services

# Milford Anaerobic Digestion Project

## Capital Flow Diagram

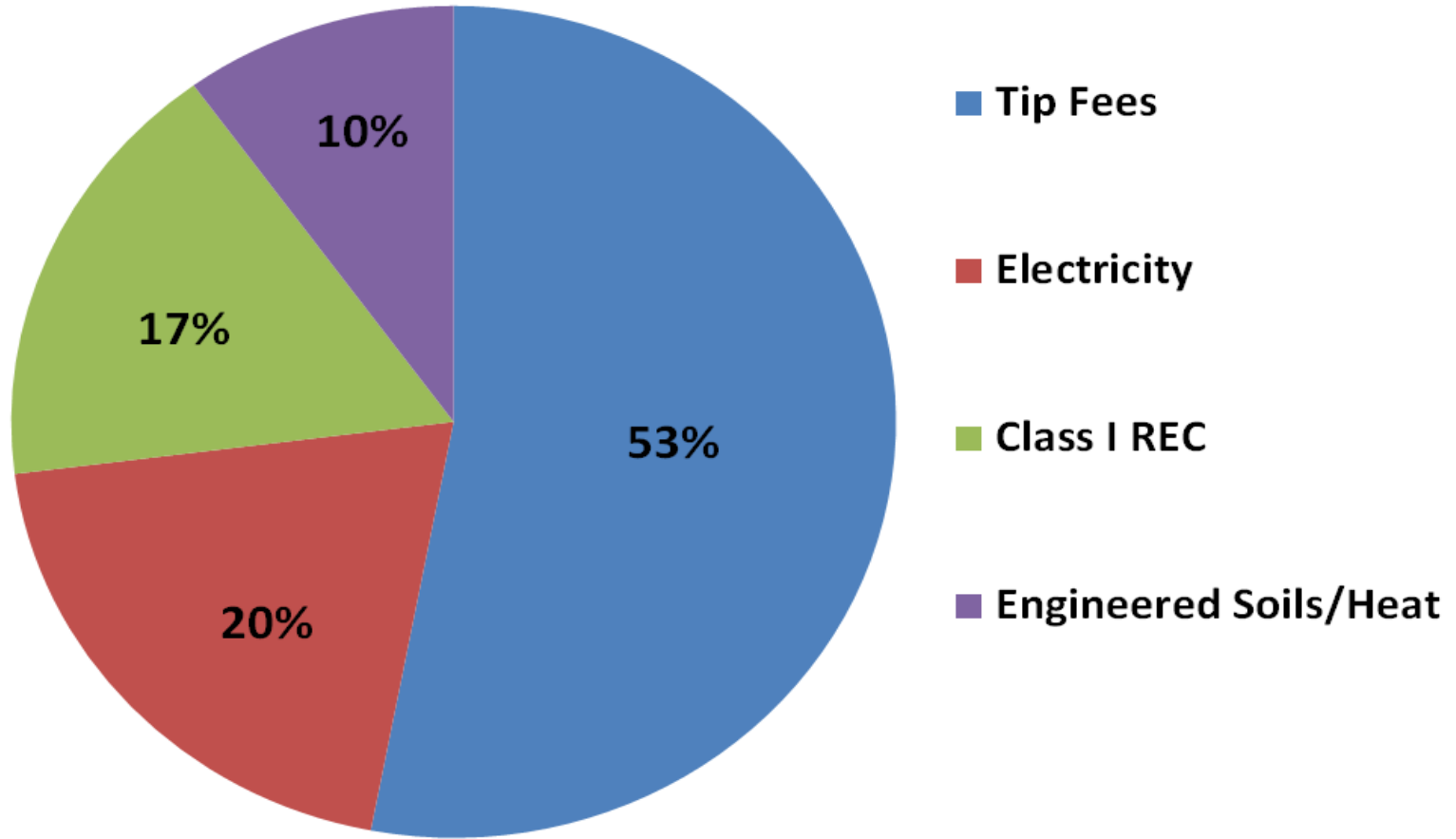
REDACTED



# Milford Anaerobic Digestion Project



## Revenue Model



# Milford Anaerobic Digestion Project



## Investment Overview

- ▶ **What is the worst case that can happen** – Assuming our rights are adequately protected in loan documents to be executed, our ultimate loss exposure is repayment of outstanding principal (\$4.6M) and interest
- ▶ **What is the financial impact** – The Sub-debt loan will increase the project's average Debt Service Coverage Ratio from **Redacted** with 100% Senior Debt to **Redacted** and increase the IRR from **Redacted**% with 100% Senior Debt to **Redacted**%
- ▶ **How can Green Bank be made whole** – Adequate cash flow as forecasted, however, in the event of a default, Green Bank can be made whole to the extent that proceeds from liquidated assets are enough to satisfy our outstanding principal and interest as the lender of debt subordinate to Senior debt
- ▶ **What is the project objective function** – 78 kWh and 44,000 Btu per dollar of ratepayer funds at risk
- ▶ **What is percent of capital allocation to the project?** – 3.75% of Green Bank's balance sheet (~\$120 million)

# Milford Anaerobic Digestion Project



## Recommendations

- ▶ Recommend to the full Board of Directors that the Green Bank execute documentation to provide \$4,565,000 in long-term subordinated debt to this project
- ▶ Recommend to the full Board of Directors that approval of this selection and investment be conditioned upon the completion of all remaining due diligence review, inclusive of all project documentation

Board of Directors  
Agenda Item #7a  
Residential Sector  
Low to Moderate Income Single Family Lease  
Product

# LMI Access to Solar in CT

## Analysis of CT Solar Lease Applications



### We are falling short financing the LMI\* Market

#### 1. Fewer applications

- 45% of applicant pool, vs. 51% of state

#### 2. Fewer funded projects

- 35% of funded projects, vs. 51% of state

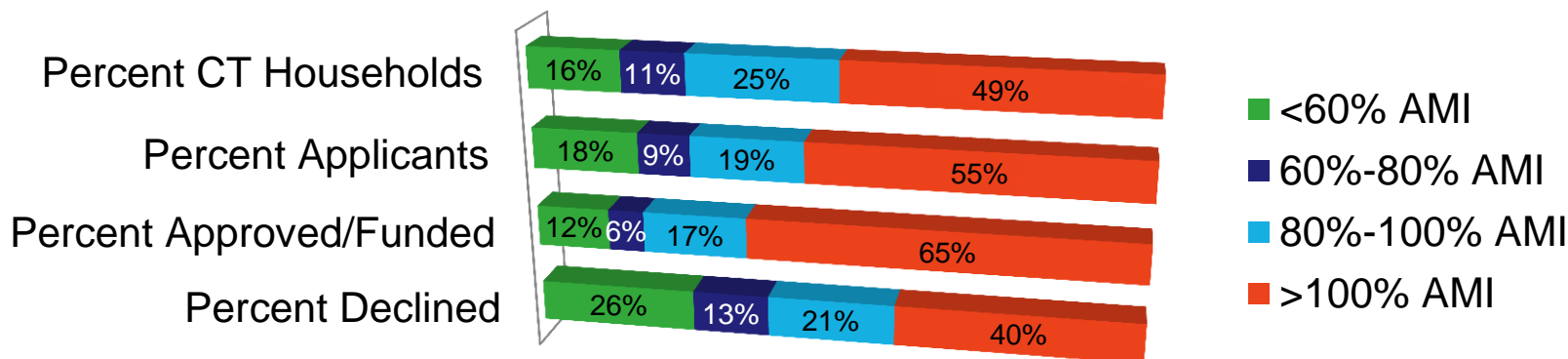
#### 3. More declines

- 60% of declines, vs. 51% of state
- Due to lower credit scores (FICO) and higher debt-to-income ratios (DTI)

### Average Statistics by Status

Status	Approved/ Funded	Declined
Average FICO	779	652
Median FICO	789	648
Average Family Income	\$111,961	\$87,875
Median Family Income	\$100,686	\$66,932
Average DTI	32	51
Median DTI	32	47

## Connecticut Population and Green Bank Portfolio Applicants by Income





# Solution: Targeted LMI Single Family Lease Product – PosiGen Debt Investment



## **Purpose**

- To meet the needs of low-to-moderate income (LMI) homeowners under Green Bank's Residential Solar Financing RFP, propose partnering with PosiGen to target this hard-to-reach market

## **PosiGen Background**

- Experienced solar lease provider that serves LMI populations through community-based marketing, alternative underwriting and streamlined energy efficiency installation
- PosiGen has been successful in LMI communities in LA and have seen low delinquencies e

## **Impact**

- Support ~1,100 solar installs in LMI households using alternative underwriting standards pioneered by PosiGen that allow for financing approval without a credit score or DTI check

## **Request Approval To**

- Create a program with PosiGen, Inc., with local offices in Bridgeport, to provide a solar lease with an optional energy upgrade package targeted at the LMI market
- Commit [REDACTED] and a contingent commitment of another [REDACTED] in debt capital, with the option to subordinate to a private debt capital provider

## **Key Dependency**

- Staff will propose a higher PBI incentive for LMI households for the BOD to consider in July

# LMI Lease Product Provided by PosiGen



PosiGen offers a solar lease product that can increase access and affordability for CT LMI homeowners

- Simple, low-cost lease with a 20 year flat fee
- Optional energy efficiency upgrade and savings guarantee
- No FICO/credit score screen
- Streamlined installation process through a single partner

## Performance-Based Incentive (PBI)

Provided by the Green Bank, in an elevated amount per kWh of solar energy produced for the first 6 years of production

Contemplated as source of cash flow to repay Green Bank debt through the structure

## Debt

Debt, with the potential to be subordinated to a private capital provider (TBD), in the amount of up to [REDACTED]

Yield – proposed: [x%] per annum  
Term – proposed: [Y] years

## Contingent Debt

Debt, with the potential to subordinate to a private capital provider (TBD), in the amount of up to an additional [REDACTED], conditional on PosiGen raising [REDACTED] of senior private debt capital

Yield – proposed: relevant 10 year swap + REDACTED basis points per annum  
Term – proposed [Z] years

- Over the 20 year financing term, projected clean energy generation is approximately 174 GWh versus \$REDACTED of ratepayer funds at risk, or 13.19 kWh for every ratepayer dollar at risk.

# LMI Lease Product Deal Structure



Characteristic	Notes
<u>Capital Stack</u>	<p>The capital stack will include</p> <ol style="list-style-type: none"> <li>1) Equity from PosiGen</li> <li>2) Tax equity from [REDACTED],</li> <li>3) Secured debt from the Green Bank (which will likely be subordinated to a private debt capital provider, once selected)</li> <li>4) Potentially senior secured debt from a to-be-determined entity.</li> </ol> <p>Each tranche of funding will be drawn pro rata, as systems are installed, delivering approximately \$3.50 - \$4.00 of private capital for every dollar of Green Bank debt expended</p>
<u>Deal Structure</u>	<p>The transaction will be structured as a partnership flip (similar to the Green Bank’s existing CT Solar Lease 2 model), allowing for quick execution between the parties</p>
<u>Amortization</u>	<p>The Green Bank debt commitment(s) will likely amortize over a [REDACTED] year term, in line with the PBI funding cycle, reducing the exposure of those funds to a relatively short timeframe.</p>
<u>PBI</u>	<p>The Green Bank will provide a PBI to be distributed on a per kWh basis, only monetized as households receive electricity from the solar PV installations. The PBI level for LMI households will be brought to the BOD in July.</p>

# LMI Lease Product Capital Flow



**REDACTED**

Board of Directors  
Agenda Item #7b  
Residential Sector  
Multifamily Predevelopment Loan Programs

# Multifamily Predevelopment Loan Programs: Program Summary



## Purpose

- Availability of predevelopment funds for energy audits, consulting and engineering has been identified as one of the biggest barriers to getting energy upgrades done in multifamily buildings
- The Multifamily Predevelopment Loan Programs for the Low Income / Affordable & Market Rate segments will operate as high-risk loan funds where the Green Bank is paid back out of permanent financing

## Impact

- **Green Bank:** Predevelopment loans will be funded out of the \$1,000,000 budget requested for FY16
- **Market:** Given an expected average loan size of \$15,000 - \$20,000, funds can reach up to ~60 properties, and upon repayment, can establish a revolving facility for serving additional properties

## Request Approval To:

1. Develop and deploy predevelopment loan programs for \$1,000,000, with \$500,000 earmarked for affordable housing, using MacArthur PRI funds;
  - Program Scenario 1: Service provider funded jointly by owner and Green Bank
  - Program Scenario 2: Direct loans to owner
2. Establish and deploy a pilot program in partnership with New Ecology Inc. (“NEI”), (*Program Scenario 1, example*)

# Multifamily Predevelopment Loan Programs: Program Justification



## Addressing Needs of a Challenging Market

- Owners **don't know where to start** when it comes to energy upgrades
- **Funding** for predevelopment work via **high quality service providers** is the most significant barrier to developing the financing pipeline
- This program could be an **industry game-changer**, particularly for affordable housing, where **scarce grants are the norm** for pre-dev
- Program would **provide sorely lacking market data** and statistics

## Alignment with Green Bank Objectives

- The Multifamily Predevelopment Loan Programs are a critical first step in achieving the Green Bank's broader multifamily goals of:
  - i. Dramatically reducing energy costs for tenants and owners
  - ii. Mainstreaming quality, comprehensive, and cost-effective energy upgrades
  - iii. Closing the energy affordability gap

# Multifamily Predevelopment Loan Programs: Program Design



## Criteria

- Eligible borrowers will be subject to appropriate due diligence, and eligible projects will have a reasonable expectation that they will be able to secure term financing

## Structure

- The Green Bank will develop and administer programs initially, but will ultimately identify a qualified third party to run the programs. Administration includes processing applications, underwriting, closing and funding loans, and servicing
- Loans will provide funding for the various and necessary stages of the predevelopment programs, and will only be repaid if and when projects close with permanent third party or owner financing
- Pre-vetted contractors will perform eligible work including benchmarking, audits, engineering, and other design and consulting services necessary to complete work scopes needed for financing

## Financing Terms & Conditions

Loan Size	Average of \$15,000 - \$20,000 (option for larger/smaller loans if eligible)
Term	No longer than 24 months (with option for term extensions if eligible)
Rate	Between 0.0% - 5.0% depending on market sector served (i.e. affordable vs. market rate), loan size, projected term, and project risk profile
Fees/Co-Payments	Application fee; co-payments at certain milestones depending on market served
7 Repayment	Green Bank paid back if and when project secures permanent financing



Board of Directors  
Agenda Item #8  
Budget & Operations Committee  
FY 2016 Targets and Budget

# FY16 Goals

## Statutory & Infrastructure Sector



Program	Projects	Capital Deployed	Clean Energy Deployed (MW)	Annual Clean Energy Generated and Saved (MMBtu)
RSIP	11,987	\$402,869,745	90.0	376,603
Anaerobic Digester	3	\$62,825,000	6.2	193,681
Combined Heat and Power	2	\$8,900,000	2.8	79,505
<b>Total</b>	<b>11,992</b>	<b>\$474,594,745</b>	<b>99.0</b>	<b>649,789</b>
<b>FY15 Total</b>	<b>3,217</b>	<b>\$207,100,000</b>	<b>37.9</b>	<b>775,920</b>

# FY16 Goals

## Residential



Program	Projects	Capital Deployed	Clean Energy Deployed (MW)	Annual Clean Energy Generated and Saved (MMBtu)
Smart-E	1,062	\$16,287,000	1.8	21,310
<i>CHIF/HES Channel</i>	<i>600</i>	<i>\$7,800,000</i>	<i>0.0</i>	<i>9,900</i>
<i>Existing EE/HVAC Channels</i>	<i>235</i>	<i>\$2,585,000</i>	<i>0.0</i>	<i>3,878</i>
<i>Solar (some with EE)</i>	<i>227</i>	<i>\$5,902,000</i>	<i>1.8</i>	<i>7,532</i>
CT Solar Lease	451	\$16,000,000	3.4	14,227
Low Income Loans/Leases	606	\$13,750,000	3.0	14,203
Multifamily	43	\$11,500,000	1.2	16,648
<b>Total</b>	<b>2,162</b>	<b>\$57,537,000</b>	<b>9.4</b>	<b>66,388</b>
<b>FY15 Total</b>	<b>1,195</b>	<b>\$28,502,500</b>	<b>6.81</b>	<b>29,862</b>

# FY16 Goals

## Commercial & Industrial



Program	Projects	Capital Deployed	Clean Energy Deployed (MW)	Annual Clean Energy Generated and Saved (MMBtu)
C-PACE	90	\$53,000,000	9.0	160,000
FY15 Total	63	\$50,000,000	8.8	114,517

# FY16 Goals

## Institutional



Program	Projects	Capital Deployed	Clean Energy Deployed (MW)	Annual Clean Energy Produced and Saved (MMBtu)
Lead By Example – State	4	\$95,000,000	0.0	228,000
Lead By Example – Municipal	3	\$20,000,000	0.0	56,250
Institutional Off Credit ESA	2	\$1,000,000	0.0	28,750
CT Solar Lease	10	\$6,000,000	2.0	8,369
<b>Total</b>	<b>19</b>	<b>\$122,000,000</b>	<b>2.0</b>	<b>321,369</b>

<b>FY15 Total</b>	<b>30</b>	<b>\$168,000,000</b>	<b>2.5</b>	<b>510,466</b>
-------------------	-----------	----------------------	------------	----------------

# FY16 Goals

## Overall



Sector	Projects	Capital Deployed	Clean Energy Deployed (MW)	Annual Clean Energy Produced and Saved (MMBtu)
Statutory & Infrastructure	13,005	\$508,640,549	109.0	691,634
Residential	2,162	\$57,537,000	9.4	66,388
Institutional	19	\$122,000,000	2.0	321,369
Commercial & Industrial	90	\$53,000,000	9.0	160,000
<b>Total*</b>	<b>13,079</b>	<b>\$672,579,745</b>	<b>111.2</b>	<b>1,175,787</b>

\*Residential solar projects that receive financing from CGB also receive an incentive in RSIP so are counted in each sector's goal. They have been removed from the total to avoid double counting

# FY16 Budget

## Statement of Revenue and Expenses (Cash Basis)



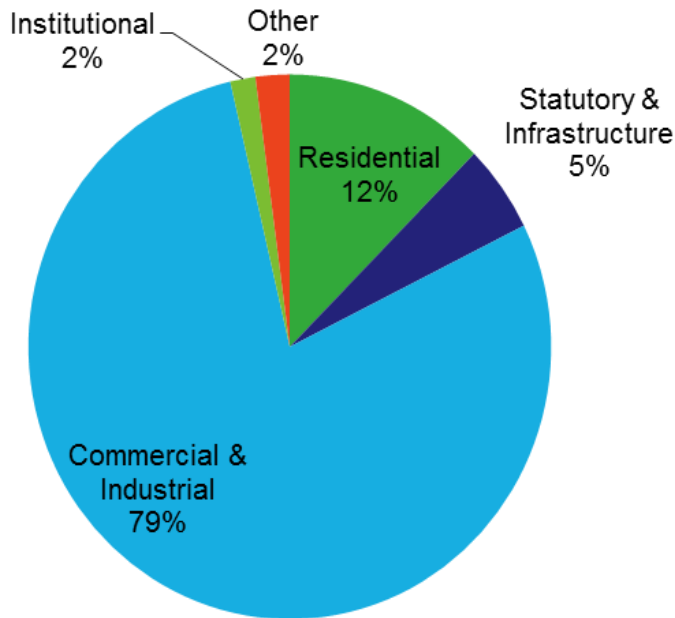
	FY2016	FY2015		FY2015
	Total Operations & Program Budget	Total Operations & Program Budget	FY16 Budget Inc. (Decr.)	Projected 12 Months Actual
<b>Revenues</b>				
Utility customer assessments	\$ 27,498.0	\$ 27,525.0	-0.1%	\$ 27,272.0
RGGI auction proceeds	\$ 5,400.0	\$ 19,000.0	-71.6%	\$ 16,583.5
REC sales	\$ 2,060.4	\$ 575.0	258.3%	\$ 1,474.0
Other revenue sources	\$ 2,160.5	\$ 6,524.8	-66.9%	\$ 1,634.0
<b>Total revenues:</b>	<b>\$ 37,118.9</b>	<b>\$ 53,624.8</b>	<b>-30.8%</b>	<b>\$ 46,963.5</b>
<b>Operating expenses:</b>				
Employee compensation	\$ 5,279.3	\$ 4,704.0	12.2%	\$ 4,579.9
Employee benefits and payroll taxes	\$ 3,805.1	\$ 3,464.0	9.8%	\$ 3,068.3
Program Devel./Admin./EMV	\$ 5,806.1	\$ 4,167.3	39.3%	\$ 2,077.0
Marketing	\$ 3,061.3	\$ 3,139.9	-2.5%	\$ 2,036.2
Professional and consulting fees	\$ 1,423.0	\$ 836.0	70.2%	\$ 600.0
Office, rent and location related exp.	\$ 1,088.0	\$ 891.1	22.1%	\$ 935.0
<b>Operating expenses:</b>	<b>\$ 20,462.8</b>	<b>\$ 17,202.3</b>	<b>19.0%</b>	<b>\$ 13,296.4</b>
<b>Net operating income:</b>	<b>\$ 16,656.1</b>	<b>\$ 36,422.5</b>	<b>-54.3%</b>	<b>\$ 33,667.1</b>
Financial Incentives & Grants	\$ (13,765.7)	\$ (23,100.0)	-40.4%	\$ (10,050.0)
Interest Rate Buydowns	\$ (2,473.3)	\$ (904.7)	173.4%	\$ (450.0)
<b>Net revenues over expenditures:</b>	<b>\$ 417.1</b>	<b>\$ 12,417.8</b>	<b>-96.6%</b>	<b>\$ 23,167.1</b>

# FY16 Budget

## Loans Funded & Sold



### Loans Funded



Sector	Loans Funded
Residential	\$ 8,000
Statutory & Infrastructure	\$ 3,333
Commercial & Industrial	\$ 50,503
Institutional	\$ 1,000
Other	\$ 1,350
<b>Total</b>	<b>\$ 64,186</b>

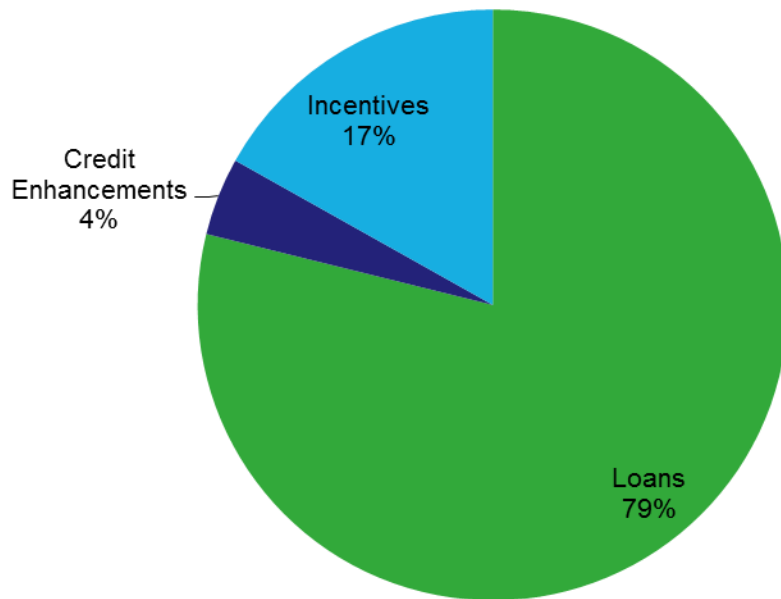
Sector	Loans Sold
C-PACE	\$ 47,150
Statutory & Infrastructure	\$ 4,500
<b>Total</b>	<b>\$ 51,650</b>



# FY16 Budget



## Funding Type



Type	Support
Loans	\$ 64,186
Credit Enhancements	\$ 3,474
Incentives*	\$ 13,730

\*\$9m will be recovered through SHREC

# FY16 Budget

## Statement of Net Position



	Audited June 30, 2014	Projected June 30, 2015	Projected June 30, 2016	FY16 v.FY15 \$ Change
<b>ASSETS</b>				
Current Assets				
Cash	\$ 74,373,278	\$ 40,285,400	\$ 32,131,300	\$ (8,154,100)
Other current assets	\$ 18,552,134	\$ 8,472,156	\$ 6,141,738	\$ (2,330,418)
Total current assets	\$ 92,925,412	\$ 48,757,556	\$ 38,273,038	\$ (10,484,518)
Long term assets	\$ 26,459,205	\$ 73,812,627	\$ 82,960,645	\$ 9,148,018
<b>TOTAL ASSETS</b>	\$ 119,384,617	\$ 122,570,183	\$ 121,233,683	\$ (1,336,500)
<b>LIABILITIES &amp; NET POSITION</b>				
Liabilities	\$ 3,464,263	\$ 1,308,745	\$ 1,708,745	\$ 400,000
Net Position	\$ 115,920,354	\$ 121,261,438	\$ 119,524,938	\$ (1,736,500)
<b>TOTAL LIABILITIES &amp; EQUITY</b>	\$ 119,384,617	\$ 122,570,183	\$ 121,233,683	\$ (1,336,500)

# FY16 Budget

## Staffing



### New Positions

Controller	Permanent
Office Manager & Receptionist	Permanent
Manager, Statutory & Infrastructure	3 year
Associate, Statutory & Infrastructure	3 year

### Approved Positions

FY16	FY15
50	46

# FY16 Budget

## Bond Proceeds



### Green Loan Guaranty Program

- Up to \$18 million to be used for guaranteeing loans made by lending institutions for eligible energy conservation measures for individuals (1-4 family), non-profit, and small businesses (< 50 employees)
- In consultation with EEB and CT Health and Educational Facilities Authority (CHEFA)

Program	Beneficiary	Financial Institution	Amount Requested	Private Capital Attracted
Smart-E Loan (Home)	Single Family	Banks-CU	\$7 million	\$77 million
Smart-E Loan (Small Bus)	Small Business	Banks-CU	\$3 million	\$13.5 million
<b>Total</b>			<b>\$10 million</b>	<b>\$90.5 million</b>

### Renewable Energy & Efficient Energy Finance Program

- Up to \$18 million to be used to make grants, loans, or other forms of assistance for renewable and energy-efficient generation sources – up to 2.5% of proceeds can be used for workforce development
- In consultation with DEEP, DECD, and the State Treasurer

Program	Amount Requested	Private Capital Attracted
Workforce Development	\$0.45 million	-
Low Income Solar	\$5.0 million	\$18.0 million
AD Pilot (Southington)	\$2.0 million	\$9.0 million
<b>Total</b>	<b>\$7.45 million</b>	<b>\$27.0 million</b>

# FY16 Budget

## Programmatic PSAs



### Residential

- Metis
- Concord Servicing
- EnergySage
- Archaeological and Historical Services

### Statutory & Infrastructure

- Clean Power Research
- Locus Energy

### Marketing

- SmartPower

### Commercial and Industrial

- SRS

Board of Directors  
Agenda Item #9  
Executive Session

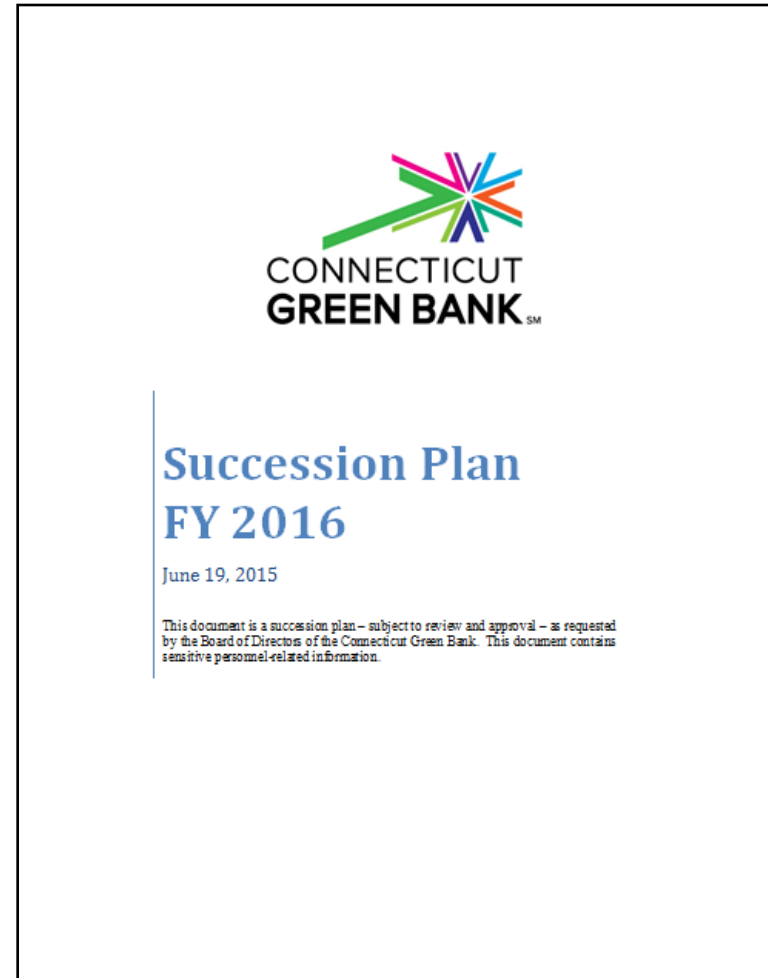
Board of Directors  
Agenda Item #10  
Other Business

# Other Business

## Succession Plan (Update)



- Coordinated final comments through the ACG Committee
- Updates included:
  - CGB branding
  - Designation of Genevieve Sherman as Director of C&I Programs
  - Andy Brydges adjustments
  - Organization chart
- No need to approve the Succession Plan – President and CEO will implement as part of personnel action plan





# Other Business

## MFAH – Lean Process (Update)

50+ participants from 20+ organizations took part

We asked – **What does good look like?**

- *Most (all!) utility incentive letters of agreement are issued by the time of financing app*

**What does great look like?**

- *Energy efficiency is mainstreamed; capital improvement projects include energy upgrades*

We identified KPI's for measure success

### What does Customer Value?

- NOI ( Net Operating Income )
- Reduced number service calls
- Increased tenant retention
- Simplified financing process with a reliable outcome
- Increased asset values
- Improved quality of life for tenants
- Reduced energy bills



### Key Performance Indicators (Metrics)

- 1) Financed/completed MFAH projects will achieve at least:
  - **X %** Average Cost Savings per Unit
  - **X %** Average Energy Savings per Unit
- 2) 100 % of completed DOH/CHFA funded projects include identified energy improvements **implemented**
- 3) 100 % Letters of Agreement for utility incentives are issued at financing application (not closing)
  - CHFA/DOH – LOA delivered at 40 % design
  - All others – LOA included with financing application
- 4) Increase number of MFAH units served by financing



# Other Business

## Colebrook – Wind (Update)



- 5 mW \$22.5M project (20 Yr PPA w/Eversource § 127)
- Project Sponsor: BNE
- Approved by BoD 4-25-14
- \$2.8M Subordinated Secured Loan
  - \$2.0M Term Loan (includes pay off of CCEF \$500,000 pre-dev loan)
  - \$0.8M Working Capital Facility
- \$12.7 million senior credit facility with Webster Bank
- Loan agreements executed December 2014
- EPC contractor: The Ryan Company, Inc. (Norton, MA)
- January 9 - BNE issued a Full Notice To Proceed
- May 6 - CGB, Webster, EAPC (lender's engineer), BNE and Ryan met to review the past and current project status → "OK"
- Commissioning/testing mid-Oct ... "COD" December 15

Board of Directors  
Agenda Item #11  
Adjourn

**CONNECTICUT GREEN BANK**

**Board of Directors**

Draft Minutes –Regular Meeting

Friday, April 17, 2015

A special meeting of the Board of Directors of the **Connecticut Green Bank (the “Green Bank”)** was held on April 17, 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:** Robert Klee, Vice Chairman of the Connecticut Green Bank, called the meeting to order at 9:03 AM. Board members participating: Catherine H. Smith (by phone), Robert Klee, John Harrity, Norma Glover, Reed Hundt (by phone), Bettina Ferguson,-and Kevin Walsh (by phone).

**Members Absent:** Patricia Wrice, Matthew Ranelli, Mun Young Choi, and Tom Flynn.

**Staff Attending:** George Bellas, Andy Brydges, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey (by phone), Dale Hedman, Bert Hunter, Andrea Janecko, Kerry O’Neil, Cheryl Samuels, Michael Yu, Joe Buonannata, Kerry O’Neill, and Genevieve Sherman.

**Others In Attendance:** Denise Farrell (by phone), Rich McCarthy (by phone), Anthony Hannon, and Mike Trahan (by phone).

- 2. Public Comments:**

Mike Trahan spoke about the SHREC program and job openings for the program. He explained the past two years have been going fairly well, but solar permitting is still an issue. He explained that industry confidence is up significantly. Mike said he met with Solar City, CCM, the Connecticut Conference and Municipalities and COST, the Council of Small Towns, the state lawmaker to review a bill that’s making its way through the process designed to streamline permitting at the local level. The bill is falling short of his expectations. The planning and development committee must also act on this bill. He met with, OneRoof Energy, a good sized solar services provider based in California. They announced last week that they’re going to set up shop here in Connecticut. They work with installers at the local level, much the same way that Sungevity does.

- 3. Update from the President:**

Mr. Garcia provided an update on the statements of financial interest (SFI) and advised that Mr. Farnen would be the point of contact for any questions or concerns. He also advised that they are due by May 1<sup>st</sup>.

Mr. Garcia provided an update on the legislative session. He advised that the last meeting was January 23<sup>rd</sup> and that a lot has been happening at the legislature. He advised about the active involvement in a couple of forums. On January 29<sup>th</sup> there was a two-hour session with Connecticut Energy Efficiency Fund, before the Energy and Technology Committee. Both provided updates on how things were going, which was very well received.

On February 23<sup>rd</sup> the Green Bank partnered with DEEP and the E&T committee chairs on Utility 2.0, the next generation model. He explained that there were several panels. He stated that Richard Kauffman from New York State came in to speak about New York's next generation model initiative called "REV".

On the 17<sup>th</sup> of March there was a public forum with the Green Bank and REEBA at the state legislature on Connecticut's clean energy economy. The purpose of the forum was to celebrate several recent successes in Connecticut clean energy policy including achieving record levels of solar installation, the successful Energize Norwich campaign, and the nationally-recognized C-PACE program – all programs leveraging ratepayer funds to attract private capital investment.

Last week there was a session put together by the Connecticut Hydrogen Fuel Cell Council on hydrogen both, on site and transportation. He advised that one of things that needs to be thought about is that the "clean energy" definition for the Green Bank actually includes alternative fueled vehicles and infrastructure. This will probably be discussed around the June time frame, on how the Green Bank may get involved in better understanding and approaching the market.

Mr. Farnen explained that there are three bills that the Green Bank is involved in. Those bills are the SHREC first and foremost – Governor's Bill 6838, House Bill 6991, to remove any ambiguity in the C-PACE statute that the intention is to attract more private investments, and R-PACE. Mr. Farnen explained that R-PACE, House Hill 6993, would likely not move forward this legislative session but a working group is being established to be better positioned next session for adoption of R-PACE policy.

Mr. Garcia explains about R-PACE. Last year there was a requirement to do a study on R-PACE. The study was conducted. E & T Committee requested a piece of legislation be drafted based on the study. R-PACE currently is not moving forward, but the Co-Chairs of the E & T Committee and the Banks Committee want the Connecticut Bankers Association and the Connecticut Green Bank figure out what that Bill is going to look like. Legislative leaders and the Green Bank want to pass R-PACE next session.

Mr. Garcia explained there is currently a search going on for a director for C-PACE. There have been 25 – 30 resume submittals for the position. One candidate is moving through the staff interviews. There should be about 3 finalists as of next week in a group interview. The final director should be in place by mid-May.

On the SHREC, the Solar Home Removal Energy Credit, Mr. Garcia noted this is the Governor's Bill concerning local economic development and access to residential renewable energy. This Bill was announced at Goodwin Tech High School. Work still needs to be completed on it. DEEP and Governor's office are currently working together along with the Green Bank to improve the Bill. Mr. Farnen explained that he feels that the odds are good that the Bill will pass and since it's the Governor's Bill, that it is a great positive.

Mr. Garcia explained that he feels optimistic that no budget cuts should be coming. He explained that the Green Bank seems to be in a good position given that the Green Bank's financial commitments are fully balanced against its financial resources, and that George Bellas has been communicating frequently with the Office of Fiscal Analysis on our commitments to financial position.

#### 4. Consent Agenda:

Mr. Klee requested a motion on the consent agenda, which included meeting minutes approval from January 23, 2015 and an extension request.

**Upon a motion made by Ms. Glover, seconded by Mr. Harrity, the Board members voted in favor of adopting the consent agenda as written.**

- a. Approval of Meeting Minutes for January 23, 2015

##### **Resolution #1**

Motion to approve the minutes of the Board of Directors Regular Meeting for January 23, 2015.

- b. Extension Request of Prior Approved C-PACE Transactions

##### **Resolution #2**

**WHEREAS**, pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the "Act"), the Connecticut Green Bank ("Green Bank") is directed to, amongst other things, establish a commercial sustainable

energy program for Connecticut, known as Commercial Property Assessed Clean Energy (“C-PACE”);

**WHEREAS**, pursuant to the C-PACE program the Green Bank Board of Directors (the “Board”) or the Connecticut Green Bank Deployment Committee (the “Deployment Committee”) has approved and authorized the President of the Green Bank to execute financing agreements for the eleven (11) C-PACE projects described in the Memo submitted to the Board on April 10, 2015 (collectively, the “Finance Agreements”);

**WHEREAS**, the Finance Agreements were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board or the Deployment Committee and shall be executed no later than 120 days from the date of Board or Deployment Committee approval; and

**WHEREAS**, due to delays in fulfilling pre-closing requirements for the C-PACE transactions listed above the Green Bank will need more time to execute the Finance Agreements.

**NOW**, therefore be it:

**RESOLVED**, that the Board extends authorization of the Finance Agreements to no later than 120 days from April 17, 2015 and consistent in every other manner with the original Board or Deployment Committee authorization for each Finance Agreement.

## **5. Commercial and Industrial Programs:**

### **A. C-PACE Update**

Ms. Sherman provided updates on closed and approved projects. She explained that with the approval of today’s transactions that the 100<sup>th</sup> C-PACE deal will be approved. It will go from being a \$65 million program to a \$70 million program.

Two additional banks from the Northeast part of the state have consented. This is great since there are a lot of projects in that area.

*1461 Farmington Ave, Bristol*

Ms. Sherman discussed the projects that had been sent to the members last week. The first is a property owner that was successful in getting approved for a second installation on the property by winning through the small ZREC lottery. Owner is requesting an increase in the amount of financing for the

installation. Members had been given a red line to see the differences. It's gone from about a \$600,000 project to a \$900,000 project, but still falls within all of the standard underwriting procedures.

Mr. Harrity asked where the employees are from since the contractor is out of Longmeadow, Massachusetts. Genevieve advised that she will need to ask.

Mr. Garcia explained that the Green Bank is working with SRS that does the backend technical underwriting. There will be a Public Benefit Report included in future reports that will discuss the greenhouse gas emission, energy savings, and jobs benefits for every C-PACE project. It takes into consideration the percent of the employees involved in a C-PACE project that are Connecticut based. That should start to be seen in June.

Mr. Walsh (phone) questioned what this transaction would look like if the Green Bank were not involved and they just relied on third party financing to get it done.

Mr. Hunter explained the length of transaction would not be able to be achieved with bank financing unless a mortgage is involved. He explained that this is being done on a 20 year term. He noted that this is really being financed with private capital, because all of the transactions are being moved out to private investors after they are funded by the Green Bank.

Mr. Walsh (phone) requests that the team be watchful of what the market will do without the support from the Green Bank, which has been discussed at prior meetings.

Mr. Hunter agreed and explained that in another transaction, an auto dealer did approach their bank for financing their project and that the bank advised that they would be better off using C-PACE, because the bank could not offer that long of a term (20 years).

Ms. Sherman advised that it's not the capital that's not available, but the structure in general. She advised that that structure will change to allow the Green Bank to step away from being the lender of record and originating the transactions.

The Connecticut Auto Retailer's Association teamed up with a solar contractor and will deliver about \$7 million in C-PACE transactions.

Mr. Hundt explained what is being focused on is trying to reduce demand for energy. He questioned what the fastest, yet economically prudent development that produces energy efficiency. He advised that the total market penetration is very low. He advised that the obstacles to the market penetration lie within the origination function. Also, that lending at 5% or



6% does not produce a savings to investment ratio that's greater than 1. He would like to have a more open discussion about the Green Bank's purpose and how to accelerate the retrofitting.

Mr. Walsh explained that he's not looking to hold up the project. He wanted to make the statement that the financing markets are developing very quickly.

Ms. Glover advised that Green Bank will still be the conduit even as the changes take place.

Mr. Garcia advised that there are requirements per the legislation that Green Bank always has to follow. The goal is to have the private markets step in and do the rest. He advised that they need to be willing to come in and originate the transactions.

Mr. Klee requested further discussion on the topic at a future meeting.

Mr. Garcia agreed that the staff and Board need to do that. He also advised that staff is in budget process for the next fiscal year, as well. He stated that he will sit down with Genevieve, Mackey, and Bert to get some time to have additional conversation.

Mr. Hundt stated that things change and that they need to keep track of the changes.

Mr. Klee wanted to make sure that they're keeping up as things change.

Ms. Smith suggested that if there is not time in a normal meeting that they add an hour on somewhere, because it's a very important conversation to have.

Ms. Sherman advised that this is a question that is at the forefront each day with the C-PACE Program. She advised that they are in a budgeting cycle and that they're looking at how the C-PACE Program will be run next year and how they will work with private capital providers and originators that have an intention to do business in the State of Connecticut.

*2361 Whitney Ave #B, Hamden*

Ms. Sherman moved forward to another transaction that the Deployment Committee has already seen last month. This transaction was recommended for approval by the full board. It's over \$2.5 million.

This project pushed the underwriting criteria just above the 80% threshold. Green Bank went back to the owner and suggested that they structure the

finance agreement such that the total loan to value (LTV) on the building never exceeded 80% as draws from the Green Bank go toward the construction of the project. The project will take several months. This will be accomplished as they pay down their outstanding mortgage debt.

There was a cash flow deficit identified in the out years of the project. The useful life the equipment going into this project exceeds 20 years. For that reason the project qualifies for a 20 year C-PACE assessment. Burt suggested that Green Bank go back to the owner with a sculpted amortization that would front load the payments. That was done with the owner and their representatives and came to an agreement. The owner will be making payments closer to \$300 thousand in the first 15 years, \$200 thousand in years 16 – 20, versus about \$300 thousand fixed over the full 20 year period. That brings the deficit down below 5 figures a year in those five years.

Ms. Ferguson questioned about front loading the debt.

Ms. Sherman explained that yes, the debt service coverage is still within the underwriting criteria.

Mr. Klee questioned whether or not this type of solution can be used on other projects.

Ms. Sherman advised that this is a tool that can be used. But she advised that this is moving away from the program guidelines that apply to all projects and should not be used in all cases. It is certainly a way of mitigating a potential risk in the outer years.

Mr. Hunter added that they do intend to make it an option to building owners. He explained that the Green Bank's risk and the capital providers risk is reduced. He explained that it saves a considerable amount of interest payments. By offering that to a property owner it gives them options. He explained that they feel that a number of property owners will take advantage of it.

### *300 Great Hill Road, Naugatuck*

Ms. Sherman provided information on a new transaction. This is the Green Bank's first transaction in Naugatuck. It is a comprehensive efficiency upgrade and a roof replacement. The only unusual financial issue is that the property was purchased out of a bankruptcy. Additional due diligence was done to confirm that this transaction met all of the underwriting criteria in terms of the property's eligibility.

The transaction will be just under \$550,000 with a 5 ½% interest rate over 15 years. This is also a new contractor.

Mr. Harrity questioned if this is primarily for lighting.

Ms. Sherman answered that it's lighting and HVAC and that they're replacing the roof.

Mr. Klee asked if there were any other questions prior to him asking for a motion.

Mr. Farnen gave clarification on the second resolve that there are no leases on the three properties discussed and this language was removed from the resolution.

**Upon a motion made by Ms. Glover, seconded by Mr. Harrity, the Board members voted in favor of adopting the following resolutions regarding the C-PACE transactions for Resolution #3, 1461 Farmington Ave, Bristol. Resolution #4, 2361 Whitney Ave #B, Hamden. Resolution #5, 300 Great Hill Road, Naugatuck.**

*1461 Farmington Ave, Bristol*

**Resolution #3**

**WHEREAS**, pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the "Act"), the commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

**WHEREAS**, the Green Bank Board of Directors (the "Board") has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a \$912,350 construction loan and term loan under the C-PACE program to Bristol Farms Associates, LLC, the building owner of 1461 Farmington Ave, Bristol, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the "Feasibility Study Loan") from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan

would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Loan and, if applicable, a Feasibility Study Loan in a total amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board dated April 10, 2015 and as he or she shall deem o be in the interests of the Green Bank and the ratepayers no later than 120 days from April 17, 2015;

**RESOLVED**, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Act, including but not limited to the savings to investment ration and lender consent requirements; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

*2361 Whitney Ave #B, Hamden*

**Resolution #4**

**WHEREAS**, pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the "Act"), the commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

**WHEREAS**, the Green Bank Board of Directors (the "Board") has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a \$3,473,197 construction loan and term loan under the C-PACE program to 2319 Hamden Center I, LLC, the property owner of 2361 Whitney Ave #B, Hamden, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the “Feasibility Study Loan”) from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Loan and, if applicable, a Feasibility Study Loan in a total amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board dated April 10, 2015 and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from April 17, 2015;

**RESOLVED**, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Act, including but not limited to the savings to investment ratio and lender consent requirements; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

*300 Great Hill Road, Naugatuck*

**Resolution #5**

**WHEREAS**, pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the “Act”), the commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy (“C-PACE”);

**WHEREAS**, the Green Bank Board of Directors (the “Board”) has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a \$541,582 construction loan and term loan under the C-PACE program to

Albert's Hill Inc., the property owner of 300 Great Hill Road, Naugatuck, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

**WHEREAS**, the Green Bank may also provide a short-term unsecured loan (the "Feasibility Study Loan") from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Loan and, if applicable, a Feasibility Study Loan in a total amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board dated April 10, 2015 and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from April 17, 2015;

**RESOLVED**, that before executing the Loan, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction meets the statutory obligations of the Act, including but not limited to the savings to investment ration and lender consent requirements; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

## **B. Commercial and Industrial Programs**

Mr. Hunter summarized private capital and the C-PACE Program. Green Bank Board of Directors approved a funding warehouse off the balance sheet of the Green Bank for \$40 million. That was in the context of selling off the first \$30 million to Clean Fund. He explained that the Green Bank is about to sell its second set of transactions to Clean Fund. He further noted that as Ms. Sherman indicated, we have approved approximately \$70 million in transactions, so even with selling \$30 million, eventually the Green Bank would run out of capacity its own balance sheet. He explained that this funding situation is being well monitored by Mr. Bellas and Mr. Hunter and

with the RFP for capital providers drawing to a close, the Green Bank expects to be able to fully fund all approved and closed C-PACE transactions. At the same time, as part of the RFP, he explained the need to get an external lender of record. There have been state contracting issues with all of the transactions, and he mentioned that this can be a barrier for many property owners seeking to use C-PACE. The conclusion is that we have to have an outside lender of record to be able to get around those issues.

Another objective of the RFP is to use less Green Bank capital than in the first transaction. The Green Bank is supporting that transaction with 20% of the capital required. The Green Bank would also like to offset some the origination costs of the program by recapturing some of the economics of the transactions. Finally, he noted, to the extent possible some functions will be outsourced to the private sector and pointed out that the Green Bank has already moved the collection and servicing activities to an external servicer. The Green Bank will continue along that model.

One of the key points is the value recapture. Mr. Hunter thanked Mr. Hundt and Jeff Schub (Coalition for Green Capital) for discussing the criteria and helping to shape the RFP that was issued to the market.

The Green Bank has received several proposals that will fulfill the needs and objectives identified. There is a considerable interest from around the globe from international banking and investment banking firms. He explained how this asset class is really attracting interest in the private market.

The structures vary all the way from a whole loan purchase to a combination of a warehouse and securitization option. He noted that a warehouse approach with some risk share offers the opportunity to enhance the economic yield back to the Green Bank. All of the proposals offer the opportunity to scale up. Looking ahead in the RFP schedule, he said staff expected to shorten the number of proposals down to two and to have a final selection by the first week of May. Staff wants to have a facility in place by the middle of the summer.

Ms. Ferguson questions the procedure regarding the whole loan.

Mr. Hunter explains that in a whole loan purchase the entire transaction is handed over and that the Green Bank is paid out at a percentage on the dollar.

Ms. Ferguson states that it would be better to do the warehouse approach.

Mr. Hunter states that yes that would be the case. The Green Bank would stay as a subordinated participant within the transaction. He explained that there is a credit enhancement aspect to a securitization from excess spread

between the yield on the C-PACE transactions with the property owners and the cost of funds achieved in the securitization, yielding a built in cushion. In residential PACE it's about 3% and grows over time since the interest rate is so high on a residential PACE loans, which results in a considerable amount of excess spread. That excess spread builds up over time. In commercial PACE the excess spread is considerably less. He explained that many financial professional staff that we have discussed this with, feel that rating agencies are going to be looking for some other credit enhancement up front. The Green Bank is prepared to offer that and get a yield benefit from it.

Ms. Sherman explains another benefit of a credit enhancement is it captures a greater number of credits in the market that otherwise might not qualify for the same advance rate that would be seen on a whole loan purchase. The warehouse model allows for the aggregation to occur.

Mr. Hunter asked for any questions.

Mr. Hundt asked if there was any remaining decision by the Board concerning the RFP.

Mr. Farnen stated that when staff gets to the term sheet phase that they would agree the term sheet in principle subject to Board approval and that would be brought to the Board at the June 19<sup>th</sup> meeting.

Mr. Hundt questions if it does require a Board vote.

Mr. Garcia stated that it does.

Mr. Hundt questions if Mr. Hunter would prefer to have the Board give him the ability to negotiate within certain parameters.

Mr. Walsh stated that he thinks this is an important discussion to have for the Board. He stated that these are some important tradeoffs that the Board should understand.

Mr. Hundt agreed that they should be informed.

Mr. Klee stated that there would have to be a special meeting within the next week or two.

Mr. Hundt advised that the other members might benefit from having some time to discuss the details more thoroughly.

Mr. Walsh agreed that it would be very helpful.

Mr. Garcia advised that they should plan a special meeting.



Mr. Hundt stated that he doesn't feel that there needs to be a Board Meeting, just to decide how they should inform the other members.

Mr. Walsh agreed that they could do it offline.

Mr. Klee agreed that it should be fine to do it offline. He asked if there was anything further before moving onto residential sector updates.

## **6. Residential Sector Program Updates & Recommendations:**

Ms. O'Neill advised that Green Bank is at \$43.5 million approved and/or closed transactions. She advised that they are very pleased with the momentum. There are over 220 eligible contracting partners. 55% of them have submitted at least one project in.

She explained that they are ahead of the targets if CT Solar loan is taken out of the picture. They were budgeted for 12 months. They graduated off the balance sheet after 4 months.

Lease is significantly ahead of budget. That speaks to strong demand in the market.

SMART-E is also ahead in both units and number of loans closed. The average loan size budgeted was \$13,000. She advised that they're seeing \$18,000.

COZY continues to be a challenge. They're going to continue to watch and evaluate that.

They ran a promotion to incentivize customers to get to close faster for CT Solar Lease. That was successful. She advised that the solarize campaigns are always a big help with the solar lease product. She explained that they have about \$8 million left to secure before the fund allocation is depleted. Sometime over the summer applications will stop being taken. Lender engagement for SMART E has been a big driver in terms of really pushing the volume. The top three lenders are 70% of the volume. The bundle offer is also very strong.

Energize Connecticut product coordination, SMART E is a product with a lot of competition. The Efficiency Fund runs loan programs that use subsidized capital with Connecticut Housing Investment Fund. We are going to bring forward a request to move the Connecticut Housing Investment Fund to a SMART E lender for the credit challenged market. They'll also offer a payment plan loan under \$3000 at 0%.

Ms. O'Neill noted that where we have not achieved coordination is that the gas companies by statute have the ability to offer a loan program for single measure heating upgrades. They're in the market at 0%. They're going to request to extend that through the end of the legislative end date of the program.

Mr. Hunter stated that under statute the gas companies can just drive that decision.

Ms. O'Neill agreed.

Mr. Hunter pointed out that this is a clear case where private capital is available for loans to be made to home owners, but the gas companies insist on this 0% loan.

Mr. Farnen added that from a legislative perspective, there is a 10% down payment statutory requirement that utilities may be interested in trying to remove. Mr. Farnen explained that it makes it harder for private capital and the Green Bank to compete on an even level with subsidized ratepayer dollars at a zero percent interest rate with no money down.

Mr. Hunter clarified that it's a Green Bank program (Smart-E), but its private capital (from the Smart-E lenders – banks and credit unions) that the Heating Loan is competing with.

Ms. O'Neill stated that the utilities expect to do about \$17 million in origination this year in that product. The Smart-E is at \$6 million approved, closed.

Mr. Klee advised that DEEP is also trying to push back on this.

Ms. O'Neill thanked Ms. Wrice for helping to organize regional fuel banks to learn about the COZY Home Loan as part of the outreach effort. Also, we worked with the Department of Housing on their standards for Resi 1 – 4 rehabs to incorporate energy and health and safety.

She advised members that more information is available in the packet for SMART E.

We are finally seeing a pipeline on multi-family. Kim's team has now doubled. She introduced Demetrius Pantriachios, who had just joined Kim's team. She touched on a CHFA partnership. She stated that there are 20 projects for Solarize. She stated that they are going to address the access issues for owners and developers to access resources.

#### **A. CHIF Guaranty and Bridge Loan**

Mr. Healey advised about the partnership that is being built with CHIF. He stated that there is an existing relationship with them. He stated that they are looking to support CHIF in raising new capital. The focus of the new lending will be on credit challenged customers. The Green Bank, in connection with this recapitalization would support the financing in the million dollar range with a 10% guarantee. He advised the Board of the memo that they had received that the guarantee would only be deployed after an existing 10% debt service reserve fund was fully exhausted and that the senior loan would only be about 80% of the CHIF loan portfolio's value. He concluded that it's a fairly low risk for the Green Bank.

The second part of the request is to provide a short-term bridge loan since CHIF's ratepayer funds are running out. The loan would be for no more than \$900,000 at an interest rate of 2% over the next several months after which it will then bump up to 4%. Again, this would bridge CHIF to the point where the Green Bank raises the private capital. Staff expects to be able to secure capital within the next month or so. He noted that this is a fairly simple agreement.

Mr. Hunter discussed the fact that there will be a security interest in the residential loans that CHIF has currently. So, it will be a secured bridge.

Mr. Klee asks if any Board Members have any questions on resolution number 6.

Ms. Ferguson questioned the \$1.5 million reserve fund.

Mr. Healey explained that the reserve fund would be coming out of proceeds of the financing. He advised that this is non-recourse facility. Its entire loan pool will be the security for the new lender.

Ms. Ferguson asked how much the reserve fund would be.

Mr. Healey explained that that would depend on the advanced rate. It's a pool of underlying residential loans that's growing. It will probably be to an advanced rate of \$10 million.

Mr. Klee asked if there were any additional questions and requested a motion.

Mr. Walsh asked what the rate would have been if the Green Bank did not provide ongoing credit support.

Mr. Healey explained that this is a strong portfolio. It is not a high interest rate pool. It's at 0%, 2.99% loans in it. If we didn't give a decent rate we

wouldn't be able to get much out of the recap. The second part is the economic consideration. He explained that Green Bank will be supporting CHIF.

Mr. Walsh stated that the Green Bank is retaining some risk.

Mr. Healey stated that ongoing discussion with the lenders the term sheet is still under negotiation.

Mr. Klee requested a motion on this resolution 6.

**Upon a motion made by Ms. Glover, seconded by Ms. Ferguson, the board members voted in favor of adopting Resolution #6.**

**Resolution #6**

**WHEREAS**, the Connecticut Green Bank ("Green Bank") has an existing partnership with the Connecticut Housing Investment Fund ("CHIF") focused on financing qualifying energy upgrades for affordable multifamily properties;

**WHEREAS**, the Green Bank and CHIF now desire to expand that partnership to provide long-term, low-cost financing to credit-challenged single-family homeowners for qualified energy upgrades;

**WHEREAS**, the Green Bank proposes extending a guaranty (the "Guaranty"), in an amount not to exceed \$1,500,000, to CHIF's wholly-owned subsidiary the Connecticut Energy Efficiency Financing Company ("CEEFCo") for the purpose of securing private capital to be used for financing energy upgrades for such credit challenged customers; and **WHEREAS**, the Green Bank further proposes extending a bridge loan (the "Bridge Loan") to CEEFCo, in an amount not to exceed \$900,000, to be used for financing energy upgrades for credit-challenged customers until such private capital is sourced.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors ("Board") authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank, to execute and deliver the Guaranty and Bridge Loan with terms and conditions consistent with the memorandum submitted to the Board dated April 10, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board.

**RESOLVED**, that the Board authorizes Green Bank staff to fund interest rate buy-downs (“IRBs”) associated with CEEFCo financing of credit-challenged single-family homeowners using existing budget allocated to IRBs for the Green Bank’s Smart-E loan program, as well as any such future budgetary authorization.

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

#### **B. Update and Request for Extension of the CT Solar Lease**

Mr. Hunter requested an extension on CT Solar Lease. He advised that the transaction had been approved back in 2013. Green Bank is supporting the transaction with a \$9.5 million investment. The exact numbers are \$23 million in tax equity and roughly \$27 million of debt capital. The investor has approved 3.7 megawatts of residential systems. We expect to be north of 900 systems by the end of the fund. On the commercial side we have approved 1.8 megawatts across 6 projects.

Mr. Healey explained that the local contractor base has really jumped. The C-PACE lien is seen as a security and collections mechanism for the PPA. The solar energy that is produced will be collected by the Town of Woodbridge. The Town of Ashford will have 3 town projects totaling 117 kW’s and generating 150,000 kWh annually. It’s the first Green Bank solar PPA serving the multi-family sector.

Mr. Hunter continued on his update of request for extension for the CT Solar Lease. The final residential applications are expected mid-summer. We expect final commercial contracts early fall. And while there are no RFP’s issued for the commercial side of the program, he explained that staff has spoken to a number of players in the market. We will wrap the final parts of the program in June or July 2016, which brings staff to the reason for the need for an extension of the date to July 31, 2016.

Mr. Klee asks if there are any other questions on resolution 7. He requests a motion.

**Upon a motion made by Mr. Harrity, seconded by Ms. Glover, the Board members voted in favor of approving Resolution #7.**

#### **Resolution #7**

**WHEREAS**, at a special meeting of the Board of Directors of the Connecticut Green Bank (“Green Bank”) held on June 26, 2013, the

Green Bank Board of Directors (the “Board”) approved resolutions for the CT Solar Lease 2 program (“Solar Lease 2”);

**WHEREAS**, the Green Bank intends to extend the duration of the tax equity and credit facilities supporting Solar Lease 2 and to implement certain changes in the mix of systems to be installed as set forth in the memorandum submitted to the Board dated April 10, 2015;

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors (“Board”) authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank, to execute and deliver amendments and other related documentation to extend the duration of the tax equity and credit facilities supporting Solar Lease 2 and to implement certain changes in the mix of systems installed consistent with the memorandum submitted to the Board dated April 10, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board;

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

### **C. Update on Residential Solar Financing Strategy**

Ms. O’Neil provided an update on solar financing strategy. She explained that they’re not going to be involved with mainstream prime customers. They’re transitioning to the private sector for that. They’re going to focus Green Bank dollars on underserved markets.

Ms. O’Neill spoke about how Go Solar CT will not to be about financing, but as a trusted source for going solar in Connecticut. This is a shift in where our web resources will be going. We’ll report back as we move through our RFP process. We will endorse a prime customer lease, so our independent installers have a trusted source there.

Mr. Klee moves onto sector updates and progress to targets.

## **7. Sector Updates and Progress to Targets**

Mr. Garcia advised that good progress is being made toward the year end targets. He asks Andy Brydges, Bettina Ferguson and Commissioner Klee to weigh in on the progress for institutional programs.

Mr. Brydges says that it's not showing in the numbers as of yet, but doing very well. Substantial progress has been made. He informed the Board that they had met on Wednesday with the Office of Policy and Management to present on the study of difference financing alternatives for the state performance contracts and projects. We decided that bonds are the most effective way to finance these projects. There was support from OPM. There was support from Secretary Barnes to use \$40 million of existing bonds. That would finance two of our first three projects. The remaining project has interest in using the Green Bank to use bonds backed by the states Special Capital Reserve Fund (SCRF). We'll need a capital lease through the state. There's obviously tremendous need.

Ms. Glover stated that this is a good place to go.

Mr. Brydges thanked Commissioner Klee for pushing it to the Governor. There's really no need to do a proof of concept. The model is several decades old. We're finding 40 – 60% savings at our facilities and the federal government just released a solicitation for \$55 billion of energy performance contracts for its facilities.

Mr. Klee commended the team.

Ms. Ferguson stated that they're glad to be assisting with the launch of the bonds.

Mr. Garcia asked when they can expect a draft.

Mr. Hunter stated late summer it should be available.

Mr. Garcia thanks everyone for their hard work. He stated that they're ahead of targets on the statutory and infrastructure sector programs.

Mr. Bellas offers a financial position update through February 2015. Currently our mix is 49% current 51% non-current assets as opposed to 71% current in the previous year versus 30% non-current. Total assets were \$119.2 million of which Cash balances stand at \$49 million , of which \$4 million is restricted federal funds being used as credit enhancements for our various financing programs.

Mr. Garcia asked if there are any unfunded program commitments.

Mr. Bellas noted that the current balance of unfunded commitments is \$102.6 million. About 65% of this amount is for the C-PACE loan program and various incentive residential solar incentive programs. Current revenues were approximately 5% below budget projections primarily due to a

decrease in proceeds received from RGGI auctions. Operating expenses to date continue to remain under budget.

Mr. Garcia advises they're going into Executive Session at 10:45 AM.

**Upon a motion made by Mr. Klee, seconded by Mr. Harrity, the Board members voted in favor to enter Executive Session at 10:45 AM for personnel matters.**

## **8. Executive Session**

**Upon a motion made by Ms. Glover, seconded by Mr. Harrity, the Board members voted in favor of the resolution.**

### **Resolution #8**

**WHEREAS**, the Board of Directors of the Connecticut Green Bank (the "Green Bank") requested that the President and CEO develop a succession plan ("the Succession Plan") to ensure that the Green Bank has the senior leadership (i.e. Director level and above) and key talent with the skills and depth of experience required to meet the short, medium, and long-term operational and strategic plans of the organization;

**WHEREAS**, that the Succession Plan acknowledges the importance of developing future leaders and recognizing employee service;

**WHEREAS**, the Audit, Compliance and Governance, per Section 5.3.1(X) of the Bylaws of the Green Bank is responsible for the management of succession planning;

**WHEREAS**, the Succession Plan is a document drafted by the President and CEO for review by the Board of Directors; and

**WHEREAS**, the Succession Plan will serve as a roadmap for the Green Bank.

**NOW**, therefore be it:

**RESOLVED**, that the members of the Board of Directors will review and provide comments on the Succession Plan presented to the Board of Directors on April 17, 2015 to the Audit, Compliance and Governance Committee; and

**RESOLVED**, that the Audit, Compliance and Governance Committee is directed to take feedback from the Board of Directors and recommend final



presentation of the Succession Plan to the Board of Directors at the regularly scheduled meeting on June 19, 2015.

**9. Adjournment**

**Upon a motion made by Mr. Klee, seconded by Ms. Ferguson, the Board members voted unanimously in favor of adjourning the April 17, 2015 meeting at 11:20 AM**

Respectfully Submitted,

---

Catherine Smith, Chairperson

DRAFT



# Memo

**To:** Board of Directors of the Connecticut Green Bank

**From:** George Bellas (VP of Finance and Administration)

**CC:** Bryan Garcia (President and CEO), Mackey Dykes (VP and COO), and Brian Farnen, (Chief Legal Officer)

**Date:** June 12, 2015

**Re:** Proposed revisions to current banking signatories

---

On September 29, 2011 the Connecticut Green Bank (CGB) Board of Directors approved a list of employees allowed to act as authorized banking signatories on behalf of CGB. Since that time the CGB has created 4 additional Special Purpose Entities (SPE) to administer its financing programs. This has resulted in increased treasury transactions which must be completed on a timely basis. In order to assist the accounting team in their efforts to execute treasury transactions on a timely basis, staff is requesting the addition of the position of "Vice President and Chief Operating Officer," currently held by Mackey Dykes, to the list of authorized bank signatories. I am also requesting that the position of "Director Renewable Energy Deployment" be changed to reflect a new title "Director of Statutory and Infrastructure Programs" held by Dale Hedman. I have reflected the proposed changes to the existing resolution below. This resolution will be effective for the following entities:

1. Connecticut Green Bank
2. CEFIA Holdings LLC
3. CT Solar Loan I LLC
4. CEFIA Services Inc.
5. CT Solar Lease 2 LLC

## **RESOLUTION**

**RESOLVED**, that the Connecticut Green Bank Board of Directors (the "Board") approves the addition of the position of "Vice President and Chief Operating Officer" to the Connecticut Green Bank's list of authorized bank signatories;

**RESOLVED**, that the Board amends the list of authorized bank signatories to reflect the position change in title from "Director Renewable Energy Deployment" to "Director of Statutory and Infrastructure Programs"; and

**RESOLVED**, that these changes shall be effective for the following entities: Connecticut Green Bank, CEFIA Holdings LLC, CT Solar Loan I LLC, CEFIA Services Inc., and CT Solar Lease 2 LLC. The proper Connecticut Green Bank officers are authorized and empowered to execute and deliver all other documents and instruments necessary to effectuate this resolution.



# Memo

**To:** Board of Directors of the Connecticut Green Bank

**From:** George Bellas (VP of Finance and Administration), Mackey Dykes (VP and COO), Bryan Garcia (President and CEO)

**Date:** June 12, 2015

**Re:** Recommended revisions to the Connecticut Green Bank and its affiliates' Internal Accounting Control Procedures

---

On April 22, 2015 the Connecticut Green Bank (CGB) staff presented proposed revisions to existing internal accounting control policies and procedures with the Audit, Compliance and Governance Committee of the CGB. These policies and procedures are a part of the overall internal accounting control framework that is reviewed by both the independent accounting firm that audits our Comprehensive Annual Financial Report (CAFR) and the State of Connecticut Auditors of Public Accounts. After review and discussion the ACG Committee recommended Board approval of the proposed revisions. The following policies to be revised are included in your Board package in redline version:

- Policy 101 – Purchasing and Accounts Payable
- Policy 102 - Consulting and Advisory Services
- Policy 103 – Company Credit Card Policy
- Policy 104 – Mobile Communications Policy
- Policy 104a – Mobile Communications Reimbursement Form

The proposed changes address the following matters:

1. The policies now include the affiliates of the CGB, CEFIA Holdings LLC, CT Solar Loan I LLC, CEFIA Services Inc. and CT Solar Lease 2 LLC.
2. The policies have been revised to reflect changes in the titles and responsibilities of senior management who are tasked with approving contracts, purchase orders, vendor invoices and the disbursement of CGB and affiliate funds.
3. The purchasing and accounts payable policy documents the existing controls over the transfer of funds between the CGB and its affiliates for working capital purposes.

4. The consulting and advisory policy has been revised to reflect the controls currently in place to approve PSAs and other contracts by CGB's senior management team before execution.
5. Minor revisions to the credit card policy have been made to reflect who can be issued a CGB credit card. Currently only the President and CEO, the VP/COO and the Senior Manager in CGB's marketing department have been issued a CGB credit card. The issuance of new company credit cards must be approved by the President and CEO.
6. Minor changes to the mobile communications policy have been made to reflect on going changes in device technology used by staff for CGB business.

We are requesting that the Board approve the recommended revisions to the CGB and affiliates internal control policies and procedures.

### **RESOLUTION**

**WHEREAS**, On April 22, 2015 the Connecticut Green Bank (the "Green Bank") staff presented proposed revisions to existing internal accounting control policies and procedures with the Green Bank Audit, Compliance and Governance Committee (the "ACG Committee"). After review and discussion the ACG Committee recommended to the Green Bank Board of Directors (the "Board") that the Board approve the proposed revisions attached to the Memo to the Board dated June 12, 2015;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the revisions to the following Green Bank, and its affiliates, existing internal accounting control policies: Policy 101, Policy 102, Policy 103, Policy 104, and Policy 104a, as such revisions are more fully described in the Memo to the Board dated June 12, 2015; and

**RESOLVED**, the proper Connecticut Green Bank officers are authorized and empowered to execute and deliver all other documents and instruments necessary to effectuate this resolution.



# Memo

**To:** Board of Directors of the Connecticut Green Bank

**From:** George Bellas (VP of Finance and Administration), Mackey Dykes (VP and COO), Bryan Garcia (President and CEO)

**Date:** June 12, 2015

**Re:** Recommended revisions to the Connecticut Green Bank and its affiliates' Internal Accounting Control Procedures

---

On April 22, 2015 the Connecticut Green Bank (CGB) staff presented proposed revisions to existing internal accounting control policies and procedures with the Audit, Compliance and Governance Committee of the CGB. These policies and procedures are a part of the overall internal accounting control framework that is reviewed by both the independent accounting firm that audits our Comprehensive Annual Financial Report (CAFR) and the State of Connecticut Auditors of Public Accounts. After review and discussion the ACG Committee recommended Board approval of the proposed revisions. The following policies to be revised are included in your Board package in redline version:

- Policy 101 – Purchasing and Accounts Payable
- Policy 102 - Consulting and Advisory Services
- Policy 103 – Company Credit Card Policy
- Policy 104 – Mobile Communications Policy
- Policy 104a – Mobile Communications Reimbursement Form

The proposed changes address the following matters:

1. The policies now include the affiliates of the CGB, CEFIA Holdings LLC, CT Solar Loan I LLC, CEFIA Services Inc. and CT Solar Lease 2 LLC.
2. The policies have been revised to reflect changes in the titles and responsibilities of senior management who are tasked with approving contracts, purchase orders, vendor invoices and the disbursement of CGB and affiliate funds.
3. The purchasing and accounts payable policy documents the existing controls over the transfer of funds between the CGB and its affiliates for working capital purposes.

4. The consulting and advisory policy has been revised to reflect the controls currently in place to approve PSAs and other contracts by CGB's senior management team before execution.
5. Minor revisions to the credit card policy have been made to reflect who can be issued a CGB credit card. Currently only the President and CEO, the VP/COO and the Senior Manager in CGB's marketing department have been issued a CGB credit card. The issuance of new company credit cards must be approved by the President and CEO.
6. Minor changes to the mobile communications policy have been made to reflect on going changes in device technology used by staff for CGB business.

We are requesting that the Board approve the recommended revisions to the CGB and affiliates internal control policies and procedures.

### **RESOLUTION**

**WHEREAS**, On April 22, 2015 the Connecticut Green Bank (the "Green Bank") staff presented proposed revisions to existing internal accounting control policies and procedures with the Green Bank Audit, Compliance and Governance Committee (the "ACG Committee"). After review and discussion the ACG Committee recommended to the Green Bank Board of Directors (the "Board") that the Board approve the proposed revisions attached to the Memo to the Board dated June 12, 2015;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the revisions to the following Green Bank, and its affiliates, existing internal accounting control policies: Policy 101, Policy 102, Policy 103, Policy 104, and Policy 104a, as such revisions are more fully described in the Memo to the Board dated June 12, 2015; and

**RESOLVED**, the proper Connecticut Green Bank officers are authorized and empowered to execute and deliver all other documents and instruments necessary to effectuate this resolution.

Connecticut Green Bank

CEFIA Holdings LLC

CT Solar Loan I LLC

CEFIA Services Inc.

CT Solar Lease 2 LLC

~~Clean Energy Finance and Investment Authority~~

Accounting Department

Internal Controls and Procedures

Index

CEFIA 101 – Purchasing and Accounts Payable

CEFIA 102 – Consulting and Advisory Services

CEFIA 103 – Credit Cards

CEFIA 104 – Mobile Communications



## 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 affiliates for which CGB provides accounting and financial reporting services Company, whether operating or programmatic in nature.

**III. Responsibility:**

Procurement of supplies will be facilitated through the department of finance and administrative department. 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 Company 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 administrative department.

**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 VP and Chief Operating Officer ("COO").
2. Office furniture, fixtures and equipment - must be approved by the President & CEO or the COO Chief of Staff.
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 COO Chief of Staff.

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 Managing Director, Information Technology. All purchases \$1,000 or greater will follow the approval process outlined in B1 below, and approved by the President & CEO or the Chief of Staff and the VP Finance and Administration.
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 CGBEFIA 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, ~~or~~ loan guarantees, debt and equity investments or other financial products is outlined in the bylaws and operating procedures of the CGBAuthority.
7. Sponsorships and Memberships – All CGBEFIA sponsorships and memberships must be approved by Director level staff and the COO, or above and if greater than \$10,000 the President & CEO.
8. Consulting and Advisory Services – See CGBEFIA – 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. ~~The CEFIA party who is responsible for the matter described in the invoice will review the fees incurred. Once reviewed, All this~~ invoices will be forwarded to the Chief Legal General Counsel and COO President & CEO 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: VP Finance and Administration; COO Chief of Staff; Chief Legal General Officer Off Counsel; President & CEO; EVP and Chief Investment Officer; Director Renewable Energy Deployment; 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 ~~of Finance and Administration~~ 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 ~~COO Chief of Staff~~ or, in both their absence, the VPF ~~Finance and Administration~~.
  - 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 ~~Finance and Administration~~.
  - Consulting and Advisory Services – See CEFA – 102
  - Re-occurring charges – for ~~disbursements items~~ that occur on a regular basis monthly (rents, equipment lease payments, utilities, etc), the VPF ~~Finance and Administration~~ must approve the invoice. A second signature from a member of ~~senior~~ management 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 ~~of Finance and Administration~~ or in the absence of the VPF, the COO, Chief Investment Officer or Chief Legal Officer in writing. The VPF or such other designee listed above of Finance must then ~~submit~~ review all such items ~~to~~ with 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. ~~Check request should be completed for items of urgency for payment and when no formal invoice is available. A c~~Check request may be used as approval documentation for invoices. Invoices may be signed directly as well. The finance and administrative department will develop and maintain check request forms.

5. Wire/ACH transfers

- a. The processing of wire/~~ACH disbursements transfers~~ 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. are signed, and the General Counsel directs the finance department to fund the transaction.

102

2015

CGBEFIA –

Revised February 03XX,

## Consulting and Advisory Services

**I Purpose:** Pursuant to operating procedures initially adopted by the Board of Directors of the ~~Connecticut Green Bank~~ Clean Energy Finance and Investment Authority (CGBEFIA) on December 16, 2011 as amended from time to time; CGBEFIA may contract for ~~engage~~ 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. (for unbudgeted items) or the President & CEO (within budgeted expenditures) otherwise determines that the use of such services is warranted and in the best interest of CEFIA.

**III. Responsibility:** All staff parties contracting for ~~engaging~~ 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) form as developed and revised from time to time as necessary by the Company's legal department ~~finance and administrative 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 ~~for service requests:~~

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 COO and 4) the Chief Legal Officer. ~~Total fees and expenses less than or equal to \$10,000—President & CEO; General Counsel; Director of Government and External Relations; EVP & CIO; Chief of Staff; Director of Marketing and Outreach; Director of Technology Innovation; Director of Renewable Energy Deployment; VP Finance & Administration and Director of Energy Efficiency Deployment, collectively “Sr. Management”.~~
2. Execution of the PSA: The President & CEO will execute all PSA's on behalf of the company. However see 5 below. ~~Total fees and expenses greater than \$10,000 up to \$75,000—two signatures from Sr. management one of which must be the President and CEO.~~
3. ARS requests ~~Total fees and expenses~~ 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 B12 above.
4. ARS requests ~~Total fees and expenses~~ greater than \$150,000 must follow the RFP requirements in section C prior to execution of PSA under B12 above.
5. Execution of PSA's and approval of ARS requests ~~Approval in~~ the absence of the President &and CEO – If the President &and CEO is unavailable for a period of time to execute ~~approve~~ 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 COO, Chief Investment Officer or Chief Legal Officer of Finance and Administration in writing. The VPF ~~of Finance~~ must then forward ~~review~~ all items approved under this section ~~to~~ with the President & CEO upon his/her return to the office and obtain approval from the President and CEO at that time.
6. ~~All Contracts—All ARS requests will be reviewed by the COO and VPF to ensure that the requested disbursement falls within the appropriate departmental budget for the current fiscal year prior to approval. All PSAs will be sent to the Finance Department prior to execution. The Vice President Finance & Administration will review the contract for compliance with procedures, internal management practices, and to determine that the expenditure is within the annual budget for consulting and advisory services or within programmatic budgets. The contract cannot be executed without the review and signoff by the Vice President Finance & Administration.~~

C. PSA duration and RFP requirements

1. Duration - The duration of PSAs for consulting or advisory services will generally not exceed one year without ~~prior~~ written approval of the President ~~&and~~ CEO.
2. ~~RFP required if > \$150,000 in any one fiscal year or if the Board of Directors directs CEFIA to do so. Whenever possible, a~~ An RFP is to be completed prior to entering into any contract ~~for consulting or advisory services~~ in an amount over \$150,000 in any one fiscal year.
3. Contractors with multiple contracts - CGBEFIA 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~~ Finance Department 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 ~~VP~~ Finance President, Finance & Administration will be responsible for monitoring the status of approved contracts and ensuring that all contracts are in compliance with these operating procedures.

---

## **Company Credit Card Policy and Procedures**

### **I. Purpose:**

To provide procedures for the use of Connecticut Green Bank, the “Company” 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 VP and Chief Operating Officer (“COO”) are authorized purchasing agents of the Company. The ~~President and CEO (CEO)~~ shall provide the ~~VP Finance & Administration (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 ~~monthly~~ 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. Periodically during the month the VPF will access the Company credit card account via the internet and review credit card activity.~~ All unauthorized activity ~~should~~ will be immediately be reported to the cCredit card issuer and VPF by the 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 cCredit 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.

## Mobile Communications Policy

### Policy

The ~~Connecticut Green Bank~~~~lean Energy Finance and Investment Authority~~ (the “Company”) often must have immediate access to key employees. Accordingly, the Company will provide mobile devices with cell and internet access~~cellular phone access~~ to an employee if the employee’s responsibilities require the employee to be out of the office traveling on Company business and the employee needs to be in contact ~~by phone~~ with the Company staff or its business partners customers during that time.

~~Cell phones capable of sending and receiving e-mails will be approved only if the employee can demonstrate that his or her responsibilities are such that immediate access to e-mails is essential to conducting business.~~

### Procedure

~~Mobile device~~~~All cellular phone~~ plans have a fixed number of “voice” minutes and “data” minutes~~“anytime minutes”~~ for a flat monthly fee. In addition, the plans have an unlimited number of night and weekend minutes within the home calling area.

Employees ~~can~~will be reimbursed for the purchase of a mobile device~~cell phone~~ and the associated monthly voice and data charges by submitting an approved employee expense report to the accounting department on a monthly basis. All purchases of mobile devices~~cell phones~~ and associated voice and data plans must be pre approved and within dollar limits set by the Company in order to receive reimbursement. Dollar limits will be reviewed and adjusted periodically by the Company. Pre Approval forms may be obtained from the accounting department. All requests for mobile communications devices and associated voice/data plans must be approved by the COO-President & CEO. ***Charges incurred that were not pre approved or above the pre approved limits will be the responsibility of the employee.*** Employees may use a company mobile device~~cellular phone~~ for personal calls as long as there is no additional cost incurred by the Company.

On occasion, employees who do not qualify for a company mobile device~~cellular phone~~ will use their own personal mobile device~~cellular phone~~ for business related calls. Employees will be reimbursed for the cost of business related phone calls made on personal mobile devices~~cellular phones~~. The cost of business related calls made on a personal device~~cellular phone~~ must be submitted on an expense report. A copy of the phone bill with an explanation of the business purpose of each call must be attached to the expense report.

In order to prevent and detect instances of abuse the accounting department may periodically audit employee mobile device~~cell phone~~ invoices submitted for reimbursement. Instances of possible abuse will be reported to the employee's department head and may result in termination of reimbursement privileges.

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



CGBCEFIA – 104A  
Revised February 3, 2015

**MOBILE DEVICE COMMUNICATIONS REIMBURSEMENT PRE-APPROVAL FORM**

Date: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Department: \_\_\_\_\_

**Description of Pre-Approval Request:**

	Requested Price:	Request Limit:
Equipment:	\$	
\$150		
		<b>Total</b>
Equipment:	\$	\$150
Monthly Voice:	\$	\$ 80
Monthly Data:	\$	
\$ 60		Other Monthly Fees/Services: \$
		(Enter description for "other monthly fees/services")
<b>Total Monthly Fees:</b>	<b>\$</b>	<b>\$140</b>

- Describe Business Reason(s) Supporting Above Request:  
\_\_\_\_\_  
\_\_\_\_\_

**APPROVALS: Up to pre-approved limits and for other pre-approved fees**

Supervisor's Signature: _____	Date: _____
_____	
Name: _____	Title: _____
<i>Please Print</i>	

Department Head's Signature: _____	Date: _____
_____	
Name: _____	Title: _____
<i>Please Print</i>	

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Bryan T. Garcia, President and CEO**

*Please Print*

- Cell phone invoice must be attached to Expense Report as a condition of reimbursement.
- Cell phone invoices will be reviewed on a periodic basis by Finance Department Staff. Instances of abuse will be reported to Department Head and may result in termination of reimbursement approval.
- Employee will be reimbursed on a monthly basis through Employee Expense Report.



# Memo

**To:** Board of Directors  
**From:** Genevieve Sherman  
**CC:** Brian Farnen, Bert Hunter, and Bryan Garcia  
**Date:** June 19, 2015  
**Re:** Approval of Funding Requests below \$300,000 – Board Update

---

At the July 18, 2014 Board of Directors (BOD) meeting of the Connecticut Green Bank (“Green Bank”) it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve funding requests less than \$300,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Comprehensive Plan, approved within Green Bank’s fiscal budget and in an aggregate amount not to exceed \$1,000,000 from the date of the last Deployment Committee meeting. This memo provides an update on funding requests below \$300,000 that were evaluated and approved. During this period, two projects were evaluated and approved for funding in an aggregate amount of approximately \$339,475. Also included in the BOD materials are internal documentation of the review and approval process Green Bank staff and officers go through.

---

**Project Name:** Earth Place – 10 Woodside Lane, Westport CT  
**Amount:** \$178,757  
**Comprehensive Plan:** C-PACE Transaction  
**Staff Request:** Genevieve Sherman, Director, Commercial and Industrial Programs; Bert Hunter, Chief Investment Officer

**Description**

[Additional materials to be provided next week]

**Project Name:** Sheffield Pharmaceuticals – 170 Broad Street, New London CT  
**Amount:** \$160,718  
**Comprehensive Plan:** C-PACE Transaction  
**Staff Request:** Genevieve Sherman, Director, Commercial and Industrial Programs; Bert Hunter, Chief Investment Officer

**Description**

[Additional materials to be provided next week]

**RESOLUTIONS**

**WHEREAS**, on January 18, 2013, the Connecticut Green Bank (the “Green Bank”) Board of Directors (the “Board”) authorized the Green Bank staff to evaluate and approve funding requests less than \$300,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Green Bank Comprehensive Plan, approved within Green Bank’s fiscal budget and in an aggregate amount not to exceed \$500,000 from the date of the last Deployment Committee meeting, on July 18, 2014 the Board increase the aggregate not to exceed limit to \$1,000,000 (“Staff Approval Policy for Projects Under \$300,000”); and

**WHEREAS**, Green Bank staff seeks Board review and approval of the funding requests listed in the Memo to the Board dated June 19, 2015 which were approved by Green Bank staff since the last Deployment Committee meeting and which are consistent with the Staff Approval Policy for Projects Under \$300,000;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the funding requests listed in the Memo to the Board dated June 19, 2015 which were approved by Green Bank staff since the last Deployment Committee meeting. The Board authorizes Green Bank staff to approve funding requests in accordance with the Staff Approval Policy for Projects Under \$300,000 in an aggregate amount to exceed \$1,000,000 from the date of this Board meeting until the next Deployment Committee meeting.



# Memo

**To:** Board of Directors  
**From:** Matt Macunas (Legislative Liaison & Marketing Manager)  
**CC:** Brian Farnen (General Counsel and CLO) and Bryan Garcia (President and CEO)  
**Date:** June 12, 2015  
**Re:** 2015 Regular Legislative Session Summary

---

The Connecticut Green Bank was thoroughly engaged with the state legislature this year. We won passage of several key pieces of legislation, engaged with proposals from others, and raised the Green Bank's profile in the public policy community as the rebranded Connecticut Green Bank.

A special legislative session will soon commence to address concepts still in development by the close of the regular legislative session. State lawmakers will vote on omnibus bill packages regarding budget implementation, school construction, bonding, and land conveyance.

The following proposals comprised the Green Bank's suite of legislative initiatives for 2015:

## **C-PACE**

The General Assembly passed the Green Bank's proposed technical change to the C-PACE authorizing statute (Attachment A), which clarifies that private capital providers can now directly participate in C-PACE transactions. To date, all C-PACE transactions have been funded from a \$40 million internal warehouse of funds. However as of the start of 2015, the transaction pipeline for the coming year was estimated to outpace the warehouse's funding capacity. Under this new proposal C-PACE will continue to be administered by the Green Bank, which will also continue financing transactions – but a growing volume of them will now be addressed through private capital.

House Bill 6991 received unanimous support in both the House (145-0) and the Senate (35-0) relatively early during the regular session. It was transmitted to Governor Malloy on May 29<sup>th</sup> for signature as Public Act 15-21.



## **SHREC**

The Green Bank worked with the Governor's office to pass an *Act Concerning the Encouragement of Local Economic Development and Access to Residential Renewable Energy* (Attachment B). This proposal creates a new financing mechanism to support the Residential Solar Investment Program. All while lowering the cost of RPS compliance, the bill raises the state-mandated deployment target from 30 MW to 300 MW; extends the availability of RSIP incentives; and pushes efficiencies in the municipal permitting process to reduce soft costs of installations.

The bill was amended to include nearly all of House Bill 6435, *An Act Streamlining the Permitting Process for Residential Solar Photovoltaic Systems*. It was a product of negotiations with legislative proponents, REEBA, the installer industry, the Green Bank, the Connecticut Council of Municipalities, the Council Of Small Towns, and the Office of the State Building Inspector. This concept also received broad, bipartisan support.

With broad bipartisan support, the bill passed the House 129-10 and the Senate 35-0.

## **R-PACE**

The Energy and Technology Committee requested the Green Bank's help in crafting legislative language for *An Act Concerning a Residential Property Assessed Clean Energy Program* (Attachment C). This proposal was consistent with a January 2015 viability study the agency completed in partnership with the Clean Energy States Alliance. The study proposed strengthening the R-PACE authorizing statute initially set into law through Public Act 11-80 to operationalize a workable program. The bill drew testimony in opposition from commercial lenders, which had concerns their property liens would be subordinated to R-PACE energy improvement financing.

House Bill 6995 did not receive a vote from the Energy and Technology Committee and the bill died. Green Bank staff is working with the co-chairs of the Energy and Technology Committee, the Banking Committee, and the Department of Banking to convene stakeholders this summer and address issues that have been divisive on R-PACE. This meeting of minds is the next step toward reintroducing R-PACE legislation in the 2016 regular session.

In addition to our own proposals, the following concepts materialized that warranted Green Bank attention:

### **Anaerobic Digesters**

The Energy and Technology Committee raised House Bill 6020 (Attachment D), *An Act Concerning Anaerobic Digestion*, which passed the House and Senate unanimously. This bill extends the Green Bank's anaerobic digestion pilot program – and its reporting deadline - by two years. It makes no changes to the number of projects allowed in to the program, currently set at five.

## **Green Bonds**

The Green Bank collaborated with the Office of the Treasurer, the Department of Energy and Environmental Protection, the Department of Economic and Community Development, and the Office of Policy and Management to advance the state's Lead By Example program to improve energy efficiency in state buildings. Language (Attachment E) was submitted to OPM for inclusion into a pending budget implementer bill. This language would raise the Green Bank's Special Capital Reserve Fund cap from \$50 million to \$100 million to ensure sufficient coverage for the first round of state building projects.

## **Municipal and Quasi-Public Set Aside**

House Bill 6086 would have extended the state's current set aside contracting provisions to contractors hired by municipalities. Its proponents were the legislative Black and Puerto Rican Caucus and the Commission on Human Rights and Opportunities. After seeing amended language extending this requirement to all real property improvements of quasi-public agencies, the Green Bank led the quasi-public agencies in helping proponents match drafted language to their actual intent, which was to have contracting set aside requirements follow *state taxpayer* monies. This bill did not advance but the latest language - appropriately exempting certain agencies like the Green Bank - might be included in a pending budget implementer bill.

## **Community Solar**

The House and Senate passed Senate Bill 928, *An Act Establishing a Shared Clean Energy Facility Pilot Program*. This requires DEEP, in consultation with the electric distribution companies, to establish a two-year pilot program to support shared clean energy facilities – most likely shared solar arrays. DEEP must develop an RFP seeking projects totaling up to 2 MW in United Illuminating territory and 4 MW in Eversource Energy territory. Work on this policy began with a proposal in the 2014 regular session. After a failed first attempt, the legislature commissioned a study on Shared Clean Energy Facilities to the Connecticut Academy of Science and Engineering, to which the Green Bank provided panelists and study contacts. The Green Bank focused its comments solely on location (e.g., siting in grid congested areas and brownfields) and low income (i.e., making the lower cost energy available to low income customers).

## **Solar on Shared Dwellings**

The Green Bank offered testimony in favor of Senate Bill 1121 in the Judiciary Committee and Senate Bill 730 in the Energy and Technology Committee. Both were aimed at preventing condominium and homeowner associations from barring the installation of solar equipment. Both of these bills received hearings but neither passed their respective committees.

## **REEEF Account**

The legislative Finance, Revenue, and Bonding Committee asked for Green Bank testimony regarding the \$18 million Renewable Energy and Efficient Energy Finance Account. The agency responded with written comments and verbal testimony. These gave the opportunity

to reiterate the agency's movement away from a subsidy-based model, and to communicate the disproportionately positive results of its transition to a financing-based model.

### **Sustainable Community Ratings**

Environment Committee leadership convened a stakeholder group with the goal of examining sustainable community ratings systems such as those in New York, New Jersey, Minnesota, and the national STAR. This initiative was advanced as House Bill 6956, but did not receive House or Senate passage. However the actions mandated by the bill could likely be taken voluntarily through inter-agency collaboration.

### **Forum on Connecticut's Clean Energy Economy**

On March 17, the Green Bank facilitated well-attended panel discussions at the legislature with REEBA, inviting lawmakers, staff, stakeholders, and the public. Staff moderated talks with market participants on Connecticut's residential solar market, Energize Norwich, and C-PACE. The event focused on how the Green Bank is attracting private capital to lend into the clean energy marketplace in Connecticut. The agency also used the event to mark the early achievement of 30 MW residential solar by 2022.

### **"Utility 2.0" Hearing on Grid Modernization**

The Green Bank connected Richard Kauffman – the state of New York's Chairman of Energy and Finance - with the legislative Energy and Technology Committee as a keynote speaker in their "Utility 2.0" forum on grid modernization, held on February 23. Mr. Kauffman inspired the committee with his testimony on New York's Reforming Energy Vision initiative, setting the stage for committee action on related subjects throughout the legislative session.

### **Informational Hearing with Connecticut Energy Efficiency Fund**

On January 29, at the request of the legislative Energy and Technology Committee, the Green Bank and the Connecticut Energy Efficiency Fund presented their respective histories, programs, and unique roles in Connecticut's energy landscape. The Green Bank reviewed its legislative agenda with the committee, and highlighted its successes leveraging limited ratepayer funds to create disproportionate gains in clean energy investment.

If you should have any questions on these matters, please feel free to contact me at (860) 257-8990 or [Matt.Macunas@CTGreenBank.com](mailto:Matt.Macunas@CTGreenBank.com).

## **Attachment A**

**House Bill No. 6991**

**Public Act No. 15-21**

### **AN ACT CONCERNING THE COMMERCIAL PROPERTY ASSESSED CLEAN ENERGY PROGRAM.**

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Section 16a-40g of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) As used in this section:

(1) "Energy improvements" means (A) participation in a district heating and cooling system by qualifying commercial real property, (B) participation in a microgrid, as defined in section 16-243y, including any related infrastructure for such microgrid, by qualifying commercial real property, provided such microgrid and any related infrastructure incorporate clean energy, as defined in section 16-245n, (C) any renovation or retrofitting of qualifying commercial real property to reduce energy consumption, (D) installation of a renewable energy system to service qualifying commercial real property, or (E) installation of a solar thermal or geothermal system to service qualifying commercial real property, provided such renovation, retrofit or installation described in subparagraph (C), (D) or (E) of this subdivision is permanently fixed to such qualifying commercial real property;

(2) "District heating and cooling system" means a local system consisting of a pipeline or network providing hot water, chilled water or steam from one or more sources to multiple buildings;

(3) "Qualifying commercial real property" means any commercial or industrial property, regardless of ownership, that meets the qualifications established for the commercial sustainable energy program;

(4) "Commercial or industrial property" means any real property other than a residential dwelling containing less than five dwelling units;

(5) "Benefited property owner" means an owner of qualifying commercial real property who desires to install energy improvements and provides free and willing consent to the benefit assessment against the qualifying commercial real property;

(6) "Commercial sustainable energy program" means a program that facilitates energy improvements and utilizes the benefit assessments authorized by this section as security for the financing of the energy improvements;

(7) "Municipality" means a municipality, as defined in section 7-369;

(8) "Benefit assessment" means the assessment authorized by this section;

(9) "Participating municipality" means a municipality that has entered into a written agreement, as approved by its legislative body, with the bank pursuant to which the municipality has agreed to assess, collect, remit and assign, benefit assessments to the bank in return for energy improvements for benefited property owners within such municipality and costs reasonably incurred in performing such duties; [and]

(10) "Bank" means the Connecticut Green Bank; and

(11) "Third-party capital provider" means an entity, other than the bank, that provides loans directly to benefited property owners for energy improvements.

(b) (1) The bank shall establish a commercial sustainable energy program in the state, and in furtherance thereof, is authorized to make appropriations for and issue bonds, notes or other obligations for the purpose of financing, (A) energy improvements; (B) related energy audits; (C) renewable energy system feasibility studies; and (D) verification reports of the installation and effectiveness of such improvements. The bonds, notes or other obligations shall be issued in accordance with legislation authorizing the bank to issue bonds, notes or other obligations generally. Such bonds, notes or other obligations may be secured as to both principal and interest by a pledge of revenues to be derived from the commercial sustainable energy program, including revenues from benefit assessments on qualifying commercial real property, as authorized in this section.

(2) When the bank has made appropriations for energy improvements for qualifying commercial real property or other costs of the commercial sustainable energy program, including interest costs and other costs related to the issuance of bonds, notes or other obligations to finance the appropriation, the bank may require the participating municipality in which the qualifying commercial real property is located to levy a benefit assessment against the qualifying commercial real property especially benefited thereby.

(3) The bank (A) shall develop program guidelines governing the terms and conditions under which state and third-party financing may be made available to the commercial sustainable energy program, including, in consultation with representatives from the banking industry, municipalities and property owners, developing the parameters for consent by existing mortgage holders and may serve as an aggregating entity for the purpose of securing state or private third-party financing for energy improvements pursuant to this section, (B) shall establish the position of commercial sustainable energy program liaison within the bank, (C) [shall] may establish a loan loss reserve or other credit enhancement program for qualifying commercial real property, (D) may use the services of one or more private, public or quasi-public third-party administrators to administer, provide support or obtain financing for the commercial sustainable energy program, [and] (E) shall adopt standards to ensure that the energy cost savings of the energy improvements over the useful life of such improvements exceed the costs of such improvements, and (F) may encourage third-party capital providers to provide loans directly to benefited property owners in lieu of or in addition to the bank providing such loans.

(c) Before establishing a commercial sustainable energy program under this section, the bank shall provide notice to the electric distribution company, as defined in section 16-1, that services the participating municipality.

(d) If a benefited property owner requests financing from the bank or a third-party capital provider for energy improvements under this section, the bank shall:

(1) Require performance of an energy audit or renewable energy system feasibility analysis on the qualifying commercial real property that assesses the expected energy cost savings of the energy improvements over the useful life of such improvements before approving such financing;

(2) If financing is approved, either by the bank or the third-party capital provider, require the participating municipality to levy a benefit assessment on the qualifying commercial real property with the property owner in a principal amount sufficient to pay the costs of the energy improvements and any associated costs the bank or the third-party capital provider determines will benefit the qualifying commercial real property;

(3) Impose requirements and criteria to ensure that the proposed energy improvements are consistent with the purpose of the commercial sustainable energy program;

(4) Impose requirements and conditions on the financing to ensure timely repayment, including, but not limited to, procedures for placing a lien on a property as security for the repayment of the benefit assessment; and

(5) Require that the property owner provide written notice, not less than thirty days prior to the recording of any lien securing a benefit assessment for energy improvements for such property, to any existing mortgage holder of such property, of the property owner's intent to finance such energy improvements pursuant to this section.

(e) (1) The bank or the third-party capital provider may enter into a financing agreement with the property owner of qualifying commercial real property. After such agreement is entered into, and upon notice from the bank, the participating municipality shall (A) place a caveat on the land records indicating that a benefit assessment and a lien [is] are anticipated upon completion of energy improvements for such property, or (B) at the direction of the bank, levy the benefit assessment and file a lien on the land records based on the estimated costs of the energy improvements prior to the completion or upon the completion of [said] such improvements.

(2) The bank or the third-party capital provider shall disclose to the property owner the costs and risks associated with participating in the commercial sustainable energy program established by this section, including risks related to the failure of the property owner to pay the benefit assessment. The bank or the third-party capital provider shall disclose to the property owner the effective interest rate of the benefit assessment, including fees charged by the bank or the third-party capital provider to administer the program, and the risks associated with variable interest rate financing. The bank or the third-party capital provider

shall notify the property owner that such owner may rescind any financing agreement entered into pursuant to this section not later than three business days after such agreement.

(f) The bank or the third-party capital provider shall set a fixed or variable rate of interest for the repayment of the benefit assessment amount at the time the benefit assessment is made. Such interest rate, as may be supplemented with state or federal funding as may become available, shall be sufficient to pay the bank's financing and administrative costs of the commercial sustainable energy program, including delinquencies.

(g) Benefit assessments levied pursuant to this section and the interest, fees and any penalties thereon shall constitute a lien against the qualifying commercial real property on which they are made until they are paid. Such lien, or if the financing agreement provides that the benefit assessments shall be paid in installments then each installment payment, shall be collected in the same manner as the property taxes of the participating municipality on real property, including, in the event of default or delinquency, with respect to any penalties, fees and remedies. Each such lien may be recorded and released in the manner provided for property tax liens and, subject to the consent of existing mortgage holders, shall take precedence over all other liens or encumbrances except a lien for taxes of the municipality on real property, which lien for taxes shall have priority over such benefit assessment lien. To the extent benefit assessments are paid in installments and any such installment is not paid when due, the benefit assessment lien may be foreclosed to the extent of any unpaid installment payments and any penalties, interest and fees related thereto. In the event such benefit assessment lien is foreclosed, such benefit assessment lien shall survive the judgment of foreclosure to the extent of any unpaid installment payments of the benefit assessment secured by such benefit assessment lien that were not the subject of such judgment.

(h) Any participating municipality may assign to the bank any and all liens filed by the tax collector, as provided in the written agreement between the participating municipality and the bank. The bank may sell or assign, for consideration, any and all liens received from the participating municipality. The consideration received by the bank shall be negotiated between the bank and the assignee. The assignee or assignees of such liens shall have and possess the same powers and rights at law or in equity as the bank and the participating municipality and its tax collector would have had if the lien had not been assigned with regard to the precedence and priority of such lien, the accrual of interest and the fees and expenses of collection. The assignee shall have the same rights to enforce such liens as any private party holding a lien on real property, including, but not limited to, foreclosure and a suit on the debt. Costs and reasonable attorneys' fees incurred by the assignee as a result of any foreclosure action or other legal proceeding brought pursuant to this section and directly related to the proceeding shall be taxed in any such proceeding against each person having title to any property subject to the proceedings. Such costs and fees may be collected by the assignee at any time after demand for payment has been made by the assignee.

## **Attachment B**

### **House Bill No. 6838**

#### ***AN ACT CONCERNING THE ENCOURAGEMENT OF LOCAL ECONOMIC DEVELOPMENT AND ACCESS TO RESIDENTIAL RENEWABLE ENERGY.***

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Section 16-245ff of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) As used in this section and section 16-245gg, as amended by this act:

(1) "Performance-based incentive" means an incentive paid out on a per kilowatt-hour basis.

(2) "Expected performance-based buydown" means an incentive paid out as a one-time upfront incentive based on expected system performance.

(3) "Qualifying residential solar photovoltaic system" means a solar photovoltaic project that receives funding from the Connecticut Green Bank, is certified by the authority as a Class I renewable energy source, as defined in subsection (a) of section 16-1, emits no pollutants, is less than twenty kilowatts in size, is located on the customer-side of the revenue meter of one-to-four family homes and serves the distribution system of an electric distribution company.

(4) "Solar home renewable energy credit" means a Class I renewable energy credit created by the production of one megawatt hour of electricity generated by one or more qualifying residential solar photovoltaic systems with an approved incentive from the Connecticut Green Bank on or after January 1, 2015.

~~[(a)]~~ (b) The Connecticut Green Bank established pursuant to section 16-245n shall structure and implement a residential solar investment program established pursuant to this section, which shall ~~[result in a minimum of thirty]~~ support the deployment of not more than three hundred megawatts of new residential solar photovoltaic installations located in this state on or before (1) December 31, 2022, [the annual] or (2) the deployment of three hundred megawatts of residential solar photovoltaic installation, in the aggregate, whichever occurs sooner, provided the bank does not approve direct financial incentives under this section for more than one hundred megawatts of new qualifying residential solar photovoltaic systems, in the aggregate, between the date of passage of this act and April 1, 2016. The procurement and cost of [which] such program shall be determined by the bank [and the cost of which shall not exceed one-third of the total surcharge collected annually pursuant to said] in accordance with this section. ~~[16-245n.]~~

~~[(b)]~~ (c) The Connecticut Green Bank shall offer direct financial incentives, in the form of performance-based incentives or expected performance-based buydowns, for the purchase or lease of qualifying residential solar photovoltaic systems until the earlier of the following:



(1) December 31, 2022, or (2) the deployment of three hundred megawatts, in the aggregate, of residential solar photovoltaic installation. [For the purposes of this section, "performance-based incentives" means incentives paid out on a per kilowatt-hour basis, and "expected performance-based buydowns" means incentives paid out as a one-time upfront incentive based on expected system performance.] The bank shall consider willingness to pay studies and verified solar photovoltaic system characteristics, such as operational efficiency, size, location, shading and orientation, when determining the type and amount of incentive. Notwithstanding the provisions of subdivision (1) of subsection (h) of section 16-244c, the amount of renewable energy produced from Class I renewable energy sources receiving tariff payments or included in utility rates under this section shall be applied to reduce the electric distribution company's Class I renewable energy source portfolio standard [. Customers who receive expected performance-based buydowns under this section shall not be eligible for a credit pursuant to section 16-243h] until the Public Utilities Regulatory Authority approves the master purchase agreement pursuant to subsection (e) of section 16-245gg, as amended by this act.

[(c)] (d) [Beginning with the comprehensive plan covering the period from July 1, 2011, to June 30, 2013, the] The Connecticut Green Bank shall develop and publish [in each such plan] on its Internet web site a proposed schedule for the offering of performance-based incentives or expected performance-based buydowns over the duration of any such solar incentive program. Such schedule shall: (1) Provide for a series of solar capacity blocks the combined total of which shall be a [minimum] maximum of [thirty] three hundred megawatts and projected incentive levels for each such block; (2) provide incentives that are sufficient to meet reasonable payback expectations of the residential consumer and provide such consumer with a competitive electricity price, taking into consideration the estimated cost of residential solar installations, the value of the energy offset by the system, the cost of financing the system, and the availability and estimated value of other incentives, including, but not limited to, federal and state tax incentives and revenues from the sale of solar home renewable energy credits; (3) provide incentives that decline over time and will foster the sustained, orderly development of a state-based solar industry; (4) automatically adjust to the next block once the board has issued reservations for financial incentives provided pursuant to this section from the board fully committing the target solar capacity and available incentives in that block; and (5) provide comparable economic incentives for the purchase or lease of qualifying residential solar photovoltaic systems. The [bank] Connecticut Green Bank may retain the services of a third-party entity with expertise in the area of solar energy program design to assist in the development of the incentive schedule or schedules. The Department of Energy and Environmental Protection shall review and approve such schedule. Nothing in this subsection shall restrict the [bank] Connecticut Green Bank from modifying the approved incentive schedule [before the issuance of its next comprehensive plan] to account for changes in federal or state law or regulation or developments in the solar market when such changes would affect the expected return on investment for a typical residential solar photovoltaic system by [twenty] ten per cent or more. Any such modification shall be subject to review and approval by the department.

[(d)] (e) The Connecticut Green Bank shall establish and periodically update program guidelines, including, but not limited to, requirements for systems and program participants related to: (1) Eligibility criteria; (2) standards for deployment of energy efficient equipment or building practices as a condition for receiving incentive funding; (3) procedures to provide reasonable assurance that such reservations are made and incentives are paid out only to qualifying residential solar photovoltaic systems demonstrating a high likelihood of being installed and operated as indicated in application materials; and (4) reasonable protocols for the measurement and verification of energy production.

[(e)] (f) The Connecticut Green Bank shall maintain on its Internet web site the schedule of incentives, solar capacity remaining in the current block and available funding and incentive estimators.

[(f)] (g) Funding for the residential [performance-based incentive program and expected performance-based buydowns shall be apportioned from] solar investment program (1) may include up to one-third of the moneys collected annually under the surcharge specified in section 16-245n; [, provided such apportionment shall not exceed one-third of the total surcharge collected annually,] (2) shall include all of the revenue from the solar home renewable energy credit program; and (3) may be supplemented by federal funding as may become available.

[(g)] (h) The Connecticut Green Bank shall identify barriers to the development of a permanent Connecticut-based solar workforce and shall make provision for comprehensive training, accreditation and certification programs through institutions and individuals accredited and certified to national standards.

(i) The Public Utilities Regulatory Authority shall provide an additional incentive of up to five per cent of the then-applicable incentive provided pursuant to this section for the use of major system components manufactured or assembled in Connecticut, and another additional incentive of up to five per cent of the then-applicable incentive provided pursuant to this section for the use of major system components manufactured or assembled in a distressed municipality, as defined in section 32-9p, or a targeted investment community, as defined in section 32-222.

[(h)] (j) On or before January 1, [2014] 2017, and every two years thereafter for the duration of the program, the Connecticut Green Bank shall report to the joint standing committee of the General Assembly having cognizance of matters relating to energy on progress toward the goals identified in subsection [(a)] (b) of this section.

Sec. 2. Section 16-245gg of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

[The Public Utilities Regulatory Authority shall provide an additional incentive of up to five per cent of the then-applicable incentive provided pursuant to section 16-245ff for the use of major system components manufactured or assembled in Connecticut, and another additional incentive of up to five per cent of the then-applicable incentive provided pursuant

to section 16-245ff for the use of major system components manufactured or assembled in a distressed municipality, as defined in section 32-9p, or a targeted investment community, as defined in section 32-222.]

(a) Not later than one hundred eighty days after July 1, 2015, the Connecticut Green Bank shall negotiate and develop a master purchase agreement with each electric distribution company. Each such agreement shall have a term of fifteen years, and require the electric distribution company to purchase solar home renewable energy credits produced by qualifying residential solar photovoltaic systems. Each electric distribution company's obligation to purchase solar home renewable energy credits produced by qualifying residential solar photovoltaic systems begins on the date that the Public Utilities Regulatory Authority approves the master purchase agreement pursuant to subsection (e) of this section and expires on December 31, 2022.

(b) Solar home renewable energy credits shall be owned by the Connecticut Green Bank, until transferred to an electric distribution company pursuant to a master purchase agreement in accordance with subsection (a) of this section. A solar home renewable energy credit shall have an effective life covering the year of its production and the following calendar year. The obligation of the electric distribution companies to purchase solar home renewable energy credits pursuant to the master purchase agreement shall be apportioned to electric distribution companies based on their respective distribution system loads at the commencement of the master purchase agreement period, as determined by the authority.

(c) Notwithstanding subdivision (1) of subsection (h) of section 16-244c, an electric distribution company may retire the solar home renewable energy credits it procures through the master purchase agreement to satisfy its obligation pursuant to section 16-245a or such company may resell such renewable energy credits, with the proceeds from resale to be netted against contract costs.

(d) To develop a master purchase agreement, the Connecticut Green Bank and an electric distribution company shall negotiate in good faith the final terms of the draft master purchase agreement. Thirty days after the date negotiations commence, either the Connecticut Green Bank or an electric distribution company may initiate a docket proceeding before the Public Utilities Regulatory Authority to resolve any outstanding issues pertaining to the master purchase agreement.

(e) Upon completion of negotiations on a master purchase agreement the Connecticut Green Bank and the electric distribution company shall not later than January 1, 2016, jointly file, with the authority, an application for approval of the agreement by the authority. No such master purchase agreement may become effective without approval of the authority. The authority shall hold a contested case, in accordance with the provisions of chapter 54, to approve, reject or modify an application for approval of the master purchase agreement.

(f) The purchase price of solar home renewable energy credits shall be determined by the Connecticut Green Bank, and such purchase price shall decline over time commensurate with the schedule of declining performance-based incentives and expected performance-

based buydowns. Such purchase price shall not exceed the lesser of either (1) the price of small zero-emission renewable energy credit projects for the preceding year, or (2) five dollars less per renewable energy credit than the alternative compliance payment pursuant to subsection (k) of section 16-245. Any customer of an electric distribution company that is eligible for the residential solar investment program shall not be eligible for small zero-emission renewable energy credits pursuant to section 16-244s.

(g) The electric distribution companies' costs associated with complying with this section shall be recoverable on a timely basis through a fully reconciling, nonbypassable rate component. Nothing in this section shall preclude the resale or other disposition of energy or associated renewable energy credits purchased by an electric distribution company, provided the electric distribution company shall net the cost of payments made to projects under the master purchase agreement against the proceeds of the sale of energy or renewable energy credits and the difference shall be credited or charged to electric distribution company customers through a reconciling component of electric rates as determined by the authority that is nonbypassable when switching electric suppliers.

(h) Each electric distribution company shall annually file with the authority an accounting of all costs and fees incurred by such electric distribution company while complying with the master purchase agreement.

(i) Any certificates issued by the New England Power Pool Generation Information System for Class I renewable energy credits produced by a qualifying residential solar photovoltaic system after the electric distribution company obligation, pursuant to subsections (a) and (b) of this section, to purchase solar home renewable energy credits from such system expires shall be transferred from the Connecticut Green Bank to the electric distribution company that services the area where such residential solar photovoltaic system is located. The electric distribution company shall either (1) resell such credits into the New England Power Pool Generation Information System renewable energy credit market, to be used by any electric supplier or electric distribution company to meet the requirements of section 16-245a, so long as the revenues from such sale are credited to the electric distribution company's customers, or (2) retain such certificates to meet such company's requirements under section 16-245a. In considering whether to sell or retain such certificates, the company shall select the option that is in the best interest of such company's ratepayers.

Sec. 3. (NEW) (*Effective October 1, 2015*) (a) As used in this section:

(1) "Residential solar photovoltaic system" means equipment and devices that have the primary purpose of collecting solar energy and generating electricity by photovoltaic effect, have a nameplate capacity rating of twelve kilowatts or less, are installed on the roof of a single-family home and conform to the Connecticut State Building Code;

(2) "Municipality" means any town, city, borough, consolidated town and city or consolidated town and borough;

(3) "Electronic submission" means the act of a permit applicant who submits his or her completed application to a municipality for review by means of electronic mail, facsimile or electronic application available on a municipality's Internet web site.

(b) Not later than January 1, 2016, each municipality shall incorporate residential solar photovoltaic systems in its building permit application process or utilize a residential solar photovoltaic system permit application supplement. Each municipality may (1) develop and post on the municipality's Internet web site a permit application for the installation of a residential solar photovoltaic system, (2) allow for electronic submission of such application, and (3) exempt such system from payment of permit fees pursuant to subsection (c) of section 29-263 of the general statutes.

(c) Not more than thirty days after receipt of a permit application, a municipality shall inform such permit applicant whether such application is approved or disapproved.

(d) In conducting inspections of work completed pursuant to a residential solar photovoltaic system permit, a local building official may use additional resources as described in the International Residential Code portion of the Connecticut State Building Code. Inspections shall be performed pursuant to said International Residential Code portion of the Connecticut State Building Code.

(e) Nothing in this section shall authorize any person to cause any home or structure located within a historic district established pursuant to section 7-147b of the general statutes to be altered, as defined in section 7-147a of the general statutes.

(f) Not later than December 1, 2015, the Connecticut Green Bank, in consultation with the office of the State Building Inspector, shall plan, implement and host five residential solar photovoltaic system permit training seminars, in different municipalities for the purpose of providing guidance and information to municipal officials developing a permitting process in accordance with this section. The Connecticut Green Bank may consult with the Connecticut Conference of Municipalities, the Connecticut Council of Small Towns, the Renewable Energy and Efficiency Business Association and any other organization or representative of such organization in the planning and implementation of the training seminars.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>from passage</i>	16-245ff
Sec. 2	<i>from passage</i>	16-245gg
Sec. 3	<i>October 1, 2015</i>	New section

The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber

thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

***OFA Fiscal Note***

***State Impact:*** None

***Municipal Impact:*** None

***Explanation***

The bill expands the Connecticut Green Bank's residential solar investment program. The Connecticut Green Bank is a quasi-public state agency which does not currently receive state funding. The program is not estimated to have a fiscal impact on the state or municipalities as ratepayers.

House "A" eliminates the original bill and the associated impact and results in the impact described above.

***The Out Years***

***State Impact:*** None

***Municipal Impact:*** None

**OLR Bill Analysis**

**HB 6838 (as amended by House "A")\***

***AN ACT CONCERNING THE ENCOURAGEMENT OF LOCAL ECONOMIC DEVELOPMENT AND ACCESS TO RESIDENTIAL RENEWABLE ENERGY.***

**SUMMARY:**

This bill expands the Connecticut Green Bank's residential solar investment program and standardizes certain steps in the municipal permitting process for installing residential solar systems.

Regarding the solar investment program, the bill:

1. allows the program to support up to 300 megawatts (MW) of new residential solar photovoltaic (PV) installations by the end of 2022, instead of requiring it to provide 30 MW of PV installations by that time;
2. requires the program to end on the earlier of December 31, 2022 or when it achieves 300 MW of installations;

3. creates solar home renewable energy credits (SHRECs) which are owned by the Green Bank and generated when certain residential PV systems produce electricity;
4. requires electric distribution companies (EDCs, i.e., Eversource and United Illuminating) to purchase SHRECs from the Green Bank under a master purchase agreement negotiated between each EDC and the Green Bank;
5. expands the program's funding sources to include proceeds from the Green Bank's sale of SHRECs to the EDCs; and
6. allows the EDCs to recover their costs for purchasing the SHRECs through a reconciling (adjustable) component of their electric rates, as determined by the Public Utilities Regulatory Authority (PURA).

Regarding the municipal permitting process, the bill requires each municipality, by January 1, 2016, to incorporate residential solar PV systems in their building permit application process or use a residential solar PV system permit application supplement. It also allows municipalities to (1) post applications online, (2) permit electronic filing, and (3) waive certain fees. Under the bill, municipalities must inform a permit applicant whether the application is approved or disapproved within 30 days of receiving an application.

The bill requires the Green Bank, in consultation with the state building inspector, to implement a residential solar PV system permit training seminar for municipal officials developing a permitting process.

It also makes minor, technical, and conforming changes.

\*House Amendment "A", among other things, (1) makes 300 MW a cap, instead of a goal, for the solar investment program; (2) terminates the program of when it reaches the cap or December 31, 2022, whichever is earlier; (3) requires the purchase price of SHRECs to decline over time; (4) prohibits customers who participate in the program from participating in the Z-REC program; (5) requires the Green Bank to transfer RECS to the EDCs after their obligation to purchase them expires; and (6) adds the provisions on residential solar PV permitting.

EFFECTIVE DATE: Upon passage, except the provisions on municipal permitting are effective October 1, 2015.

## **THE RESIDENTIAL SOLAR INVESTMENT PROGRAM**

By law, the Green Bank's residential solar investment program offers financial incentives for purchasing or leasing certain residential solar PV systems. The incentives are either (1) performance-based incentives paid out on a per kilowatt-hour (kWh) basis for the electricity the system produces or (2) expected performance-based buy downs that are a one-time upfront payment based on the system's expected performance.

The law provides these incentives for "qualifying residential solar PV systems." The bill specifies that these systems are solar PV projects that

1. receive funding from the Green Bank,
2. are certified by PURA as Class I renewable energy sources,
3. emit no pollutants,
4. generate less than 20 kilowatts,
5. are on the customer-side of a one- to-four-family home's revenue meter, and
6. serve an EDC's distribution system.

Current law requires the program to result in at least 30 MW of new residential PV systems by December 31, 2022. The bill instead (1) requires the program to support the deployment of up to 300 MW of systems by that date and (2) terminates the program on that date or when the program reaches the 300 MW cap, whichever occurs first. It also prohibits the bank from approving incentives for more than 100 MW of new systems between the date the bill passes and April 1, 2016.

The law allows the Green Bank to fund the program with up to one-third of the funds annually collected through the charge on electric bills that supports the Clean Energy Fund, plus any available federal funding. The bill requires the bank to also fund the program with all of the revenue it receives from the sale of SHRECs, which the bill creates.

Current law requires the renewable energy produced from a program's PV systems to be applied toward the EDCs' renewable portfolio standard requirements (RPS, a requirement to obtain a certain percentage of their energy from renewable energy sources) if it receives tariff payments or is included in utility rates. The bill eliminates this requirement once the master purchase agreement is approved and instead allows the EDCs to retire the SHRECS they must purchase under the bill to satisfy their RPS requirements.

### ***Solar Home Renewable Energy Credits***

The bill creates SHRECs, which are Class I renewable energy credits created for each megawatt hour of electricity produced by qualifying residential solar PV systems that receive approved incentives from the Green Bank on or after January 1, 2015. A SHREC has an effective life that covers the year it was produced and the next calendar year. It is owned by the Green Bank until transferred to an EDC under the master purchase agreement.

Under the bill, the Green Bank sets the purchase price for SHRECs, which must decline over time commensurate with the schedule of declining performance-based incentives and expected performance-based buy-downs. The price cannot exceed the lesser of (1) the preceding year's price for small Z-RECs (a similar renewable energy credit produced by certain zero-emission facilities) or (2) \$5 less per credit than the RPS alternative compliance payment (a 5.5 cents/kWh penalty for failing to meet RPS requirements). The bill prohibits EDC customers who are eligible for the SHREC program from also being eligible for the Z-REC program.



### ***Master Purchase Agreement***

The bill requires the Green Bank, within 180 days after July 1, 2015, to negotiate and develop a 15-year master purchase agreement with each EDC requiring the EDC to purchase the bank's SHRECs. Each EDC's obligation to purchase SHRECs must (1) begin once PURA approves the agreement; (2) expire on December 31, 2022; and (3) be apportioned based on its distribution system's demand for electricity, as determined by PURA, when the agreement begins.

The bill requires the Green Bank and EDCs to negotiate in good faith to develop the agreement. If there are any outstanding issues 30 days after the negotiations start, either party may initiate a docket with PURA to resolve the issues. Once the negotiations are complete, the Green Bank and EDCs must, by January 1, 2016, jointly file the agreement for PURA's approval. PURA must hold a contested case under the Uniform Administrative Procedure Act to approve, reject, or modify the agreement, which cannot become effective without PURA's approval. (The bill does not specify what criteria PURA must use to approve, reject, or modify an agreement.)

### ***EDC Cost Recovery***

The bill requires that EDCs timely recover their costs associated with complying with the bill's requirements through a fully reconciling (adjustable), non-bypassable rate component. Each EDC must annually file with PURA an accounting of all costs and fees it incurred while complying with the master purchase agreement.

The EDCs can resell or dispose of the energy or credits they purchased under the agreement, but the proceeds from the sale must be netted against their costs for complying with the agreement. The difference must be credited or charged to the EDC's customers through a PURA-determined reconciling component of their electric rates that cannot be bypassed by switching electric suppliers.

Once the EDCs' obligation to purchase SHRECs expires, any Class I renewable energy credits (RECs) produced by a qualifying residential PV system must be transferred from the Green Bank to the PV system's EDC. The EDC must either (1) resell the credits into the New England Power Pool Generation Information System REC market for electric suppliers and EDCs to meet their RPS requirements or (2) keep the credits to meet its own RPS requirements. In deciding whether to resell or keep the RECs, the EDC must select the option that is in its ratepayers' best interests.

### ***Other Provisions***

The bill eliminates a provision in current law that prohibits customers who receive the program's performance-based buy down from receiving net metering credits (i.e. billing credits that allow a customer to "run their meter backwards" based on how much excess electricity their PV system generates).

The bill requires the Green Bank to publish on its website, instead of in its biannual comprehensive plan a proposed schedule for offering program incentives. Among other things, current law requires the incentives to meet a consumer's reasonable payback expectations. The bill requires them to also provide the consumer with a competitive electricity price and adds the cost of financing the system to various other factors the bank must consider when setting the incentives (e.g., the value of energy offset by the system and the availability and value of other incentives).

Current law allows the Green Bank to modify an incentive schedule if changes in federal or state law or developments in the solar market would affect a typical residential PV system's expected return on investment by 20% or more. The bill lowers this threshold to 10% and subjects the modification to review and approval by the Department of Energy and Environmental Protection.

The bill also extends, from January 1, 2016 to January 1, 2017, the deadline for the Green Bank's next biannually required report to the Energy Committee on the program's progress.

### **RESIDENTIAL SOLAR PERMITTING**

The bill requires each municipality, by January 1, 2016, to incorporate residential solar PV systems in their building permit application process or use a residential solar PV system permit application supplement. Under the bill's permitting provisions, a residential solar PV system is equipment and devices that:

1. collect solar energy and generate electricity by photovoltaic effect,
2. have a nameplate capacity rating of 12 kilowatts or less,
3. are installed on the roof of a single-family home, and
4. conform to the State Building code.

The bill allows a municipality, when developing a permitting process, to:

1. develop and post on its website a permit application for installing residential solar PV systems;
2. allow applicants to submit applications electronically; and
3. exempt the systems from municipal permit fees assessed on building permit applications to construct or alter a building or structure.

The bill requires municipalities to inform an applicant for a residential solar PV system whether the permit is approved or disapproved within 30 days after receiving the permit application. It allows local building officials, when inspecting the work completed under a permit, to use additional resources described in the International Residential Code portion of the State Building Code. Inspections must be performed according to this portion of the code.

The bill specifies that its provisions do not authorize anyone to alter homes or structures in historic districts.

***Training Seminar***

By December 1, 2015, the bill requires the Green Bank to plan, implement, and host at least five residential solar PV system permit training seminars in different municipalities to provide guidance and information to municipalities seeking to develop a permitting process. In planning and implementing the seminars, the Green Bank may consult with (1) the Connecticut Conference of Municipalities, (2) the Connecticut Council of Small Towns, (3) the Renewable Energy and Efficiency Business Association, and (4) other organizations.

## **Attachment C**

### **House Bill No. 6995**

#### ***AN ACT CONCERNING A RESIDENTIAL PROPERTY ASSESSED CLEAN ENERGY PROGRAM.***

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Section 7-121n of the general statutes is repealed and the following is substituted in lieu thereof (*Effective January 1, 2016*):

(a) As used in this section:

(1) "Energy improvements" means any renovation or retrofitting of qualifying real property to reduce energy consumption or installation of a [renewable energy] system for clean energy, as defined in section 16-245n, to service qualifying real property, [provided such] and that may include related improvements to address water conservation, health and safety issues, including, but not limited to, asbestos, mold and lead remediation, and resiliency measures, including, but not limited to, flood resistant construction and hurricane resistant construction. Any renovation, retrofit or installation [is] shall be permanently fixed to such qualifying real property and may include a third-party ownership arrangement, including, but not limited to, a power purchase agreement and a lease agreement, provided the duration of any such agreement is not less than the lesser of the average estimated useful life of the principal components or ten years;

(2) ["Qualifying real property"] "Qualifying residential real property" means a single-family or multifamily residential dwelling [or a nonresidential building, regardless of ownership, that a municipality has determined can benefit from energy improvements] of four or fewer units that meets the qualifications established for the residential sustainable energy program;

(3) "Property owner" means an owner or owners of qualifying residential real property who [desires] desire to install energy improvements and [provides] who provide free and willing consent to the contractual assessment against the qualifying residential real property; [and]

[(4) "Sustainable energy program" means a municipal program that authorizes a municipality to enter into contractual assessments on qualifying real property with property owners to finance the purchase and installation of energy improvements to qualifying real property within its municipal boundaries.]

(4) "Residential sustainable energy program" means a program that facilitates energy improvements and utilizes the benefit assessment authorized by this section as security for the financing of energy improvements;

(5) "Municipality" means a municipality, as defined in section 7-369;

(6) "Benefit assessment" means the assessment authorized by this section;

(7) "Participating municipality" means a municipality that has entered into a written agreement, as approved by its legislative body, with the bank pursuant to which the municipality has agreed to assess, collect, remit and assign benefit assessments to the bank in return for energy improvements for benefited property owners within such municipality and costs reasonably incurred in performing such duties;

(8) "Bank" means the Connecticut Green Bank; and

(9) "Third-party capital provider" means an entity, other than the bank, that provides loans, leases or power purchase agreements directly to benefited property owners for energy improvements.

[(b) Any municipality, that determines it is in the public interest, may establish a sustainable energy program to facilitate the increase of energy efficiency and renewable energy. A municipality shall make such a determination after issuing public notice and providing an opportunity for public comment regarding the establishment of a sustainable energy program.]

(b) (1) The bank shall establish a residential sustainable energy program in the state, and in furtherance thereof, is authorized to make appropriations for and issue bonds, notes or other obligations for the purpose of financing (A) energy improvements; (B) related energy audits; and (C) verification reports of the installation and effectiveness of such improvements. The bank may encourage third-party capital providers to provide financing directly to benefited property owners in lieu of or in addition to the bank providing such financing. The bonds, notes, other obligations or other financing provided by third-party capital providers may be secured as to both principal and interest by a pledge of the liens, such other collateral and the revenues to be derived from the residential sustainable energy program, including revenues from benefit assessments on qualifying residential real property, as authorized in this section.

(2) When the bank or third-party capital provider has made appropriations for energy improvements for qualifying residential real property or other costs of the residential sustainable energy program, including interest costs and other costs related to the issuance of bonds, notes, other obligations or other financing provided to finance the appropriation, the bank shall require the participating municipality in which the qualifying residential real property is located to levy a benefit assessment against the qualifying residential real property especially benefited thereby.

[(c)] (3) [Notwithstanding the provisions of section 7-374 or any other public or special act that limits or imposes] The bank shall develop program guidelines governing the terms and conditions [on municipal bond issues, any municipality that establishes a sustainable energy program under this section may issue bonds, as necessary, for the purpose of financing (1) energy improvements; (2) related energy audits; and (3) renewable energy system feasibility studies and the verification of the installation of such improvements. Such financing shall be secured by special contractual assessments on the qualifying real property] under which funding may be made available to the residential sustainable energy program, in consultation

with representatives from the banking industry, municipalities and property owners, and serving as an aggregate entity for the purpose of securing state or private third-party financing for energy improvements pursuant to this section.

(4) The bank shall adopt general standards to ensure that estimated energy cost savings of the energy improvements over the average estimated useful life of such improvements exceed the costs of such improvements.

(5) The bank may establish a loan loss reserve or other credit enhancement program for qualifying residential real property, and the bank may use the services of one or more private, public or quasi-public third-party administrators to administer, provide support or obtain financing for the residential sustainable energy program.

[(d) (1) Any municipality that establishes a sustainable energy program pursuant to this section may partner with another municipality or a state agency to (A) maximize the opportunities for accessing public funds and private capital markets for long-term sustainable financing, and (B) secure state or federal funds available for this purpose.

(2) Any municipality that establishes a sustainable energy program and issues bonds pursuant to this section may supplement the security of such bonds with any other legally available funds solely at the municipality's discretion.

(3) Any municipality that establishes a sustainable energy program pursuant to this section may use the services of one or more private, public or quasi-public third-party administrators to provide support for the program.]

[(e)] (c) Before establishing a program under this section, the [municipality] bank shall provide notice to the electric distribution company, as defined in section 16-1, that services the municipality.

[(f)] (d) If [the] a benefited property owner [of record of qualifying real property] requests financing from the bank, or a third-party capital provider, for energy improvements under this section, the [municipality implementing the sustainable energy program] bank shall:

[(1) Require performance of an energy audit or renewable energy system feasibility analysis on the qualifying real property before approving such financing;

(2) Enter into a contractual assessment on the qualifying real property with the property owner in a principal amount sufficient to pay the costs of energy improvements and any associated costs the municipality determines will benefit the qualifying real property and may cover any associated costs;]

[(3)] (1) Impose requirements and criteria to ensure that the proposed energy improvements are consistent with the purpose of the residential sustainable energy program; and

[(4)] (2) Impose requirements and conditions on the financing to ensure timely repayment, including, but not limited to, underwriting criteria and procedures for placing a lien on [a] the

qualifying residential real property as security for [which an owner defaults on] repayment of the benefit assessment.

(e) (1) The bank or the third-party capital provider may enter into a financing agreement with the property owner of qualifying residential real property. After such agreement is entered into, and upon notice from the bank, the participating municipality shall (A) place a caveat on the land records indicating that a benefit assessment and a lien are anticipated upon completion of energy improvements for such property, or (B) at the direction of the bank, levy the benefit assessment and file a lien on the land records based on the estimated costs of the energy improvements prior to the completion or upon the completion of such improvements.

(2) The bank, or the third-party capital provider, shall disclose to the property owner the costs and risks associated with participating in the residential sustainable energy program established by this section and shall disclose to the property owner the terms and conditions of the assessment, including term, payments and remedies for default and foreclosure, including risks related, but not necessarily limited to (A) the failure of the property owner to pay the benefit assessment, (B) the benefit assessment remaining on the property until satisfied, (C) the potential to impair the sale of the property, (D) the potential for violation of certain provisions under any existing indebtedness secured by the benefited property, and (E) the potential for the assessment to be paid off when such indebtedness is refinanced or when the property is sold. The bank, or the third-party capital provider, shall disclose to the property owner the effective interest rate of the benefit assessment, including fees charged by the bank or the third-party capital provider to administer the program. The bank or the third-party capital provider shall notify the property owner that such owner may rescind any financing agreement entered into pursuant to this section not later than three business days after such agreement.

[(g)] (f) Prior to entering a contractual assessment, the [municipality] bank or third-party capital provider shall provide each property owner the following notice, which shall be set forth in at least fourteen-point bold type: SEEK LEGAL ADVICE BEFORE PARTICIPATING IN THIS LOAN PROGRAM TO ENSURE UNDERSTANDING OF POTENTIAL CONSEQUENCES, INCLUDING A POSSIBLE DEFAULT UNDER YOUR MORTGAGE.

[(h)] (g) Any benefit assessment levied pursuant to this section shall have a term not to exceed the [calculated payback period for] lesser of (1) the average estimated useful life of the installed energy improvements, as determined by [the municipality, and shall have no prepayment penalty. The municipality] a contractor eligible to install such improvements under the residential sustainable energy program and consistent with the guidelines established by the bank, or (2) twenty-five years. The bank or the third-party capital provider shall set a fixed rate of interest or a fixed payment schedule for leases, power purchase agreements or other such approved financing structures for the repayment of the principal assessed amount at the time the benefit assessment is made. Such interest rate, as may be supplemented with state or federal funding as may become available, shall be sufficient to pay the financing costs of the program, including delinquencies.

[(i) Assessments] (h) Benefit assessments levied pursuant to this section and the interest, fees and any penalties thereon shall constitute a lien against the qualifying residential real property on which they are made until they are paid. [Such lien] If the agreement for the benefit assessment provides, the benefit assessment shall be [levied and] paid in installments and each installment payment shall be collected in the same manner as the [general] property taxes of the participating municipality on real property, including, in the event of default or delinquency, [with respect to] any penalties, fees and remedies, [and lien priorities, provided such lien shall not have priority over any prior mortgages.]

[(j) The area encompassing the sustainable energy program in a municipality may be the entire municipal jurisdiction of the municipality or a subset of such.]

(i) Each such lien shall be recorded and released in the manner provided for property tax liens and take precedence over all other liens or encumbrances except a lien for taxes of the municipality on real property, which lien for taxes shall have priority over such benefit assessment lien. To the extent a benefit assessment is paid in installments and any such installment is not paid when due, the benefit assessment lien may be foreclosed, or enforced by levy and sale of such real property in accordance with chapter 204, to the extent of any unpaid installment payments and any penalties, interest and fees related thereto. In the event such benefit assessment lien is foreclosed, or enforced by levy and sale of the real property in accordance with chapter 204, such benefit assessment lien shall survive the judgment of the foreclosure, or levy and sale, to the extent of any unpaid installment payments of the benefit assessment secured by such benefit assessment lien that was not the subject of such judgment, or levy and sale. If the lien is enforced by levy and sale under chapter 204, the references in chapter 204 to (1) "taxpayer" shall mean the benefited property owner, (2) "tax" or "taxes" shall mean the unpaid benefit assessment or the unpaid installment payments of the benefit assessment, as applicable, (3) "collector" shall mean the participating municipality's tax collector, and (4) "municipality" shall mean the then owner and beneficiary of the benefit assessment lien, including any assignees of the participating municipality and the bank. The form of collector's deed pursuant to section 12-158 shall be used in a levy and sale of real property to satisfy a benefit assessment lien.

(j) A participating municipality shall assign to the bank, or the third-party capital provider as applicable, any liens filed by the tax collector, as provided in the written agreement between the participating municipality and the bank. The bank or third-party capital provider may sell or assign, for consideration, any and all liens received from the participating municipality at its sole discretion. The assignee or assignees of such liens shall have and possess the same powers and rights at law or in equity as the participating municipality and its tax collector would have had if the lien had not been assigned with regard to the precedence and priority of such lien, the accrual of interest and the fees and expenses of collection. The assignee shall have the same rights to enforce such liens as any private party holding a lien on real property, including, but not limited to, foreclosure and a suit on the debt. In accordance with subsection (h) of this section, the assignee shall also have the right to enforce the lien through the levy and sale procedure under chapter 204. Costs and reasonable attorneys' fees incurred by the assignee as a result of any foreclosure action or other legal proceeding



brought pursuant to this section and directly related to the proceeding, including costs and fees incurred in enforcement of the lien by the levy and sale under section 12-140 and subsection (c) of section 12-157, shall be taxed in any such proceeding against each person having title to any property subject to the proceedings. Such costs and fees may be collected by the assignee at any time after demand for payment has been made by the assignee.

This act shall take effect as follows and shall amend the following sections:		
Section 1	January 1, 2016	7-121n

**Statement of Purpose:**

To create a residential property assessed clean energy program to help state residents finance and procure home energy efficiency improvements for their homes.

## **Attachment D**

### **House Bill No. 6020**

#### **AN ACT CONCERNING ANAEROBIC DIGESTION.**

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Section 103 of public act 11-80, as amended by section 156 of public act 12-2 of the June 12 special session, is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) The [Clean Energy Finance and Investment Authority] Connecticut Green Bank shall on or before March 1, 2012, establish a three-year pilot program to promote the development of new combined heat and power projects in Connecticut that are below five megawatts in capacity size. The program established pursuant to this section shall not exceed fifty megawatts. The [Clean Energy Finance and Investment Authority] Connecticut Green Bank shall examine the appropriate assistance to provide to each approved project. The [Clean Energy Finance and Investment Authority] Connecticut Green Bank shall set one or more standardized grant amounts, loan amounts and power purchase agreements for such projects to limit the administrative burden of project approvals for the [authority] bank and the project proponent, including, but not limited to, a per kilowatt cost of up to four hundred fifty dollars. Such standardized provisions shall seek to minimize costs for the general class of ratepayers, ensuring that the project developer has a significant share of the financial burden and risk, while ensuring the development of projects that benefit Connecticut's economy, ratepayers, and environment. The [Clean Energy Finance and Investment Authority] Connecticut Green Bank may in its discretion decline to support a proposed project if the benefits of such project to Connecticut's ratepayers, economy and environment, including emissions reductions, are too meager to justify ratepayer or taxpayer investment.

(b) The [Clean Energy Finance and Investment Authority] Connecticut Green Bank shall establish a [~~three-year~~] five-year pilot program to support through loans, grants or power purchase agreements sustainable practices and economic prosperity of Connecticut farms and other businesses by using organic waste with on-site anaerobic digestion facilities to generate electricity and heat. As part of the pilot program, said [authority] bank may approve no more than five projects, each of which shall have a maximum size of three megawatts at a cost of four hundred fifty dollars per kilowatt.

(c) On or before January 1, 2016, the [Clean Energy Finance and Investment Authority] Connecticut Green Bank shall report, in accordance with the provisions of section 11-4a of the general statutes, to the joint standing committee of the General Assembly having cognizance of matters relating to energy regarding the program established pursuant to subsection (a) of this section and whether such program should continue. On or before January 1, 2018, the Connecticut Green Bank shall report, in accordance with the provisions of section 11-4a of the general statutes, to the joint standing committee of the General

Assembly having cognizance of matters relating to energy regarding the program established pursuant to subsection (b) of this section and whether such program should continue.

(d) The [Clean Energy Finance and Investment Authority] Connecticut Green Bank shall allocate four million dollars annually from the Clean Energy Fund, provided two million dollars shall be allocated for combined heat and power projects and two million dollars shall be allocated for anaerobic digestion projects.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>from passage</i>	PA 11-80, Sec. 103

**ET**            *Joint Favorable*

The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

**OFA Fiscal Note**

**State Impact:** None

**Municipal Impact:** None

**Explanation**

The bill extends the Connecticut Green Bank's anaerobic digestion pilot program by two years. The Connecticut Green Bank is a quasi-public state agency which does not currently receive state funding. The program is not estimated to have a fiscal impact to the state or municipalities as ratepayers.

**The Out Years**

**State Impact:** None

**Municipal Impact:** None

**OLR Bill Analysis**

**HB 6020**

**AN ACT CONCERNING ANAEROBIC DIGESTION.**

**SUMMARY:**

This bill extends, by two years, the Connecticut Green Bank's anaerobic digestion pilot program. The program supports sustainable practices and economic prosperity of Connecticut farms and other businesses by using organic waste with on-site anaerobic digestion facilities to generate electricity and heat. Currently, the three-year pilot program ends this year and the Green Bank must report to the Energy and Technology Committee, by January 1, 2016, on the program and whether it should continue. The bill extends the reporting deadline by two years to January 1, 2018.

The bill also makes conforming changes to reflect that PA 14-94 renamed the Clean Energy Finance and Investment Authority as the Connecticut Green Bank.

EFFECTIVE DATE: Upon passage

**BACKGROUND*****Anaerobic Digestion Pilot Program***

The Green Bank's assistance under the program can take the form of loans, grants, or power purchase agreements. It may approve no more than five projects under the program, each with a maximum size of three megawatts and a maximum cost of \$450 per kilowatt.

The bank must allocate \$2 million annually from the Clean Energy Fund for the program.

***Anaerobic Digesters***

Anaerobic digesters convert manure or other organic products into methane, the principal component of natural gas. The methane can be used for heating or electricity generation, among other things.

## **Attachment E**

### ***Proposed Budget Implementer Language to Advance Green Bonds***

#### **Proposed Revision to C.G.S. § 16a-37x(i):**

- (i) (A) A guaranteed energy-savings performance contract may provide for financing, including tax exempt financing, by a third party. The contract for third-party financing may be separate from the energy-savings performance contract. A state agency or participating municipality may use designated funds, bonds, lease purchase agreements or master lease for any energy-savings performance contracts, provided its use is consistent with the purpose of the appropriation.

(B) FUNDS FOR LEASE PAYMENTS OR ANY OTHER OBLIGATIONS UNDER ANY SUCH LEASE PURCHASE AGREEMENT OR MASTER LEASE ENTERED INTO BY A STATE AGENCY WITH THE APPROVAL OF THE STATE TREASURER SHALL BE DEEMED APPROPRIATED FROM THE GENERAL FUND, AND THE TREASURER IS AUTHORIZED TO PAY SUCH LEASE PAYMENTS OR OTHER OBLIGATIONS WHEN DUE IN THE SAME MANNER AS DEBT SERVICE ON GENERAL OBLIGATION BONDS OF THE STATE. ANY SUCH LEASE PURCHASE AGREEMENT OR MASTER LEASE SHALL NOT BE SUBJECT TO THE PROVISIONS OF SECTION 3-20 OF THE GENERAL STATUTES. FOR PURPOSES OF SECTION 4-98 OF THE GENERAL STATUTES SUCH LEASE PURCHASE AGREEMENT OR MASTER LEASE SHALL BE DEEMED APPROVED BY THE GENERAL ASSEMBLY.

#### **Proposed Revision to C.G.S. § 16-245mm**

- (g) Notwithstanding any other provision contained in this section, the aggregate amount of bonds secured by such special capital reserve fund authorized to be created and established by this section shall not exceed ONE HUNDRED [fifty] million dollars.<sup>1</sup>

---

<sup>1</sup> Note that this is not limited to SCRF backing ESCO financings.

## Wade's Dairy: A C-PACE Project in Bridgeport, CT

<b>Address</b>	1316 Barnum Avenue, Bridgeport, CT 06610		
<b>Owner</b>	Wade Properties, LLC		
<b>Proposed Project Description</b>	100 kW solar carport array 64.3 kW rooftop solar array 61 kW rooftop solar array		
<b>Proposed C-PACE Assessment</b>	\$629,800 <sup>(1)</sup>		
<b>Assessment Term (years)</b>	20		
<b>Term Remaining (months)</b>	Pending Construction Completion		
<b>Annual Interest Rate</b>	6.0%		
<b>Annual C-PACE Assessment</b>	\$54,493		
<b>Savings-to-Investment Ratio</b>	1.16		
<b>Average Debt-Service Coverage Ratio</b>	[REDACTED]		
<b>Loan-to-Value Ratio</b>	[REDACTED]		
<b>Projected Energy Savings (mmBTU)</b>		RE	Total
	Per year	987	987
	Over term	25,849	25,849
<b>Estimated Cost Savings</b>	Per year (\$)	\$53,866	\$53,866
	Life Cycle (\$)	\$1,496,769	\$1,496,769
<b>Objective Function</b>	33.2 kBTU per ratepayer dollar at risk		
<b>Location</b>	City of Bridgeport		
<b>Type of Building</b>	(1) Office, (1) Commercial, (1) Garage, (3) Warehouse		
<b>Year of Build</b>	1900 - 1975		
<b>Building Size (total sf)</b>	23,118		
<b>Year Acquired by Current Owner</b>	1995		
<b>Assessed Value</b>	[REDACTED]		
<b>Status of Mortgage Lender Consent</b>	[REDACTED]		
<b>Est. Date of Construction Completion</b>	Pending closing		
<b>Current Status</b>	Pending CT Green Bank Board of Directors Approval		
<b>Energy Contractors</b>	[REDACTED]		
<b>Additional Comments</b>	<ul style="list-style-type: none"> <li>• [REDACTED]</li> <li>[REDACTED]</li> <li>[REDACTED]</li> <li>[REDACTED]</li> </ul>		





### Crowley Chrysler & Nissan: A C-PACE Project in Bristol, CT

<b>Address</b>	1461 Farmington Ave, Bristol, CT 06011		
<b>Owner</b>	Bristol Farms Associates, LLC		
<b>Proposed Assessment</b>	<del>\$1,085,559</del> <del>\$912,350</del>		
<b>Term (years)</b>	20		
<b>Term Remaining (months)</b>	Pending Construction Completion		
<b>Annual Interest Rate</b>	<del>6.05.75%*</del>		
<b>Annual C-PACE Assessment</b>	<del>\$92,039</del> <del>\$78,944</del>		
<b>Savings-to-Investment Ratio</b>	<del>1.331.14</del>		
<b>Average Debt-Service Coverage Ratio</b>	[REDACTED]		
<b>Loan-to-Value Ratio</b>	[REDACTED]		
<b>Lien-to-Value Ratio</b>	[REDACTED]		
<b>Proposed Energy Saved and/or Produced</b>		RE	Total
	Per year (MMBtu)	1,222 MMBtu	1,222 MMBtu
	Over term (MMBtu)	22,362 MMBtu	22,362 MMBtu
<b>Estimated Cost Savings (including tax benefits)</b>	Per year (\$)	\$104,404	\$104,404
	Life Cycle (\$)	\$2,088,084	\$2,088,084
<b>Objective Function</b>	<del>20.5</del> <del>24.5</del> kBtu per ratepayer dollar at risk		
<b>Location</b>	City of Bristol		
<b>Type of Building</b>	Retail – Big Box Car Dealership		
<b>Year of Build</b>	First building in 1975, second in 2002		
<b>Building Size (total sf)</b>	30,000		
<b>Year Acquired by Current Owner</b>	1999		
<b>Appraised Parcel Value</b>	[REDACTED]		
<b>Status of Mortgage Lender Consent</b>	[REDACTED]		
<b>Proposed Project Description</b>	258 kW and 50 kW Rooftop Solar Photovoltaic		
<b>Est. Date of Construction Completion</b>	Pending closing		
<b>Current Status</b>	Pending CT Green Bank Board of Directors Approval		
<b>Energy Contractors</b>	[REDACTED]		
<b>Additional Comments:</b>	[REDACTED]		
	[REDACTED]		
	[REDACTED]		
	[REDACTED]		
	[REDACTED]		



	<div data-bbox="727 174 1567 226" data-label="Text"><p>[REDACTED]</p></div>
--	---



--	--	--



# Longview RV: A C-PACE Project in Windsor Locks

<b>Address</b>	27 Lawnacre Road, Windsor Locks, CT 06096	
<b>Owner</b>	Roberts Realty Inc.	
<b>Proposed Assessment</b>	\$455,775	
<b>Term (years)</b>	20	
<b>Term Remaining (months)</b>	Pending Construction Completion	
<b>Annual Interest Rate</b>	6.0%	
<b>Annual C-PACE Assessment</b>	\$39,436	
<b>Savings-to-Investment Ratio</b>	1.15	
<b>Average Debt Service Coverage Ratio</b>	[REDACTED]	
<b>Loan-to-Value Ratio</b>	[REDACTED]	
<b>Lien-to-Value Ratio</b>	[REDACTED]	
<b>Estimated Energy Savings and/or Production (MMBtu)</b>		RE
	Per year	543
	Over loan	9,936
<b>Estimated Cost Savings</b>	Per year	\$45,425
	Over loan	\$908,507
<b>Objective Function</b>	21.8 kBTU saved per ratepayer dollar at risk	
<b>Location</b>	Town of Windsor Locks	
<b>Type of Building</b>	Retail - Big Box (>25,000 SF)	
<b>Year of Build</b>	1960 and 1961 (two buildings)	
<b>Building Size (total sf)</b>	34,000	
<b>Year Acquired by Current Owner</b>	1994	
<b>Appraised Value</b>	[REDACTED]	
<b>Status of Mortgage Lender Consent</b>	[REDACTED]	
<b>Proposed Project Description</b>	Installation of 130kW PV system	
<b>Current Status</b>	Pending Board of Directors Approval	
<b>Energy Contractors</b>	[REDACTED]	
<b>Additional Comments</b>	<ul style="list-style-type: none"> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> <li>■ [REDACTED]</li> </ul>	



845 Brook Street  
Rocky Hill, Connecticut 06067

300 Main Street, 4th Floor  
Stamford, Connecticut 06901

T: 860.563.0015  
F: 860.563.4877  
www.ctcleanenergy.com

## Program Update Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Bert Hunter, EVP & CIO; Ben Healey, Assistant Director, and Mike Yu, Senior Manager, Clean Energy Finance

**Cc:** Bryan Garcia, President & CEO; Brian Farnen, General Counsel & CLO

**Date:** June 12, 2015

**Re:** C-PACE Sell Down to Clean Fund Tranche 2

---

This memo is designed to provide an update to the Connecticut Green Bank Board of Directors (“BOD”) with respect to the Green Bank’s sale of C-PACE assets to Clean Fund. As the BOD will recall, the Green Bank closed a landmark deal with Clean Fund on May 15, 2014, to sell up to \$30 million worth of C-PACE assets to Clean Fund, via a bond structure facilitated by the conduit issuer: the Public Finance Authority (“PFA”). That structure contemplated PFA issuing three series of bonds – A, B, and C – with Clean Fund paying cash for the senior Series A bonds (constituting 80% of the net present value of the underlying C-PACE cash flows, priced using a 5.95% discount rate) and the Green Bank holding onto the remaining 20% of the cash flows via junior Series B and C bonds.

At the time of closing last year, the Green Bank sold 11 C-PACE transactions into the structure described above, representing a total of just under \$8 million in original principal value – thereby realizing approximately \$6 million in immediate cash proceeds (again, with the remainder of the proceeds coming in the form of the B & C bonds). Staff is now prepared to close on the sale of a second tranche of C-PACE assets, which sale is expected to include the 22 completed C-PACE projects listed below:

Project Name	C-PACE Amount Financed
Shagbark	\$485,000
125 Granfield Avenue	\$30,002
Calvary Temple	\$51,116
11 Depot Road	\$53,560
Northeast Tool	\$122,471
Air Temp Mechanical	\$139,050
Larsen Ace Hardware	\$148,500

<b>Project Name</b>	<b>C-PACE Amount Financed</b>
<b>Bushnell Theatre</b>	\$384,000
<b>Sofia East Windsor (1)</b>	\$750,000
<b>Sofia East Windsor (2)</b>	\$750,000
<b>Polamer Precision</b>	\$2,530,122
<b>Modern Woodcrafts</b>	\$328,145
<b>Carling Technology</b>	\$1,116,624
<b>MJ Sullivan (PID 6652)</b>	\$205,114
<b>MJ Sullivan (PID 6651)</b>	\$725,756
<b>Carriage House Mercedes</b>	\$800,000
<b>390 Birmingham Blvd</b>	\$205,625
<b>Katz Ace Hardware</b>	\$295,291
<b>9 West Broad</b>	\$387,741
<b>Merritt Graphics</b>	\$208,606
<b>All Crate</b>	\$333,510
<b>Manchester Honda</b>	<u>\$596,725</u>
<b>Total Financed Amount</b>	\$10,646,958

Using the same financing structure as was negotiated last May, along with an agreement to price this second tranche at par (meaning there will be no haircut for the Green Bank, in that the final purchase price will be determined based on the weighted average yield of the underlying assets, or 5.69%), this sale should lead to a cash closing of approximately \$8.5 million sometime in July. Additionally, as was true for the first tranche of assets sold, the Green Bank will retain 20% of the value of the underlying assets' future cash flows in a subordinated fashion, via the Series B and C bonds. Although the Green Bank has been approached by a number of investors with respect to its interests in mezzanine investment, being the Series B bonds for Tranches 1 and 2, staff has not determined whether or when to sell its interests in these bonds and, in any case, such sale would be presented to the BOD for approval.

Acting under previous authority granted by the BOD with respect to this transaction, staff is looking forward to closing on the sale of this second tranche in July, as the cash realized through this transaction will help support FY16 budget priorities and new Green Bank financing efforts.



845 Brook Street  
Rocky Hill, Connecticut 06067

300 Main Street, 4th Floor  
Stamford, Connecticut 06901

T: 860.563.0015  
F: 860.563.4877  
www.ctcleanenergy.com

## Program Update Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Bert Hunter, EVP & CIO; Ben Healey, Assistant Director, and Mike Yu, Senior Manager, Clean Energy Finance

**Cc:** Bryan Garcia, President & CEO; Brian Farnen, General Counsel & CLO

**Date:** June 12, 2015

**Re:** Selection of C-PACE Private Capital Warehouse Provider

---

This memo is designed to provide an update to the Connecticut Green Bank Board of Directors (“BOD”) with respect to staff’s selection of a financing partner under the C-PACE Warehouse Capital Provider RFP released on December 24, 2014.

Staff is pleased to report that after a lengthy process, which included initial responses from eight highly capable capital providers, a second round narrowed down to five top-tier respondents, and a final cut that included only the two most competitive finalists, staff has selected a financing partner who will help ensure the sustainability and growth of the Green Bank’s C-PACE program going forward. Because negotiations with that partner are still underway, staff is not prepared to publicly announce the name of the selected partner at this time, but a draft term sheet outlining the key points of the deal is available to members of the BOD upon request. Although we are not yet prepared to publicly announce the new partner, staff thought it appropriate to update the BOD with this positive development as the BOD considers priorities for FY16, since having this partner in place will enable the Green Bank to focus its capital resources for the next fiscal year on new opportunities outside of the C-PACE program.

What follows below are some key highlights associated with the proposed new private C-PACE financing partnership:

- It establishes a scalable \$50 million warehouse facility (with an accordion option to allow for a facility limit of \$100 million) within a special purpose entity (“SPE”) that will be owned and controlled by a private capital provider, with no structuring, commitment, or upsize / downsize fees;
- This SPE will both a) purchase C-PACE assets from the Green Bank that currently sit on our balance sheet and b) directly finance C-PACE projects, as originated by the Green Bank;



- The proposed warehouse will provide the Green Bank with the flexibility to optimize the tradeoffs among key factors such as the advance rate (which will be up to 90%, or 10% more than the deal closed last year with Clean Fund), the timing of cash flows (including construction financing), and overall yield;
- The structure will provide surety of financing at a low cost of capital, a predictable cash flow stream to cover Green Bank expenses (including origination fees, ongoing debt returns, and upside potential associated with a likely backend securitization), and a clear and streamlined underwriting process that will accelerate deal flow and reduce transaction costs; and
- The warehouse will align incentives by delivering substantial value recapture to the Green Bank while providing the selected private capital provider with a stream of high-quality assets accompanied by a significant security package.

Fundamentally, Green Bank staff believes that the selected capital provider, an established player in the energy efficiency financing field with tremendous primary and secondary market experience, will be an excellent partner as the Green Bank takes the C-PACE program to the next level. Together, the thoughtfulness of this partner's proposal, their understanding of the C-PACE product, their diligence on the Green Bank's existing portfolio of projects, and their flexible and creative responses to staff's questions and comments throughout the selection process, have all demonstrated that they are the best fit to work with the Green Bank in scaling up C-PACE as a significant asset class, which will benefit not only Connecticut property owners and ratepayers, but also help demonstrate a scalable national model, as well.

## **New Meadow Power and Earth AD Project (Milford)**

### **Due Diligence Package**

**June 19, 2015**



**Document Purpose:** This document contains background information and due diligence on the New Meadow Power and Earth AD facility and the stakeholders involved, including AgCycle Organics, LLC, (parent company), New Meadow Power and Earth, LLC, a wholly owned subsidiary of AgCycle Organics, General Electric, turnkey equipment supplier, United Illuminating, and the City of Milford. This information is provided to the Board of Directors and the Deployment Committee for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

In some cases, this package may contain among other things, trade secrets, and commercial or financial information given to the Green Bank in confidence and should be excluded under C.G.S. §1-210(b) and §16-245n(D) from any public discourse under the Connecticut Freedom of Information Act. If such information is included in this package, it will be noted as confidential.

# Table of Contents

Project Qualification Memo.....	3
Summary .....	3
Project Structure.....	5
Strategic Plan .....	5
Ratepayer Payback.....	5
Terms and Conditions .....	5
Capital Expended .....	5
Risk.....	6
Capital Flow Diagram.....	6
Target Market .....	7
Green Bank Role, Financial Assistance & Selection/Award Process.....	7
Regulatory Framework .....	7
Project Partners .....	8
Project Detail .....	9
Risks and Mitigation Strategies.....	13
Resolutions .....	14
Draft Term Sheet .....	15
Debt Service Pro Forma .....	24
Financial Strength .....	25
Background .....	26
Financial Strength .....	26
Strategic Interest in the Project.....	26
Background .....	26
Financial Strength .....	27
.....	27
Strategic Interest in the Project.....	27
Attachment 1 – Project Pro Forma .....	28

# Project Qualification Memo

**To:** The Board of Directors

**From:** Bryan Garcia, President & CEO, Bert Hunter, EVP & CIO, Dale Hedman, Managing Director, Statutory & Infrastructure Programs and Rick Ross, Associate Director, Statutory & Infrastructure Programs

**Date:** June 19, 2015

**Re:** New Meadow Power and Earth AD Facility Project – Integrated Organic Recycling Facility Project  
\$4.565 million, 15-year Subordinated Term Loan Facility

---

## Summary

### Background

The Connecticut Green Bank (“Green Bank”) has received a project proposal from AgCycle Organics, LLC (“AgCycle Organics”), for a 3 MW anaerobic digestion facility, New Meadow Power and Earth, to be built on the property at 1183 Oronoque Road, Milford, under the statutorily mandated Anaerobic Digestion Pilot Program, as defined in PA 11-80, Section 103. This program is a key component of the Green Bank’s comprehensive plan and budget for FY 2015 thru FY 2016.

New Meadow Power and Earth, LLC, a limited liability company wholly owned by AgCycle Organics, is the project entity developing the anaerobic digestion (“AD”) and cogeneration project in the City of Milford, for the digestion of food scraps as well as other source separated organic materials.

The Green Bank has maintained its commitment to the program development and execution of the 3-year Anaerobic Digestion Pilot Program pursuant to Section 103 of Public Act 11-80. At a meeting of the Deployment Committee held May 14, 2015, the Committee was briefed on the project and staff agreed to provide the project’s due diligence package two weeks prior to the Board meeting for review and any follow-up discussions as necessary.

It is this support and recommendation that is the subject of this presentation by staff to the Green Bank’s Board of Directors.

### Introduction to New Meadow Power and Earth, LLC

New Meadow Power and Earth, LLC, aka ‘AgCycle Power Milford’ is a single purpose Connecticut entity formed in 2015 and owned and managed exclusively by AgCycle Organics, as part of its agricultural businesses. New Meadow Power and Earth, will own the proposed anaerobic digestion project.

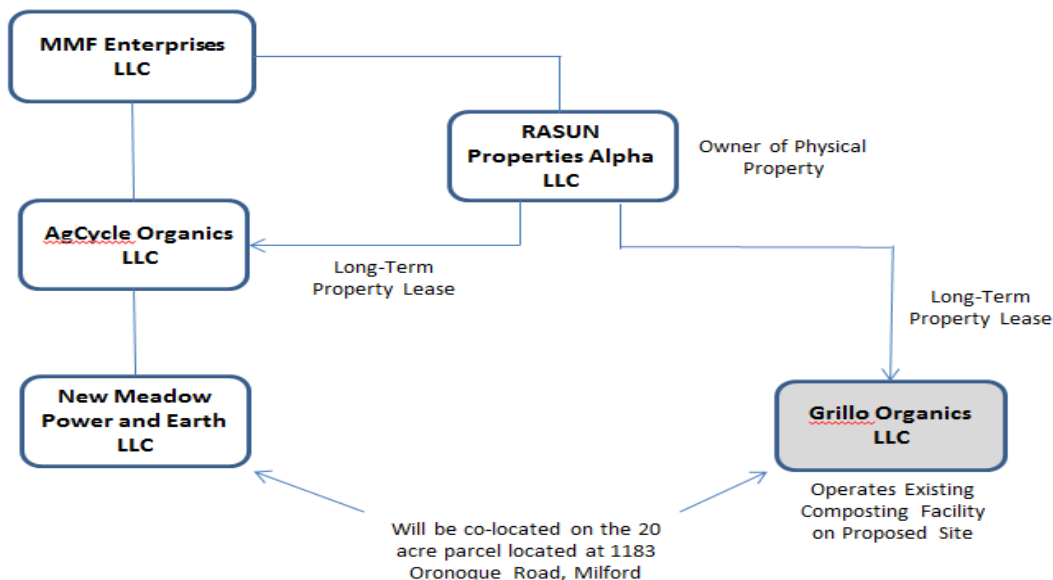
**Introduction to AgCycle Organics, LLC**

AgCycle Organics, LLC, is a Connecticut entity that was established in January 2015 for the purpose of agricultural business and is owned by MMF Enterprises, LLC, and Green Power Enterprises, LLC, its manager. AgCycle Organics, operates a small startup farm on a four acre property located at Riverside Drive and Waverly Avenue, Milford, Connecticut and controls, for its own use and for use by New Meadow Power and Earth, ten acres on the south-side of an approximately twenty acre property located at 1183 Oronoque Road, Milford, Connecticut. MMF Enterprises, LLC, is a Delaware company established in 2010 – RASUN Properties Alpha, LLC, its subsidiary, is a Connecticut company established in 2010 – and owned and managed by Roderick McNeil IV, the individual involved in preparation of this application. The site of the proposed project, zoned as an industrial district with pump stations, transfer stations and public utilities that benefit from easy highway access, has been owned and operated by the McNeil family since the 1950s.

**Introduction to General Electric Company**

General Electric Company (“GE”) has entered the Anaerobic Digestion space through its subsidiary GE Power & Water. They have done extensive research in anaerobic digestion technology and have acquired a company named Monsal on July 1, 2014, who is one of the leaders in the anaerobic digestion industry in Europe. Their newly acquired Monsal Advanced Digestion Technology has over 50 systems currently in operation throughout Europe. AgCycle Organics has partnered with GE with regards to New Meadow Power and Earth. The proposed Milford AD project equipment will be sourced from the GE Power & Water subsidiary of GE (i.e., Monsal), and AgCycle Organics will operate, through New Meadow Power and Earth, the proposed Milford AD project with the support of an operations and maintenance contract from the GE Water & Process Technology subsidiary of GE. GE will also be a capital partner in the project. GE will provide a complete turnkey solution for the anaerobic digestion project, which is anticipated to take 15-18 months to complete (from contract signing to project completion). They will also provide process guarantees for the biogas production, energy consumption, and effluent quality for the system once feedstock agreements are identified.

**Ownership Organizational Chart**



## Project Structure

### Strategic Plan

*Is the project proposed, consistent with the Board approved Comprehensive Plan and Budget for the fiscal year?*

The New Meadow Power and Earth project has submitted a proposal under the statutorily mandated AD pilot program, as defined in PA 11-80, Section 103, which is a key component of the Green Bank comprehensive plan and budget for FY 2015/2016. The project as proposed meets all of the criteria of the program and therefore is consistent with the Green Bank's Comprehensive Plan. Statutorily, the Green Bank is permitted to use its resources for expenditures (i.e. grants, loans, and PPA's) that promote investment in clean energy in accordance with the Green Bank's Comprehensive Plan – support for this project is in the form of a loan.

### Ratepayer Payback

*How much clean energy is being produced (i.e. kWh over the projects lifetime) from the project versus the dollars of ratepayer funds at risk?*

The AD system will produce approximately 355,000,000 kWh of electricity and 200,000 MMBtu of thermal energy over the 15-year term of the Green Bank financial loan agreement.

The project developer has requested a subordinated loan from the Green Bank in the amount of \$4,565,000 representing 20 percent of the overall project's capital expense.

The objective function for this project is 78 kWh per \$1 of ratepayer funds at risk for clean electricity produced and 44,000 Btu per \$1 of ratepayer funds at risk for clean thermal energy produced.

### Terms and Conditions

*What are the terms and conditions of ratepayer payback, if any?*

The project developer has requested a subordinated loan from the Green Bank in the amount of \$4,565,000, at a 2% interest rate for 15 years. A single advance in the full principal amount of the subordinated loan will be made at Commercial Operation Date (COD) or the last permanent Senior Debt advance, whichever is later. The outstanding principal and interest amount shall be payable monthly (level payment, mortgage-style basis) commencing on the first scheduled payment date of the Subordinated Loan. A senior loan in the amount of approximately **REDACTED** million has been proposed. Debt service coverage for the proposed combined senior and Green Bank loans ranges from **REDACTED** in the first 7-years to approximately **REDACTED** in the last 8-years of the project (see project debt service coverage pro forma later in this package).

See "Target Market" section below for more explanation about electricity/REC sales and the proposed loan term sheet attached.

### Capital Expended

*How much of the ratepayer and other capital that the Green Bank manages is being expended on the project?*

A subordinated loan not to exceed \$4,565,000.

## Risk

*What is the maximum risk exposure of ratepayer funds for the project?*

The maximum ongoing exposure would be the principal and any accrued interest payments on the subordinated loan from the date of disbursement to the anticipated repayment in 15 years.

## Capital Flow Diagram

**REDACTED**

## Target Market

*Who are the end-users of the project?*

New Meadow Power and Earth, LLC is planning on selling the electricity to United Illuminating at wholesale rate 980A. They are in discussions with **REDACTED**, who is interested and looking to increase their usage of renewable energy through a long term PPA. However, since there are no firm commitments in place yet the project pro forma assumes the electricity revenue will be a combination of wholesale electricity purchased by United Illuminating and Class I REC sales. This assumes an electricity rate of **REDACTED**/kWh (for sale of wholesale power plus REC sales) with an escalator of 2% a year thereafter. Should New Meadow Power and Earth successfully negotiate a long term PPA **REDACTED** it would only enhance the projects economics.

The revenue module for this project, as well as other similar AD projects, is highly reliant on tipping fees at 53% of the total revenue. Other components of the revenue model are the sale of electricity at 20%, REC sales at 17% and the remaining miscellaneous items at 10%.

## Green Bank Role, Financial Assistance & Selection/Award Process

Public Act 11-80, Section 103, statutorily mandated that the Green Bank develop and administer a 3-year AD pilot program, on or before March 1, 2012, to be funded at \$2M/year in incentives. Green Bank staff successfully incentivized the developers of the New Meadow Power and Earth Facility to apply for support for the project in the form of a subordinated loan with a reduced interest rate forming the incentive. In this way, this project (and others that the Green Bank is financing under the rolling RFP) has been able to attract senior debt financing for project development,

The Green Bank per the statute has developed the AD program and has now issued 3 rounds of request for proposals ("RFP") to attract projects offering the lowest cost to ratepayers considering deployment of the eligible resource/technology, probability of project completion and feasibility, and the best public and unique ratepayer benefits. The Green Bank opened up the third round of solicitations as a rolling RFP to help project developer's time their proposal submissions to be consistent with their project development and capital funding commitment timelines. This move has significantly paid off for the Green Bank allowing us to develop a pipeline of credible projects.

This AD project proposal was reviewed by the project review team through the Green Bank's due-diligence review process, in accordance with the criteria as defined in the RFP and statute PA 11-80, Section 103.

## Regulatory Framework

As noted above the New Meadow Power and Earth Facility serves to implement the Public Act 11-80, section 103, requiring the Green Bank to establish a three-year pilot program to support projects through loans, grants or power purchase agreements sustainable practices and economic prosperity of Connecticut farms and other businesses by using organic waste with on-site anaerobic digestion facilities to generate electricity and heat. As part of the pilot program, the authority may approve no more than five projects, each of which shall have a maximum size of 3 MW at a cost of up to \$450 per kilowatt. This project will also help support the recently passed legislation from Public Act 11-217, that went into effect on Oct. 1, 2013, requiring all businesses that generate more than 104 ton per year (2 tons/week) of food scraps to be required to bring source-separated organics to a recycling facility within a 20 mile radius of the point of origin.

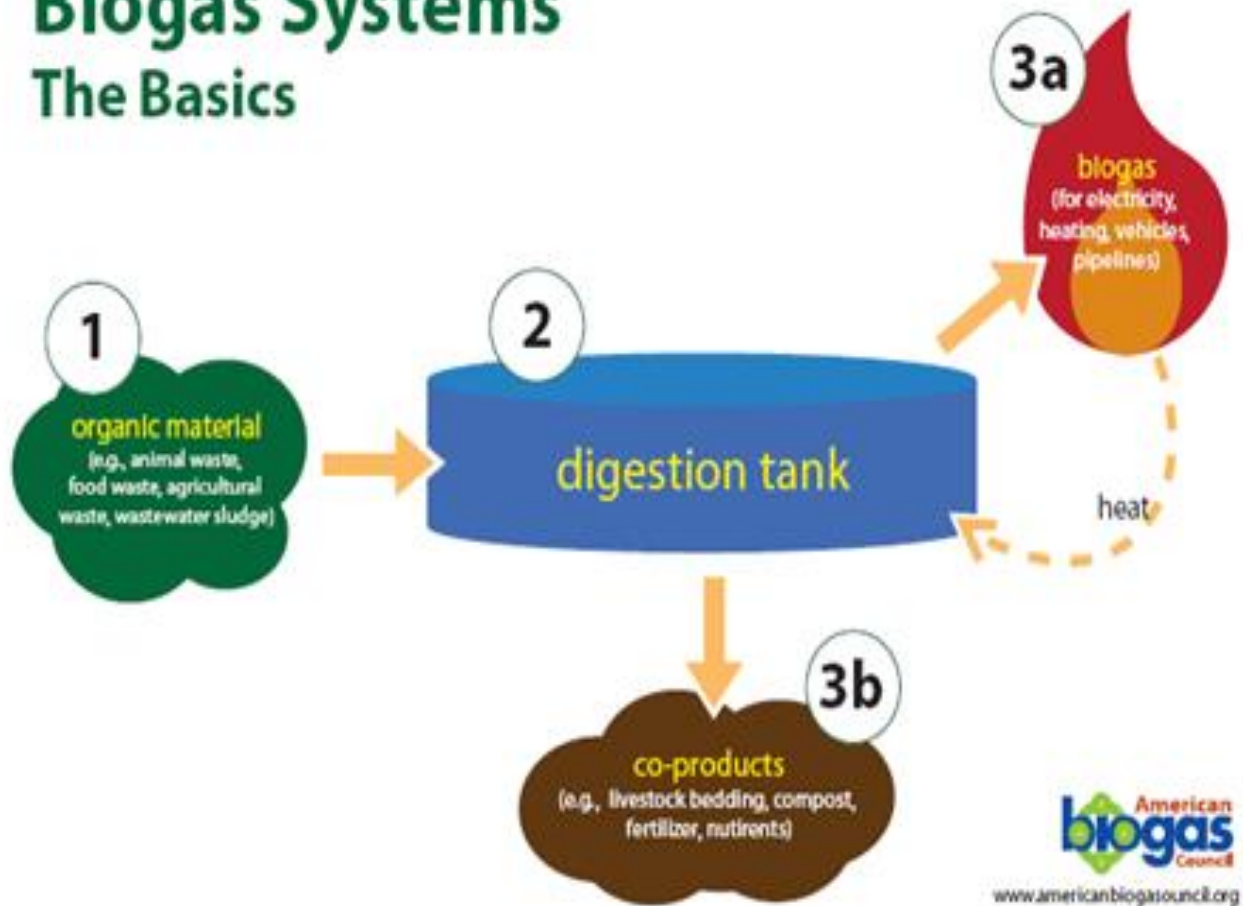


## Project Partners

- MMF Enterprises, LLC
- RASUN Properties Alpha, LLC
- AgCycle Organics, LLC
- New Meadow Power and Earth, LLC (wholly owned by AgCycle Organics, LLC)
- General Electric Company (turnkey equipment supplier and capital partner)
- United Illuminating
- City of Milford

# Biogas Systems

## The Basics



The New Meadow Power and Earth project is a three megawatt (3 MW) nameplate capacity, base-load, renewable energy power production anaerobic digestion facility. It will produce approximately 24,500,000 kWh of electricity annually. The project will utilize approximately 63,000 tons of feedstock derived from source-separated organic materials and other organic feedstock to produce the biogas used to generate the Class I renewable electricity. Anaerobic digestion from the organics feedstock recipe will result in approximately 11,000 tons of biogas production annually. The adjacent wastewater treatment plant currently produces approximately 800 tons of biogas annually that is flared.<sup>1</sup> AgCycle Organics has made arrangements with the City to pipe this biogas from the WWTF over to the AD facility for use by the reciprocating engines. There will also be future opportunities for producing additional biogas at the waste water treatment facility by introducing fats, oils, and grease (FOG).

<sup>1</sup> Flaring is the process of collecting biogas and diverting it to a stack where it is ignited and burned.

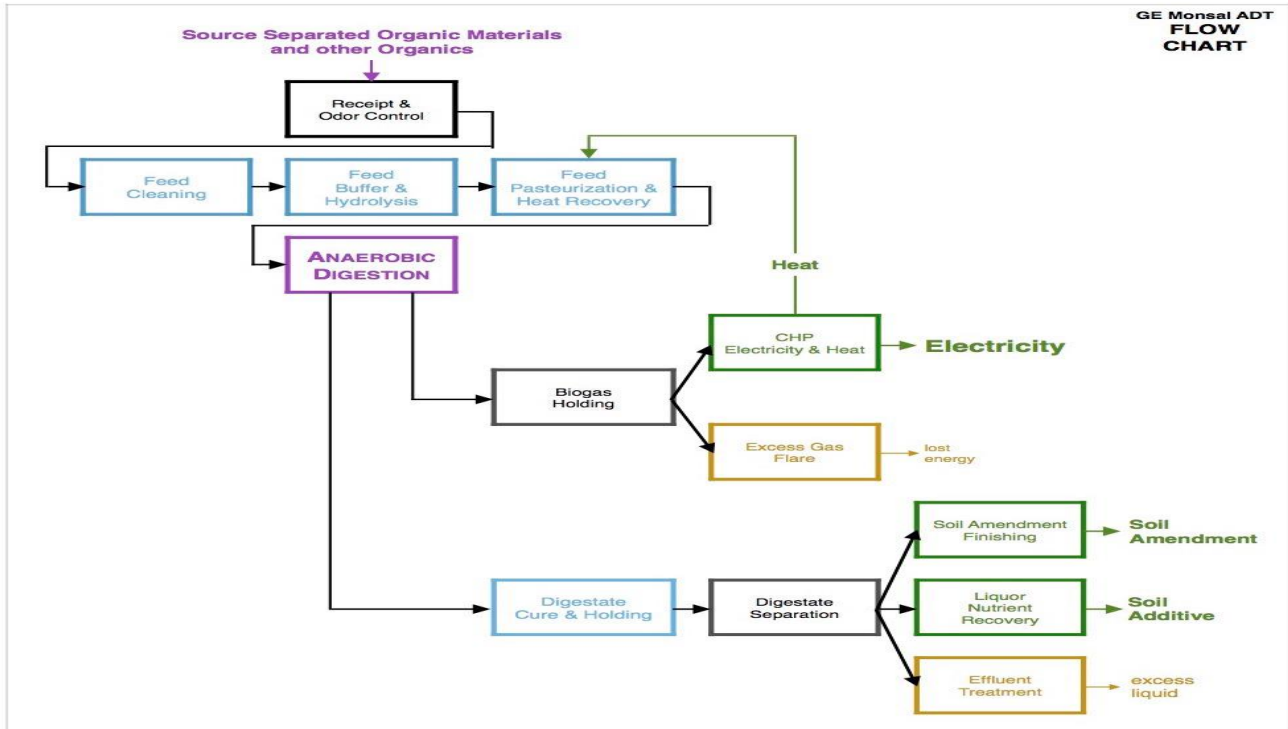
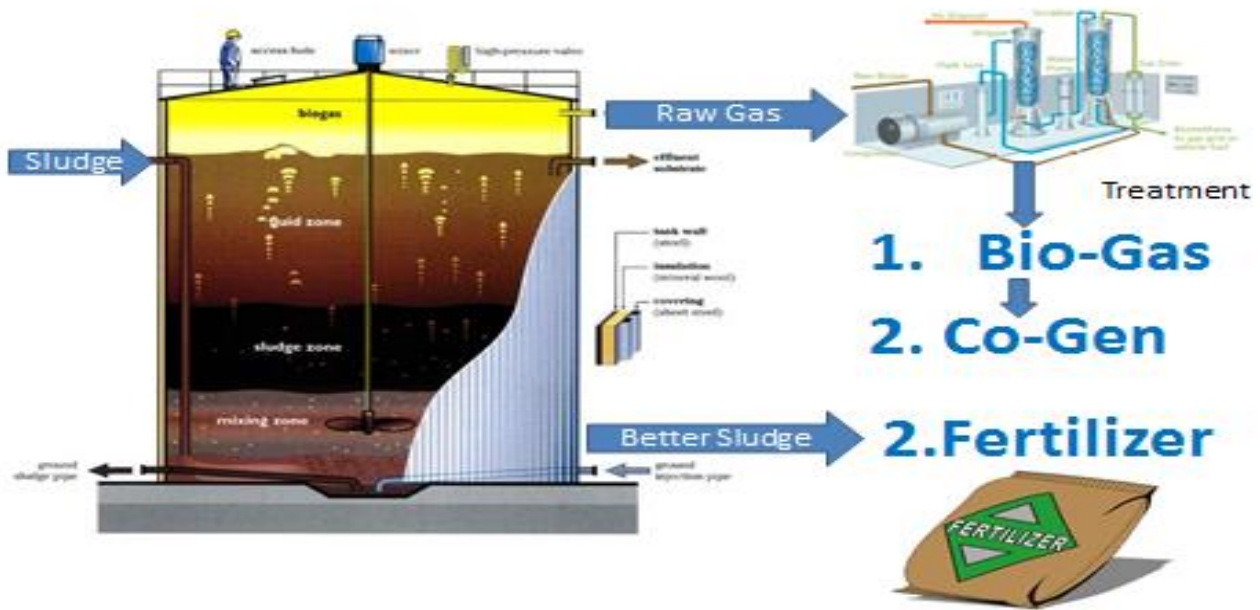
AgCycle Organics will use GE's Monsal Advanced Digestion Technology for food scraps processing for the proposed AD facility. The Monsal Advanced Digestion Technology facility footprint, for a pre-customized layout, comfortably fits on the south side of the Milford property. The facility layout will be further refined during the design phase to take account and advantage of the properties geometry; in particular, moving the facility to the southern end of the proposed site. The GE Monsal Advanced Digestion Technology pretreatment system separates approximately 95% of the organics from any included contaminating materials. Additionally, the hydrolysis buffer tank provides for variations in daily feedstock supply quantities while continuing to optimally load the anaerobic digesters and produce a consistent level of biogas. Furthermore, the gas holder absorbs any variations in hourly biogas production quantities while continuing to optimally supply the biogas engines and produce a consistent level of electrical energy. The digestate co-product will be incorporated into the existing composting and topsoil operations at the property. The high strength liquor can be processed to recover nutrients and subsequently treated by a sequential batch reactor.

The Connecticut Department of Energy and Environment Protection has performed an extensive food scraps analysis demonstrating the availability of materials throughout the state. The project will use food scraps from within a twenty mile radius around the facility, from the extreme southwestern portion of the state around Stamford, CT, from Westchester County, NY and from New York City. This region can supply well in excess of 100,000 tons of source separated organic materials and meet the feedstock requirements of the proposed facility. This project will further both the goals Connecticut General Statute 16-1(a)(26) with Connecticut Public Act No. 13-303 concerning renewable energy sources and Connecticut Public Act No. 11-217 concerning recycling of organic materials by certain food scrap producers.

The project will be co-located on a 20 acre, industrial zoned land parcel, with an existing composting, mulch and topsoil production facility. The project will benefit from technology, operations and maintenance, as well as capital supplied by GE. The project is uniquely situated from a site, vicinity and regional standpoint, with particular emphasis on the zone's power production and industrial character and proximity to the Milford wastewater treatment plant and substation node, and on the site's ability to beneficially use the digestate co-product. The project site is located at the junction of two transmission lines as well as an electric substation and is serviceable by railroad, and on route to a municipal transfer station.

The project site falls within an industrial and manufacturing sector along the Housatonic River, which includes utility generation and distribution facilities along with easy highway access. The project site is approximately one mile off of the I-95 corridor, and is accessible via one of the City's primary north-south local arteries (exit 35, Bic Drive), an un-congested, non-residential road directly abutted by commercial and industrial activities. The project will receive organics feedstock primarily by truck utilizing established carters and haulers. The project will use approximately 200 to 255 tons per day of material. At 25 tons per load, such supply would result in about two trucks every 3-hours, on average.

# The Technology



A 3 MW, 63,000 ton, GE Monsal Advanced Digestion Facility for food scraps processing features (i) a feed reception and cleaning building under negative pressure and serviced by an odor control plant, (ii) an anaerobic digestion plant including buffer and hydrolysis step, pasteurization and heat recovery step and digestate curing and holding step, (iii) a biogas utilization plant, and (iv) a liquor recovery and treatment plant.

The first stage, after receipt, of the advanced anaerobic digestion process involves separating food scraps from any contamination to recover organic material that can be fed into the digester. This is known as pre-treatment and is achieved with GE's Monsal de-packaging system. This fully automated system separates packaging, contraries and grit (glass, bones, metal, etc.) to generate a clean organic slurry prior to digestion. The process can capture more than 95% of the organic material and removes all of the non-digestible material upstream of the digestion process. It is a key step that ensures all downstream equipment is protected from contaminants. To control odors, this pre-treatment process is contained in its own building and employs GE's Monsal biofilter.

After pre-treatment the organic slurry is sent to the hydrolysis buffer tank. This tank is equipped with GE's Monsal JetMix system and serves multiple functions, one of which is to provide liquid storage capacity for the operational schedule of the receiving and separation process. The tank operates anaerobically and promotes the natural formation of volatile fatty acids in the slurry.

From the hydrolysis tank, the slurry is pasteurized in the GE's Monsal 70 process. The Monsal 70 is a three tank batch system designed to hold the sludge at 70°C for one hour to meet certain time and temperature regulations. The heat is provided from waste energy of the cogeneration unit to the GE Monsal pasteurization process where the sludge is heated to thermophilic conditions to remove any pathogens, and then is cooled back down for entry into the digesters. A key feature of GE's Monsal Advanced Digestion Technologies process is the stable heat balance.

From here, the hydrolysed slurry moves into the digestion stage. The anaerobic digestion system is designed with a hydraulic retention time of 18 to 22 days to improve the conversion from sludge to energy. The tank is equipped with GE's Monsal Sequential Gas Mixing System to provide the lowest mixing energy for the high concentration sludge. The system pulls biogas from the digester, compresses it, and provides high localized mixing through a manifold on the digester floor. There are no internal moving components in the digester for easy operation and maintenance.

After digestion, the slurry moves into the post digestion stage where it can be aerated and can be treated further via dewatering to produce a valuable cake co-product. The high strength liquor can then be processed to recover nutrients and subsequently treated with GE's AmmCycle process. Alternatively, liquid digestate can be recycled directly depending on the local situation.

The biogas from the digestion process is stored in a gas holder and can be sent directly to a cogeneration unit or be prepped for additional processing for pipeline or compressed natural gas applications.

When combined, these process stages comprise a holistic solution that takes anaerobic treatment of source separated organic materials to a new level.

The benefits of the GE Monsal solution include:

- Convert organic waste to energy
- Produces high quality biogas
- Reduction in greenhouse gas emissions
- Reduce landfill solid waste stream
- Support CT's new recycling legislation
- Create employment opportunities
- Effective odor management
- Reduced reliance on the utility transmission grid
- Facility to provide equivalent power for up to 3,000 homes
- Facility's residual solids can be used as soil amendments

### **Risks and Mitigation Strategies**

The major risks of this project are that the facility is unable to perform at a profitable level throughout the life of the Subordinated Loan. Given such an occurrence, the Green Bank's mitigating strategy is to monitor the ongoing performance of the facility closely and to work proactively with the facility owners and senior lender(s) should there be issues with repayment in order to maximize the likelihood of a full recovery of the outstanding loan principal.

## Resolutions

**WHEREAS**, in early 2013, Connecticut Green Bank (“Green Bank”) released a rolling Request for Proposals (RFP) for anaerobic digestion projects to participate in a statutorily mandated AD Pilot program pursuant to Section 103 of Public Act 11-80;

**WHEREAS**, the RFP is aimed at reducing landfill waste through the recycling of organics, helping to promote sustainable practices and economic prosperity of Connecticut farms and other businesses by using organic waste with on-site anaerobic digestion facilities to generate electricity and heat;

**WHEREAS**, AgCycle Organics, LLC submitted the New Meadow Power and Earth AD Facility proposal in response to develop, in the City of Milford, a 3.0MW anaerobic digestion and cogeneration project and, after a thorough review, was selected as a project that is consistent with the Green Bank’s Comprehensive Plan and in the best interests of ratepayer;

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors approves and authorizes the Green Bank staff to execute definitive loan documentation materially based on the term sheet set forth in this due diligence package dated June 19, 2015 for financial support in the form of a \$4,565,000 subordinated loan financing;

**RESOLVED**, that this Board action is consistent with Section 103 of Public Act 11-80; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents as they shall deem necessary and desirable to effect these Resolutions.

**Connecticut Green Bank – New Meadow Power and Earth, LLC Facility  
Summary of Terms and Conditions for Proposed  
Subordinated Term Loan Facility**

---

This Non-Binding Term Sheet summarizes the primary terms and conditions for the Connecticut Green Bank (“Green Bank”) to provide funding (the “Subordinated Loan”) for term financing of an Anaerobic Digestion facility to be located in Milford, CT (the “Project”) and to be owned by New Meadow Power and Earth, LLC (“New Meadow Power and Earth” or “Borrower”).

This summary of terms and conditions (the “Term Sheet”) is intended as an outline of certain material terms of the proposed Credit Facilities being considered by the Green Bank. It does not include descriptions of all of the terms, conditions and other provisions that would be contained in the definitive documentation relating to the Credit Facilities. This summary is not a contract to extend financing nor an offer to enter into a contract for such financing nor a commitment to obligate Green Bank in any way with respect to any financing proposal summarized herein and the parties to the proposed transactions should not rely upon it as such. Notwithstanding the foregoing, unless all relevant definitive documentation for the transactions contemplated hereunder is executed on or before August 31, 2015 (the "Expiration Date"), this Term Sheet shall expire with an option to extend the Expiration Date at the sole discretion of the Green Bank.

This Term Sheet is delivered to you on the understanding that any of the terms of substance hereunder shall not be disclosed, directly or indirectly, to any other person except your investors, officers, agents and advisors who are directly involved in the consideration of this matter unless prior written consent has been given by Green Bank. The transactions contemplated by this Summary of Terms and Conditions is subject to all necessary Green Bank approvals, including its board of directors.

- Borrower:** A Special Purpose Entity, New Meadow Power and Earth, LLC will own and operate a 3 MWAC anaerobic digestion energy project located in Milford, Connecticut. The Borrower is wholly-owned by AgCycle Organics, LLC.
- Guarantors:** AgCycle Organics, LLC (the “**Guarantors**”).
- Senior Lender(s)** TO BE DETERMINED
- Senior Loan** Approximately in the amount of **REDACTED**.<sup>2</sup>
- Sole Purpose:** To provide permanent subordinate debt financing for the proposed 3 MWAC anaerobic digestion energy project to be located in Milford, Connecticut (the “**Project**”).

---

<sup>2</sup> General Electric Corporation is also expected to provide equity funding in the amount of **REDACTED**.



<b>Lender:</b>	Green Bank and any participating lenders on or after the Closing of the Credit Facilities (collectively, the “ <b>Lenders</b> ”).
<b>Credit Facility:</b>	Not to exceed \$4,565,000 Secured Subordinated Term Loan (the “ <b>Subordinated Loan</b> ”). The Subordinated Loan may not exceed the principal amount of a Senior Loan facility. The Green Bank may reduce the principal amount of the Subordinated Loan if the interest rate on a Senior Loan facility is greater than Six Percent (6.50%) and if the minimum proforma debt service coverage ratio (“DSCR”) is not maintained based on projected Project economics agreed between Green Bank, Borrower and Senior Lender as a condition to the Advances.
<b>Maturity:</b>	Up to fifteen (15) years from the date of closing and fully amortizing level payments of principal and interest (mortgage-style basis).
<b>Repayment and payment:</b>	The monthly accrued interest, and the outstanding principal amount of the Subordinated Loan shall be payable monthly commencing one month following the permanent financial close.
<b>Pre-payment Penalty:</b>	No Pre-payment Penalty.
<b>Advance:</b>	A single payment in the full principal amount of the Subordinated Loan will be made at Commercial Operation Date (COD) or the last permanent Senior Debt advance, whichever is later.
<b>Interest Rates and Fees:</b>	Two Percent (2%) per Annum.
<b>Calculation of Interest and Fees:</b>	All calculations in respect of interest shall be made on the basis of actual number of days elapsed in a 360 day year.
<b>Collateral:</b>	The loans will be secured at all times by a continuing first priority lien on and security interest (the “ <b>Security Interest</b> ”) in all of the Borrower’s right, title and interest in

and to

- (i) any and all project agreements, including any agreements to sell electrical energy from the Project to power purchaser(s) and the purchasers of any alternative energy credits or environmental attributes available for sale including any proceeds from such agreements, agreements with equipment suppliers, EPC agreements, operation and maintenance agreements
- (ii) a pledge of 100% of Borrower's interest in all future cash flows from the Project
- (iii) all cash, money, currency, and liquid funds, wherever held, in which the Borrower now or hereafter acquires any right, title, or interest including, but not limited to a debt service reserve account for the benefit of the Senior Lender(s)) and the Lender and such other bank accounts of the Borrower or the Project;
- (iv) a perfected lien on substantially all existing and subsequently acquired assets and real properties, including, but not limited to, receivables, inventory, equipment, furniture, fixtures, improvements, material owned real property, material contracts, assignment of leases, general intangibles, and leasehold mortgages, as determined by the Lender;
- (v) a perfected lien on 100% of the capital stock of the Borrower and the Borrower's present and subsequently acquired domestic subsidiaries and affiliates; and
- (vi) all Proceeds of each of the foregoing and all accessions to, and replacements for, each of the foregoing (the "**Collateral**").

Such Security Interest, where appropriate, will be subordinate only to Senior Lender(s) lending funds to the Borrower, the proceeds of which are to be used solely for the development, construction and operation of the Project ("**Senior Debt**") pursuant to a mutually agreeable intercreditor agreement.

The Borrower will not assign any accounts or other Collateral to any person other than the Lender or the Senior Lender (together, the "**Secured Parties**" and at all times in conformity with the Intercreditor Agreement), nor create or permit to be created any lien, encumbrance or security interest of any kind on any Collateral other than for the benefit of the Secured Parties or either of them, nor grant or permit to be granted any corporate guaranty other than for the benefit of the Secured Parties or either of them, unless authorized by the Secured Parties (or, as permitted by the Intercreditor Agreement, either Secured Party) in writing, except for the security interests contemplated herein in connection with granting of the loans evidenced by the Credit Agreement and the Note.

**Voluntary Reductions:** Commitments under the Credit Facility may be reduced or terminated, in whole or in part, at the Borrower's option, upon five business days prior notice. Voluntary

reductions of commitments under the Credit Facility shall be in minimum amounts to be agreed upon.

The Borrower may prepay amounts outstanding under the Credit Facility in whole or in part (in minimum amounts to be agreed upon), with prior notice but without premium or penalty. Prepayments of the Credit Facility shall be applied pro rata against all remaining scheduled installments. Voluntary prepayments of the Subordinated Loan may not be re-borrowed.

**Mandatory Reductions:** Subject to exceptions to be further negotiated, the following mandatory commitment reductions and/or prepayments shall be required:

100% of the net cash proceeds of any additional debt; excluding the Senior Debt.

100% of the net proceeds of any equity issuance subsequent to permanent financing, subject to mutually agreeable carve-outs for Tax Equity Investments and Company Equity Investments.

100% of the proceeds of asset sales outside the ordinary course of business, to the extent such proceeds have not been applied to indebtedness of the Senior Lender(s) or reinvested in the business within 180 days.

100% of the proceeds from any casualty loss of any of the collateral to the extent such proceeds have not been applied to indebtedness of the Senior Lender(s) or reinvested in the business within 180 days.

Mandatory prepayments will be first applied to reduce the Subordinated Loan in the inverse order of maturity.

All prepayments (including voluntary prepayments) shall be accompanied by payment of accrued interest on the amount prepaid to the date of prepayment.

**Representations and Warranties:**

Organization and qualification; capitalization and ownership; use of proceeds; subsidiaries and affiliates; solvency; power and authority; validity, binding effect and enforceability; no conflict; absence of material litigation; accuracy of financial statements; margin stock; full disclosure; payment of taxes; consents and approvals; no Event of Default; compliance with instruments; patents, trademarks, copyrights, and licenses; insurance; indebtedness; security interest and mortgage liens; compliance with laws; material contracts; environmental matters; senior debt status;

and other Representations and Warranties considered appropriate by the Lender.

**Conditions Precedent to Lending:**

Usual and customary for transactions of this nature, including, but not limited to, the following:

The negotiation, execution and delivery of definitive loan and security documentation for the Credit Facilities (the "Loan Documents") satisfactory to the Lender, including satisfactory evidence that the Lender holds a perfected, first priority lien (or a lien which, as to be negotiated, is subordinate only to the Senior Lender(s)) in the Collateral for the Credit Facilities and all Connecticut state contracting provisions required by statute.

Execution of the project documents;

Evidence of debt and equity funding commitments by Senior Lender and Equity Investor (Tax Equity Investor if applicable) and all conditions precedent required in respect of any advances from the Senior Lender and Equity Investor (other than any conditions precedent related to advances of the Subordinated Loan) shall have been satisfied;

Evidence of compliance with tax credit requirements for safe harbor status;

Delivery of satisfactory opinion(s) of counsel to the Company and the Guarantors.

Closing certificate as to accuracy of Representations and Warranties, compliance with covenants, and absence of an Event of Default or potential Event of Default.

Certified resolutions, incumbency certificate, and corporate documents.

All regulatory approvals and licenses, absence of any legal or regulatory prohibitions or restrictions.

No material litigation. Specifically, there are no actions, suits, proceedings, claims or disputes pending or, to the knowledge of the Borrower after due and diligent investigation, threatened or contemplated, at law, in equity, in arbitration or before any Governmental Authority, by or against the Borrower or against any of its properties or revenues that (a) relate to this Agreement or any other Loan Document, or any of the transactions contemplated hereby, and (b) either individually or in the

aggregate, if determined adversely, could reasonably be expected to have a Material Adverse Effect.

Receipt of a projection model in form and substance satisfactory to the Lender and accepted by the Senior Lender.

Satisfactory Intercreditor Agreement with Senior Lender and (if appropriate) Tax Equity Investor.

) Completion of Lender's final due diligence.

Evidence of required insurance.

Payment of all fees and expenses of the Lender and the Senior Lender(s) which are subject to reimbursement, including but not limited to all filing and legal fees.

No material adverse change in or affecting the business, operations, property, condition (financial or otherwise) or prospects of the Company or the Guarantors.

Other Conditions Precedent to Lending as appropriate.

**Affirmative Covenants:** Usual and customary for financing transactions of this nature and for this transaction in particular, including, but not limited to:

Maintenance of books, records and inspections.

Maintenance of insurance.

Payment of taxes.

Preservation of existence, rights and authority.

Maintenance of properties and equipment.

Compliance with statutes, including environmental laws.

Compliance with all obligations under the project documents;

Any material subsidiary created or acquired subsequent to the closing of the Credit Facilities will be added as a guarantor and appropriate stock pledges and other security interests will be obtained.

Use of proceeds.

Other Affirmative and Negative Covenants as appropriate.

**Reporting  
Requirements:**

The Borrower will provide:

Within 45 days after each fiscal quarter a consolidated balance sheet and consolidated statements of income, retained earnings, and cash flow, together with a Certificate of Compliance from the Chief Financial Officer of the Borrower.

Within 120 days after each fiscal year end consolidated audited balance sheet and consolidated reviewed statements of income, retained earnings, and cash flow, together with (i) a report of an independent certified public accountant reasonably satisfactory to the Agents, (ii) any management letters of such accountants addressed to the Borrower, and (iii) a Certificate of Compliance from the Chief Financial Officer of the Borrower.

The annual budget for the upcoming year within 30 days after each fiscal year end.

Notice of default.

Other information as reasonably requested.

Other Reporting Requirements as appropriate (the foregoing to be reasonably conformed to the Reporting Requirements of Senior Lender(s)).

**Negative Covenants:** Usual and customary for transactions of this nature, including, but not limited to, the following: dividends, change of control, asset divestitures, investments, liens, leases, transactions with affiliates, prepayment of other indebtedness, restriction on mergers and acquisitions, and additional indebtedness.

Other Negative Covenants as appropriate.

**Financial Covenants:** Financial covenants, including, but not limited to, the following:

(to be negotiated)

**Events of Default:** Customary for facilities of this nature, including but not limited to:

Payment default;

Cross-defaults to other indebtedness and other material obligations;

Failure to perform any covenant or agreement;

Breach of representations and warranties;

Loss of custody or control of property;

Discontinuance of business;

Insolvency or bankruptcy;

Material adverse change;

Judgment defaults; and

Change in control.

**Assignments and Participations:**

(to be negotiated)

**Governing Law:** Connecticut

**Lender's Counsel:** TBD

**Miscellaneous /  
Proposal not an Offer to  
Lend Funds, Approvals,  
Etc.:**

This Term Sheet does not include all of the terms that would be included in definitive documentation. The terms and conditions of the Credit Facility will be further developed and expanded during the due diligence, negotiation, approval and documentation process. The transactions contemplated by this summary of terms are expressly contingent upon and subject to, among other things, (i) satisfactory completion of Green Bank's due diligence, (ii) the negotiation, execution and delivery of the Loan Documents satisfactory to Green Bank, (iii) all representations and warranties of the Borrower and, as may apply, Borrower's subsidiaries, affiliates and representatives in connection with the proposed Credit Facility being complete and correct in all material respects and not containing any untrue statement of any material facts or omitting any material facts, (iv) the satisfaction of the conditions precedent to be contained in the Loan Documents and (v) approval of the Credit Facility by Green Bank's Board of Directors. Green Bank reserves the right to cease all discussions and negotiations at any time prior to entering into the Loan Documents without any liability whatsoever to the parties to the proposed transactions.

**Enabling Statute and  
State Contracting  
Provisions:**

Green Bank is subject to the requirements outlined in Sections 16-245n of the Connecticut General Statutes and Borrower will be responsible for complying with applicable state contracting requirements.

**Expenses:**

The Borrower shall pay (a) all reasonable out-of-pocket expenses of the Lender associated with the Credit Facilities, including the preparation, execution, delivery and administration of the credit documentation and any amendment or waiver with respect thereto (including the reasonable fees, disbursements and other charges of counsel) and (b) all out of pocket expenses of the Lender(s) (including the fees, disbursements and other charges of counsel) in connection with the enforcement of the credit documentation.



## Debt Service Pro Forma

An overview debt service pro forma is shown below. Full project pro forma is available as separate attachment.

**REDACTED**

## AgCycle Organics, LLC

### Financial Strength

AgCycle Organics, LLC, is a Connecticut entity that was established in January 2015 for the purpose of agricultural business and is owned by MMF Enterprises, LLC, and Green Power Enterprises, LLC, its manager. AgCycle Organics, operates a small startup farm on a four acre property located at Riverside Drive and Waverly Avenue, Milford, Connecticut and controls, for its own use and for use by New Meadow Power and Earth, ten acres on the south-side of an approximately twenty acre property located at 1183 Oronoque Road, Milford, Connecticut. MMF Enterprises, LLC, is a Delaware company established in 2010 – RASUN Properties Alpha, LLC, its subsidiary, is a Connecticut company established in 2010 – and owned and managed by Roderick McNeil IV, the individual involved in preparation of this application. The site of the proposed project has been owned and operated by the McNeil family since the 1950s.

**REDACTED**

## **General Electric Company**

### **Background**

GE has entered the Anaerobic Digestion space through its subsidiary GE Power & Water. They have done extensive research in the potential growth of this industry and as a result acquired a company named Monsal who is one of the leaders in the anaerobic digestion industry in Europe. Their newly acquired Monsal Advanced Digestion Technology is proven and has over 50 systems currently in operation throughout Europe. GE will provide the full turnkey technology solution for this project as well as long term O&M support. GE will also be a capital partner in this project.

### **Financial Strength**

GE is a global company with a market cap in excess of \$275B.

### **Strategic Interest in the Project**

GE, as a corporation, has extensively researched anaerobic digestion as a business growth opportunity and as a result has recently decided to enter this space.

## **United Illuminating Company**

### **Background**

United Illuminating Co. is a wholly-owned subsidiary of New Haven-based UIL Holdings Corp., a diversified energy delivery company serving 690,000 electric and natural gas utility customers in 66 communities across two states, with total assets of more than \$4 billion. In addition to United Illuminating, UIL is the parent company of Connecticut Natural Gas Corp., Southern Connecticut Gas Co. and Berkshire Gas Co.

## Financial Strength

	<u>2011</u>	<u>2010</u>
<b>Financial Results of Operation (\$000's)</b>		
Electric Distribution and Transmission		
Retail		
Residential	\$ 384,967	\$ 439,357
Commercial	224,028	248,028
Industrial	37,927	39,154
Other	9,611	10,037
Wholesale	491	505
Other operating revenues	140,632	122,466
<b>Total Electric Distribution and Transmission</b>	<b>797,656</b>	<b>859,547</b>
Gas Distribution		
Retail		
Residential	406,229	75,766
Commercial	144,162	26,122
Industrial	9,532	5,401
Other	115,199	12,186
Wholesale	65,943	12,917
Other operating revenues	31,250	5,713
<b>Total Gas Distribution</b>	<b>772,315</b>	<b>138,105</b>
Non-utility Businesses	476	14
<b>Total operating revenues</b>	<b>\$ 1,570,447</b>	<b>\$ 997,666</b>
<b>Operating income</b>	<b>\$ 219,382</b>	<b>\$ 125,299</b>
<b>Net Income attributable to UIL Holdings</b>	<b>\$ 99,656</b>	<b>\$ 54,854</b>
<b>Financial Condition (\$000's)</b>		
Property, plant and equipment in service - net	\$ 2,202,855	\$ 2,084,762
Goodwill	266,797	298,890
Other deferred charges and regulatory assets	1,189,476	1,161,803
<b>Total Assets</b>	<b>4,744,609</b>	<b>4,481,838</b>
Current portion of long-term debt	13,712	154,114
Net long-term debt excluding current portion	1,548,347	1,511,768
Net common stock equity	1,094,361	1,076,142

## Strategic Interest in the Project

UI will purchase the wholesale electricity from the New Meadow Power and Earth AD facility based on the regional wholesale market pricing.

**Attachment 1 – Project Pro Forma**

**REDACTED**



845 Brook Street  
Rocky Hill, Connecticut 06067

300 Main Street, 4th Floor  
Stamford, Connecticut 06901

T: 860.563.0015  
F: 860.563.4877  
[www.ctcleanenergy.com](http://www.ctcleanenergy.com)

## **PosiGen Residential Solar Lease Engagement**

A Residential Financing Program

Due Diligence Package

June 12, 2015

**Document Purpose:** This document contains background information and due diligence on the PosiGen Residential Solar Lease Engagement and the organizations involved, including U.S. Bank (in negotiation) and a potential senior debt provider. This information is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

In some cases, this package may contain among other things, trade secrets, and commercial or financial information given to the Connecticut Green Bank in confidence and should be excluded under C.G.S. §1-210(b) and §16-245n(D) from any public discourse under the Connecticut Freedom of Information Act. If such information is included in this package, it will be noted as confidential.

# Program Qualification Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Ben Healey, Associate Director, Chris Magalhaes, Manager, and Katy Mixter, Summer Associate, Clean Energy Finance; Kerry O’Neill, Managing Director, Residential Programs; Bert Hunter, EVP & CIO

**Cc:** Bryan Garcia, President & CEO; Mackey Dykes, VP & COO; Brian Farnen, General Counsel & CLO; Dale Hedman, Managing Director, Statutory & Infrastructure Programs

**Date:** June 12, 2015

**Re:** PosiGen Residential Solar Lease Engagement

---

## Summary

As a result of Connecticut Green Bank’s (“Green Bank”) Residential Solar Financing RFP, originally issued in December 2014, the Louisiana based solar company PosiGen, Inc. (“PosiGen”) responded with a comprehensive proposal to deliver solar lease and energy efficiency financing to low and moderate income (“LMI”) households in Connecticut<sup>1</sup>. The proposed PosiGen residential solar lease engagement is designed to deploy the private capital and origination efforts needed to deliver energy savings to Connecticut’s LMI homeowners (and potentially affordable multifamily properties, as well) through an innovative, affordable solar PV leasing structure paired with energy efficiency upgrades and financing. By leveraging secured Green Bank debt and a to-be-determined, elevated Performance-Based Incentive (“PBI”) focused on LMI households, and by monetizing federal tax incentives, PosiGen – acting through its Bridgeport-based subsidiary, PosiGen CT, LLC (“PosiGen”) – will provide an attractive platform for private capital to help drive down the cost of energy in the currently underserved LMI market. PosiGen’s expertise in marketing, selling, and installing clean energy and energy efficiency systems, combined with its track record of success in overcoming traditional barriers to entry in the LMI market, such as the FICO score thresholds currently set by most tax equity investors, will help ensure that the capital deployed via the PosiGen engagement will deliver value to this underrepresented segment of the Connecticut solar PV market. With a draft term sheet between PosiGen and the Green Bank nearing finalization (see relevant section below), Green Bank staff is now ready to request Board of Directors (“BOD”) approval to move forward with closing on a \$5,000,000 debt investment, along with a contingent commitment of a further \$5,000,000 (dependent on PosiGen’s success in raising at least \$10,000,000 in private senior debt capital) so that PosiGen can expand its presence in the Connecticut market and maximize the number of LMI households that can take advantage of this innovative financing structure before the expiration of the current Federal Investment Tax Credit (“ITC”) on December 31, 2016.

## Program Description

PosiGen has previously enjoyed great success as a solar leasing and energy efficiency services company focused on the LMI sector, having installed more than 29 MW of solar PV systems for over 6,000 households in Louisiana over its first 3 years of operation. Now, having recently expanded into Connecticut and launched its local operations

---

<sup>1</sup> LMI households for the purpose of this proposal are defined as households at or below 100% of Area Median Income (“AMI”). The Green Bank has defined the *low income* market segment as households at 80% AMI or lower, in consultation with other state agencies and stakeholders. This proposal seeks to serve *low and moderate income* households, and is therefore targeting households up to 100% AMI.

out of Bridgeport, the company is looking to partner with the Green Bank in an attempt to scale the deployment of solar in the LMI market here. From a marketing perspective, PosiGen is an attractive partner for the Green Bank, with deep-seated capabilities in originating solar projects for LMI homeowners through both traditional marketing initiatives such as telemarketing and media advertising, as well as focused strategic partnerships, such as grassroots campaigns with community organizers and workforce training for at-risk youths in communities the company is looking to target for solar penetration. To that extent, PosiGen has already begun its hiring process in Connecticut with team members from Bridgeport and the greater Bridgeport area (15 members in total by the end of June 2015). With respect to the company's value proposition for customers, PosiGen's leases provide CT's LMI homeowners, who often have limited appetite for the Federal ITC, with a cost-effective, no-money-down, third-party ownership alternative to grid-supplied energy. Moreover, since PosiGen foregoes FICO/credit scores as a necessary prerequisite, households that would otherwise be unable to access clean energy due to traditional underwriting restrictions can benefit from cost-saving solar leases. Boasting a customer referral rate of almost 60%, PosiGen continues to scale the deployment of LMI solar in its home market of Louisiana at a rate of 300 – 400 new installs per month, which is exactly the kind of success Green Bank staff hope to see in Connecticut.

In order to enable PosiGen to offer an attractive lease product to households in Connecticut, the Green Bank will provide low-cost debt capital, as well as a proposed, to-be-determined elevated PBI, to a special purpose entity controlled by PosiGen. This entity will, in turn, attract additional private capital providers to invest in PosiGen's LMI solar strategy due to the value streams created by the combination of (i) cash distributions from a portfolio of solar PV operating leases, (ii) the federal investment tax credit and accelerated depreciation incentives, (iii) potential Community Reinvestment Act (CRA) benefits to banks and (iv) the Green Bank's willingness to subordinate its debt capital and offer an elevated PBI in order to accelerate the deployment of solar among LMI households.

The lease offering provided by PosiGen will confer the following benefits to Connecticut homeowners:

- A simple, low-cost lease (projected to be about \$85 per month, as of CY 2015) for the electricity generated from a rooftop solar PV system with no money down. The lease price will be fixed for the duration of a 20-year term, and will include maintenance and repair;
- An optional energy efficiency upgrade, offered for no money down alongside the solar lease, to be financed at a flat rate projected to be about \$15 per month, as of CY 2015. If the energy efficiency upgrade is combined with the solar lease, PosiGen will guarantee energy savings to the customer;
- The opportunity for LMI Connecticut households to enter into a solar leasing agreement without a FICO/credit score screen. Because national leasing companies typically do not lease to subprime FICOs, eliminating this barrier will open up the solar market and bring energy savings to previously ineligible households;
- A streamlined installation process, with PosiGen proposing to work with a single integrated contractor partner, headquartered in Bridgeport, CT, for all energy efficiency upgrades and turnkey solar installations; and
- An option at the end of the lease term to either renew the lease, purchase the system, sign a new lease and upgrade the panels, or end the lease agreement and have PosiGen remove the panels.

Without a low-cost leasing structure that provides energy savings from clean energy installations and/or energy efficiency retrofits, LMI households will continue to be underrepresented in the clean energy transition that the Green Bank is helping to facilitate in Connecticut. The disadvantages that LMI households face with respect to clean energy are compounded by overlapping federal policy approaches and market-driven forces that prevent engagement with clean energy and energy efficiency solutions. Specifically, since LMI households are unable to secure financing to own systems, they are unable to either directly or indirectly access federal tax incentives like the ITC, and since the ITC is such a huge driver of market activity, they are therefore excluded from the clean



energy economy, despite the fact that they bear disproportionately high energy costs relative to the population at large.

Green Bank staff fully expects that PosiGen, with the support of Green Bank financing and investment from private capital providers, will be able to overcome the financing obstacles that LMI households face, because it will a) secure a pool of capital against the installation and ownership of solar PV systems, thereby accessing federal tax incentives such as the ITC and accelerated depreciation, and b) reduce the credit risk surrounding the LMI market by streaming lease payments from a portfolio of households associated with an elevated Green Bank PBI and supported by subordinated debt as credit enhancements. Furthermore, PosiGen's proposed special purpose entity will be structured so that capital will be deployed in a way that aligns financial return with system performance, and thus household benefit.

As such, PosiGen's proposed financing vehicle for Connecticut LMI households will be structured as follows/have the following characteristics:

- The capital stack will include equity from PosiGen, tax equity from U.S. Bancorp, secured debt from the Green Bank (which will likely be subordinated to a private debt capital provider, once selected), and senior secured debt from a to-be-determined entity. Each tranche of funding will be drawn *pro rata*, according to the respective advance rates agreed upon amongst the parties, on a system-by-system basis once designated draw thresholds are met. This structure will simultaneously help reduce deployment risk at the debt and tax equity levels, and provide an incentive for PosiGen to continue to scale the market.
- The vehicle will be modeled as a partnership flip structure, similar to the Green Bank's existing CT Solar Lease 2 model, where cash distribution and tax benefit allocation percentages/sharing ratios are set at given levels for an initial period of time, after which those percentages/sharing ratios reverse, in order to (i.) deliver necessary returns to the tax equity investor and (ii.) mitigate recapture risk of the ITC.
- The Green Bank debt commitment(s) will amortize over a six year term, in line with the PBI funding cycle, reducing the exposure of those funds to a relatively short timeframe.
- The projected capital stack should deliver approximately \$3.50 - \$4.00 of private capital for every dollar of Green Bank debt expended.
- The PBI that the Green Bank will provide is distributed on a per kWh basis, and therefore is only monetized as households receive electricity from the solar PV installations.

### Strategic Plan

*Is the program proposed, consistent with the Board approved Comprehensive Plan and Budget for the fiscal year?*

Addressing the LMI market in Connecticut is in direct response to BOD directives to staff, and the proposed FY16 budget includes a request to fund the debt portion of this initiative. With respect to an elevated PBI level to help attract additional private capital to the engagement, such a request will follow at the BOD's July 2015 meeting, pending BOD support for the proposed PosiGen engagement.

### Ratepayer Payback

*How much clean energy is being produced (i.e. kWh over the projects lifetime) from the program versus the dollars of ratepayer funds at risk?*

The Green Bank proposes to make the following debt and PBI investments:

- Debt in the amount of up to \$5,000,000, which may be subordinated to private debt capital at the CT Green Bank's sole discretion
- Contingent Debt in the amount of up to an additional \$5,000,000, which may be subordinated to private debt capital at the CT Green Bank's sole discretion
- Provide PosiGen with a to-be-determined PBI (for LMI households only) not-to-exceed \$0.125 per kWh (i.e., RSIP Step 5) produced for 6 years of system operation. Assuming 7,833 kWh annually produced per system, the total elevated PBI may amount to approximately \$3,200,000 above what would have otherwise been distributed given current (i.e. RSIP Step 7) incentive levels.

Over the 20 year financing term, projected savings are approximately 174 GWh versus \$13,200,000 of ratepayer funds at risk, or 13.19 kWh for every ratepayer dollar at risk.

### Terms and Conditions

*What are the terms and conditions of ratepayer payback, if any?*

Subject to the development of the term sheet with the tax equity provider and the senior lender(s):

- Performance-Based Incentive (PBI), provided by the Green Bank, in a to-be-determined elevated amount per kWh of solar energy produced, on a per system basis, for the first 6 years of production as systems are placed in service and paid quarterly in arrears
  - Contemplated as source of cash flow to repay Green Bank debt through the structure
- Debt (with the potential to be subordinated to a to-be-determined private capital provider) in the amount of up to \$5,000,000
  - Yield – proposed: [5%] per annum
  - Term – proposed: [6] years
- Contingent Debt (with the potential to be subordinated to a to-be determined private capital provider) in the amount of up to an additional \$5,000,000
  - Conditional on PosiGen raising \$10,000,000 of senior private debt capital
  - Yield – proposed: relevant 10 year swap + [550] basis points per annum
  - Term – proposed [6] years

### Risk

*What is the maximum risk exposure of ratepayer funds for the program?*

The maximum risk exposure of ratepayer funds for the program is composed of:

- a. Debt in the amount of up to \$5,000,000, which may be subordinated to private debt capital at the CT Green Bank's sole discretion
- b. Contingent Subordinated Debt in the amount of up to an additional \$5,000,000. This debt consists of a \$5,000,000 term loan conditional on top of, and only after, at least \$10,000,000 of private debt is committed to the project. As with the initial \$5,000,000 commitment, this contingent commitment may be subordinated to private debt capital at the CT Green Bank's sole discretion
- c. The Performance Based Incentive, dependent on successful deployment of solar systems. The PBI will be offered at a to-be-determined, elevated rate, for LMI households, for a potential total PBI

of up to approximately, and in some scenarios above, \$3,200,000 above what would have otherwise been distributed given current incentive levels.

Thus, the projected maximum risk exposure of ratepayer funds is up to approximately, and in some cases above, \$16,500,000 on a gross basis, given a total projected PBI of \$6,500,000, and \$13,200,000, on a net basis, given an incremental projected PBI of \$3,200,000 above what would have otherwise been distributed given current incentive levels.

**Financial Statements**

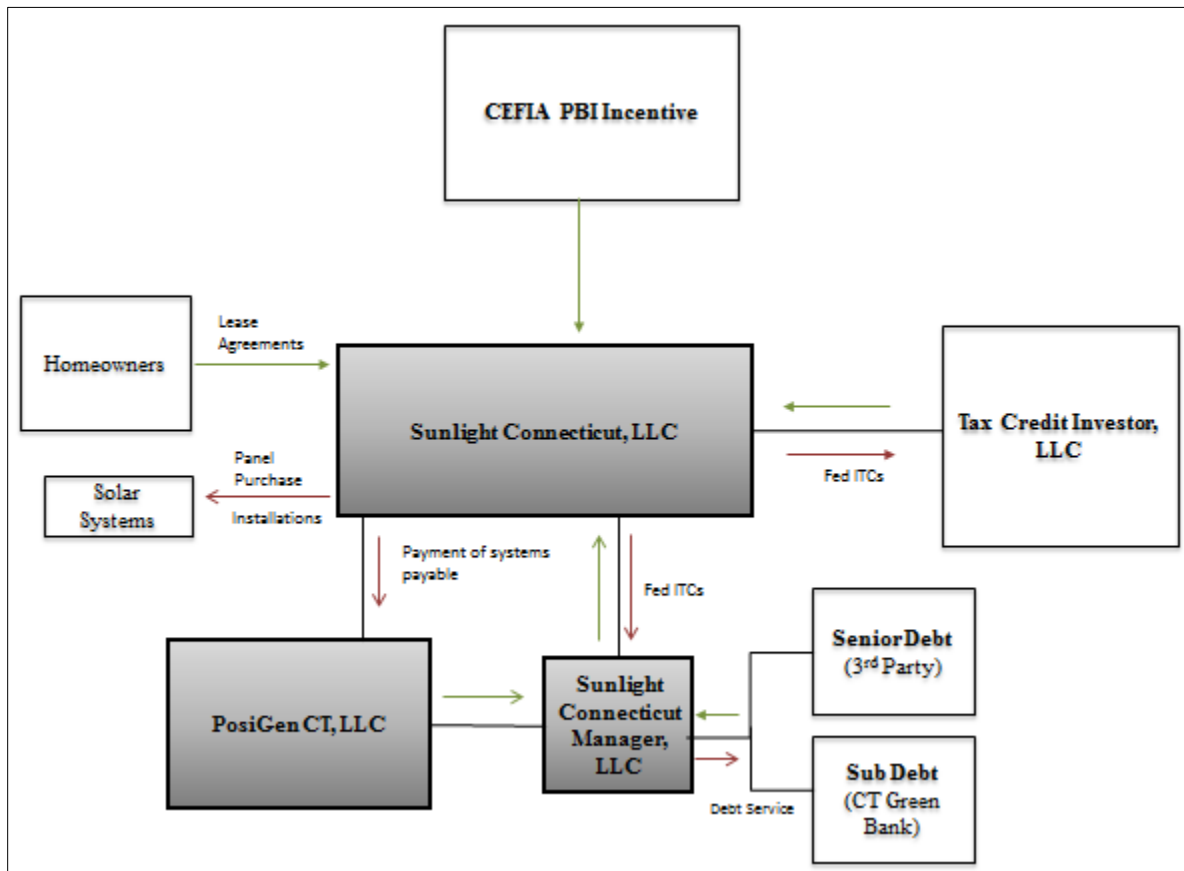
*How is the program investment accounted for on the balance sheet and profit and loss statements?*

Advances of debt are accounted for by a reduction in the Green Bank Cash and Cash Equivalents Account (Current Asset on the Balance Sheet) and a corresponding increase in “[Subordinated] Promissory Notes – [PosiGen]” (Non-Current Asset on the Balance Sheet).

Advances of the PBI will be normal and customary to our PBI practices.

**Capital Flow Diagrams**

*(Representative and Indicative of Final Structure)*



## Target Market

*Who are the end-users of the engagement?*

The end-users of the engagement will predominantly be Connecticut LMI households. By partnering with PosiGen, the Connecticut Green Bank has the opportunity to make solar more available for LMI populations with an experienced partner that is an expert at delivering services to this income bracket using an alternative approach to the traditional credit score and debt-to-income based underwriting approach. While the Green Bank has had success partnering with other third party loan originators and installers, it has not previously worked with a partner that specifically targets this income group. This initiative might also benefit LMI multifamily properties, which PosiGen could serve with Green Bank support.

## Green Bank Role, Financial Assistance & Selection/Award Process

The Green Bank will assist PosiGen in the overall design and implementation of the engagement, including capital support as previously described, marketing efforts, and efforts to assist PosiGen in terms of general engagement with key LMI stakeholders. In this capacity, the Green Bank will provide:

- Financial support through debt and an elevated PBI, which will in turn help support additional capital raises from senior debt provider(s); and
- Limited marketing support for LMI-focused Solarize campaigns.

The Green Bank selected PosiGen as a result of its Residential Solar Financing RFP, originally issued in December 2014. PosiGen responded with a comprehensive proposal to deliver a solar lease and energy efficiency financing to LMI households, and the Green Bank has now negotiated draft terms with the firm, subject to BOD approval of this proposed initiative.

## Program Partners

- PosiGen
- U.S. Bank (tax equity provider)
- [Potentially] a to be determined senior debt provider (term debt capital for the program)

## PosiGen

### Mission

PosiGen believes that technology that helps save money and also helps the environment should be available to everyone. Therefore, using federal and state incentives, PosiGen leases solar power systems to homeowners in Louisiana, New York and Connecticut for a low monthly cost, without looking at credit scores.

### Programs/Programmatic Strengths/Service Area

To date, PosiGen has focused primarily on the Louisiana market, but has recently expanded operations to New York and Connecticut. The firm offers residential solar leases, the option to buy panels, as well as energy efficiency retrofits and energy education. They focus on providing panels to low and moderate income homeowners, currently the only player in the market of which staff is aware that offers leasing without looking at credit scores. Having made several large investments in the Connecticut market, including opening up an office and hiring staff, the organization is committed to expanding their program to Connecticut LMI customers. PosiGen proposes to initially focus on Bridgeport, Hartford, and New Haven and their surrounding areas for its early sales, as the demographics of these communities align with the organization's prime customer segment. Depending on the success of these initial efforts, staff fully expects PosiGen to expand more broadly across the state.

### Leadership & Board of Directors

#### **Thomas Neyhart**, Founder, CEO

Thomas has over 25 years of management experience. For over ten years, he was the COO of a large retail chain with 32 locations and over 165 employees across six states. He then became a partner in an executive search firm specializing in construction staffing that has placed over 2,500 construction professionals throughout the United States. In 2008, he opened the Business Development division, TNL Enterprises, Inc., forming teams and joint ventures to pursue construction projects ranging from \$5 million to \$754 million.

#### **Dan McAtee**, President

Dan has over 26 years of senior executive business experience including 18 years with General Electric, and four years as CEO of a global public steel company. Dan is a certified GE master black belt and has operated companies pertaining to materials, electronics and commodities in over 34 countries. In his most recent role, Dan was the president of Dyno Nobel Americas, a \$1.2 billion explosives manufacturer and distribution company. Dan brings extensive manufacturing, continuous improvement and process discipline skills to the organization.

#### **Beth Galante**, Chief Business Development Officer

Beth practiced energy and environmental law in Louisiana for 15 years, including work with the Tulane Law Clinic when it received the National Law Journal's Runner Up Lawyer of the Year and Distinguished Environmental Achievement Award from the American Bar Association. After Hurricane Katrina, Beth directed Global Green New Orleans, a nonprofit focused on the sustainable rebuilding of the city that worked with actor Brad Pitt to build LEED Platinum homes in the Lower 9th Ward, and offered citywide energy education, about which Time magazine wrote "no organization is doing more to green New Orleans." Beth was named a Champion of Change by the

White House for creating New Orleans energy efficiency program, and is an Aspen Institute fellow in its flagship Henry Crown program.

#### **Financial Condition/Funding Sources & Stability**

PosiGen recently raised \$40 million in capital from the Goldman Sachs Urban Investment Group to fund their national expansion. A second, unnamed investor has agreed to finance the installation of another 2,000 solar panel systems. The company also has a strong relationship with U.S. Bank, which has financed all of its solar panel leases to date, as well as interest from other investors in both offering tax equity to future deals as well as senior debt.

#### **Competitive Selection and Award**

The selection of PosiGen meets multiple Green Bank criteria for key programmatic partners, including:

- **Special Capabilities** – PosiGen has been successful in originating and servicing low-cost solar leases to LMI households without requiring FICO/credit scores as part of the underwriting process, and it has already begun the process of establishing relationships with local community leaders to expand origination efforts in Connecticut. PosiGen has also identified, and trained, a local installer to act as its primary contractor for solar PV system and energy efficiency installations. Altogether, PosiGen is offering a net positive set of energy solutions to a constituency of customers that national leasing companies have been unable to service.
- **Uniqueness** – PosiGen will provide origination and servicing support for the engagement. This support will leverage their prior expertise gained in Louisiana, providing unique attributes to the market that will grant the program a greater likelihood of success.
- **Strategic Importance** – PosiGen is a leader in the residential solar leasing and energy efficiency financing market, and it has demonstrated a broad market reach to both end-users and strategic partners. These attributes are important to the Green Bank, especially with regards to promoting, installing, and servicing solar and energy efficiency related home improvements through financing programs.
- **Urgency and Timeliness** – PosiGen is ready, and has already begun the process of generating interest in its solar and energy efficiency lease offering in Connecticut, in order to gain market share and to take advantage of favorable federal ITC incentive levels before an incentive step-down in 2017.
- **Multiphase Project** – PosiGen expects to leverage successful solar PV system installations and leases with follow-on energy efficiency offerings, which will help advance energy savings to LMI households through a suite of energy-related improvements and address deferred maintenance issues associated with the LMI market.

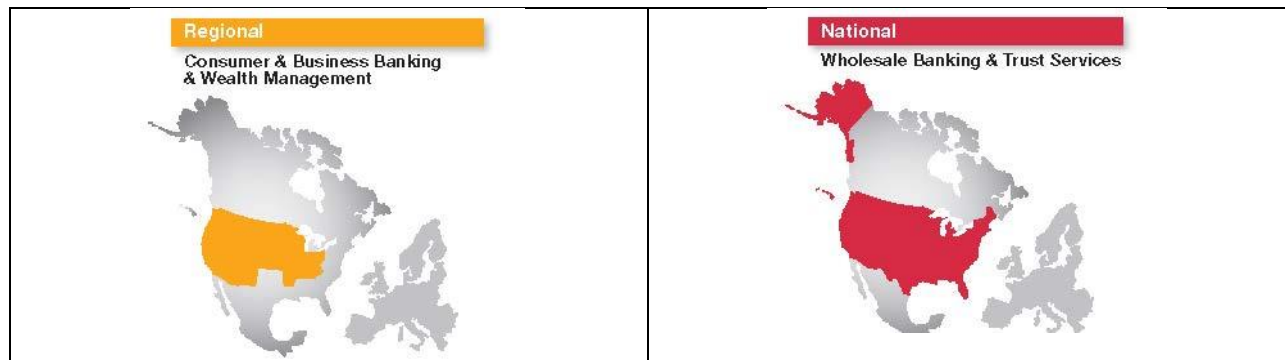
## US Bank

### Mission

One of the largest commercial banks in the US, focused on customer satisfaction while employing prudent risk controls, careful management and use of shareholders' capital and maintaining disciplined, efficient operations.

### Programs/Programmatic Strengths/Service Area

U.S. Bancorp is a diversified financial services holding company and parent company of U.S. Bank National Association, the nation's fifth-largest commercial bank. U.S. Bancorp was named Fortune Magazine's 2011 Most Admired Superregional Bank and the fifth Most Admired company in management quality in the world. Recognized for its strong financial performance, prudent risk management, capital generation and product quality, U.S. Bancorp provides a wide range of financial services for consumers, businesses, government entities and other financial institutions. U.S. Bank's branch network serves 25 states, and they offer regional consumer and business banking and wealth management services, national wholesale and trust services and global payments services to more than 17.4 million customers. Headquartered in Minneapolis, U.S. Bank was founded in 1863 under National Charter #24 and is the nation's second oldest bank operating under its original charter. The company will celebrate its sesquicentennial in 2013. U.S. Bancorp employs 63,000 people.



### **Strategic Needs Addressed by the Proposed Program & Experience with Similar Programs**

Renewable energy finance is a strategic focus for US Bank. US Bank has been active in the renewable energy space for the past four years, leveraging its expertise in other areas of tax credit investing, underwriting and asset management. Since 2008, they have committed more than \$700 million of tax equity in support of renewable energy projects and have made solar energy available to over 20,000 homeowners across the nation.

US Bank invests in a variety of solar projects: from large utility-scale installations to distributed commercial systems, and have also financed several wind developments. An important part of US Bank's business has been creating residential solar funds with national solar installers like Sunrun and SolarCity, but their first solar PV tax equity fund was the Solar Lease Program developed by the Connecticut Clean Energy Fund, the Green Bank's predecessor organization.

### **Leadership & Board of Directors**

**Richard K. Davis**, Chairman, President and Chief Executive Officer of U.S. Bancorp.

**Andrew Cecere**, Vice Chairman and Chief Financial Officer of U.S. Bancorp.

**Richard J. Hidy**, Executive Vice President and Chief Risk Officer of U.S. Bancorp.

### **Financial Condition/Funding Sources & Stability**

#### ***U.S. Bancorp At A Glance***

Ranking	U.S. Bank is 5th largest U.S. commercial bank
Asset size	\$340 billion
Deposits	\$231 billion
Loans	\$210 billion
Earnings per common share (diluted)	\$2.46
Return on average assets	1.53%
Return on average common equity	15.8%
Customers	17.4 million
Bank branches	3,085
ATMs	5,053
Consumer and business banking and wealth management	Regional
Wholesale banking and trust services	National
Payment services, merchant processing and corporate trust	International
NYSE symbol	USB
Year founded	1863



## **Strategic Qualifications**

U.S. Bank is an excellent partner for this initiative for a variety of key reasons, including:

- **Special Capabilities** – U.S. Bank is a leader in providing tax equity investments in the renewable energy marketplace, including an investment in the first public-private residential solar PV lease program with Connecticut in 2008, and subsequent investments thereafter. The experience, expertise, and availability of providing tax equity capital to support the PosiGen engagement provides special value to the Green Bank.
- **Uniqueness** – It is difficult to acquire tax equity from investors that are as large as U.S. Bank. The firm’s continued involvement with the Green Bank in residential solar lease programs demonstrates its commitment to the state and will provide high visibility to the Green Bank’s efforts to attract and deploy private capital to finance the clean energy goals for the state of Connecticut. The Green Bank and U.S. Bank have a long-standing history working together, having co-created the original and award-winning CT Solar Lease.
- **Strategic Importance** – The investment of U.S. Bank in Connecticut will expand the availability of capital to PosiGen, which will result in increased energy savings for LMI households and environmental benefits stemming from the low-cost solar lease. U.S. Bank is a leader in the industry when it comes to the tax equity financing of renewable energy projects, and their involvement provides Connecticut with high funding leverage potential.
- **Urgency and Timeliness** – U.S. Bank is ready to invest in Connecticut with the Green Bank today. Every year U.S. Bank makes decisions based on who they are going to partner with in terms of the various tax credit programs they access (i.e. new market tax credits, low income tax credits, renewable energy tax credits, etc...), and PosiGen has lined up the bank to work on this initiative now.
- **Multiphase Project; Follow-On Investment** – With the success of the CT Solar Lease and CT Solar Lease 2 programs, the Green Bank is looking to expand into the next phase of financing clean energy and energy efficiency projects by targeting markets that have been previously unable to fully benefit from such programs. Investing in the PosiGen engagement, U.S. Bank will help the Green Bank deliver energy savings to LMI households.

Further documentation on U.S. Bank is available upon request.

## **Risks and Mitigation Strategies**

**Credit Risk:** An understandable risk associated with this engagement is the future ability of LMI households to cover the monthly/ lease payments. Three factors mitigate this risk. First, payments for energy are a priority

obligation for households due to the very nature of the benefits they provide, and therefore do not carry the same risk profile as other credit obligations. Second, because gross energy savings from the solar PV system are projected to be greater than the monthly lease cost, households will experience positive net cash flows from the solar PV lease obligations, which should increase their ability to pay. Third, by bundling lease obligations from a portfolio of households, and pooling lease obligation cash distributions with tax benefits from system ownership, PosiGen's special purpose entity reduces the risk that any single, or a small number of, default(s) will impact required capital returns.

**System Performance Risk:** If the solar PV systems that support the solar lease do not meet production expectations, the value proposition to households in the lease agreement will decline, reducing energy savings and potentially even increasing overall energy costs. Two factors mitigate this risk. First, PosiGen provides maintenance and repair, backed by supplier warranties, on installed systems, at no additional cost to the lessees (although such funds are separately accounted for and reserved). Second, the Green Bank PBI used to enhance the credit of the engagement is based on a per-kWh basis, which aligns PosiGen's financial returns with the incentive to maximize system performance.

**Origination Risk:** There is a risk that PosiGen's expertise in selling and installing solar PV systems in Louisiana may not translate to Connecticut, and if there is a significant departure from PosiGen's projected installation success, the ability to raise capital may be impaired. This risk is mitigated by PosiGen's current efforts and success in establishing operations in Bridgeport, CT, and closing initial sales in the Connecticut market over the past several months.

**LMI Market Risk:** The LMI market in Connecticut is very sensitive to the current climate of federal and local clean energy and energy efficiency incentives, as well as current market and financing conditions, and if anything within this delicate ecosystem changes, the value proposition of PosiGen's flat-rate lease pricing to LMI households may be diminished. Conversely, if market conditions remain as is, but PosiGen's lease pricing changes, LMI households may find less value in PosiGen's offering, reducing market penetration and/or delivering net losses to households already in Agreement. This risk will be mitigated by the Green Bank's ability to monitor pricing to customers and verify net benefits at various points during the term of the PosiGen engagement.

**Participation of US Bank and Senior Lender(s):** PosiGen is currently in talks with US Bank for its investment of tax equity for the engagement, and is also in the process of identifying a senior lender(s) to add leverage to the capital structure, with the support of the Green Bank. If the projected value of the ITCs derived from individual solar PV systems are less than anticipated, or if the origination process is delayed and a significant portion of installations occur after the value of ITCs drops from 30% of capital costs to 10% at the end of 2016, the ability to attract tax equity will be diminished. Furthermore, if a significant number of households default on lease payments, or if a significant number of solar PV systems underperform, there may not be enough cash to meet the required debt service payments of senior lenders. This risk will be mitigated by the delayed draws on capital, which is only drawn at the agreed upon advance rates once systems are placed in service, along with significant sponsor equity contributions to the capital stack. Any systematic set of payment delinquencies or defaults will therefore not prevent cash flows generated by systems already in operation from delivering returns to the drawn portions of investors' committed capital.

## Resolutions

**WHEREAS**, the Connecticut Green Bank (“Green Bank”) has a mandate to deploy its resources to benefit all ratepayers, including low and moderate income (“LMI”) residential households;

**WHEREAS**, LMI households bear a disproportionate burden of the state’s high energy costs as a percentage of their income;

**WHEREAS**, LMI households generally do not benefit from existing federal incentives for clean energy adoption, given that such incentives require sufficient tax liabilities to be of value;

**WHEREAS**, traditional financing for residential solar PV and energy efficiency upgrades rely on credit tests that screen out many LMI households and, specifically, exclude them from the growing third-party ownership model for residential solar PV;

**WHEREAS**, the Green Bank released a Request for Proposals for Residential Solar Financing Partners (the “RFP”) on December 31, 2014;

**WHEREAS**, PosiGen, Inc. (collectively with all affiliates and subsidiaries, “PosiGen”) responded to said RFP with a comprehensive proposal to deliver a solar lease and energy efficiency finance offering to LMI households in Connecticut;

**WHEREAS**, Green Bank staff has reviewed PosiGen’s RFP response and now recommends that the Green Bank make a commitment of \$5,000,000 in debt capital (the “Loan”) and a contingent commitment of another \$5,000,000 in debt capital (the “Contingent Loan”) to support PosiGen in delivering its offering to Connecticut’s LMI households; and

**WHEREAS**, Green Bank staff expects to bring a proposal before the Board of Directors (the “Board”) at its July 2015 meeting to request an elevated Performance Based Incentive (“PBI”) under the Residential Solar Investment Program to support financing for LMI households, which elevated PBI will be critical to opening up this market segment and the success of PosiGen’s efforts to accelerate deployment therein.

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Loan with terms and conditions consistent with the memorandum submitted to the Board dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Contingent Loan with terms and conditions consistent with the memorandum submitted to the Board dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 18 months from the date of authorization by the Board; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Kerry O’Neill, Managing Director, Residential Programs; Ben Healey, Assistant Director, and Chris Magalhaes, Manager, Clean Energy Finance

## Draft Term Sheet

### Summary Draft Term Sheet

<b>Borrower:</b>	A Special Purpose Entity (Sunlight Connecticut LLC [?]) which will install, own, operate, and service a portfolio of residential 6.0 kW-DC solar PV systems located across Connecticut (the " <b>Borrower</b> " or the " <b>Company</b> ").
<b>Guarantors:</b>	[Parent guarantee parameters need to be finalized] and all existing and subsequently acquired or organized domestic holding company(ies) and operating subsidiaries of the Company as appropriate (collectively, the " <b>Guarantors</b> ").
<b>Lender:</b>	The Connecticut Green Bank.
<b>Credit Facility:</b>	\$5,000,000 Secured Credit Facility (the " <b>Credit Facility</b> ") consisting of a \$5,000,000 Term Loan (the " <b>Loan</b> "), which may be subordinated to up to \$10,000,000 in private debt at Lender's sole discretion.
<b>Credit Facility Sole Purpose:</b>	To fund a number of residential solar PV system installations across the state of Connecticut (the " <b>Project</b> ").
<b>Credit Facility Maturity:</b>	Up to six (6) years from the end of the Draw Period.
<b>Credit Facility Advances:</b>	[To Be Negotiated, but the general principle will be to advance funding in "tranches" with systems being approved by the Lender and the Tax Equity Investor]
<b>Credit Facility Repayment:</b>	[To Be Determined]
<b>Credit Facility Interest Rates and Fees:</b>	The interest rate per annum applicable to the Loan that composes the Credit Facility (the " <b>Advantaged Interest Rate</b> ") will be a fixed rate of interest, set at 5.00%. All calculations in respect of interest shall be made on the basis of actual number of days elapsed in a 360 day year.
<b>Contingent Credit Facility:</b>	\$5,000,000 Secured Contingent Credit Facility (the " <b>Contingent Credit Facility</b> ") consisting of a \$5,000,000 Term Loan (the " <b>Contingent Loan</b> ") conditional on, and only after, at least \$10,000,000 of private debt is committed to the project, in addition to the initial Credit Facility. As with the Credit Facility, the Contingent Credit Facility may be subordinated to up to \$10,000,000 in private debt at Lender's sole discretion.
<b>Contingent Credit Facility Sole Purpose:</b>	a) To fund the Project. b) To provide an optional, additional layer of liquidity to be accessed at the discretion of the Borrower, given the requirements of the Contingent Credit Facility are met, in order to help fund the completion of the Project.
<b>Contingent Credit Facility Maturity:</b>	Up to six (6) years from the end of the Draw Period.

<b>Contingent Credit Facility Advances:</b>	[To Be Negotiated, but the general principle will be to advance funding in “tranches” with systems being approved by the Lender and the Tax Equity Investor.]
<b>Contingent Credit Facility Repayment:</b>	[To Be Determined]
<b>Contingent Credit Facility Interest Rates and Fees:</b>	The interest rate per annum applicable to the Contingent Loan that composes the Contingent Credit Facility (the “ <b>Premium Interest Rate</b> ”) will be a fixed rate of interest, set at the [relevant 10 year swap plus 550 basis points]. All calculations in respect of interest shall be made on the basis of actual number of days elapsed in a 360 day year.
<b>Performance Based Incentive:</b>	[To Be Outlined in an Additional “Addendum I”] – [To include PBI amounts at various AMI Levels (i.e. \$0.125 PBI @ up to 80% AMI)]
<b>Expenses:</b>	The Borrower shall pay (a) all reasonable out-of-pocket expenses of the Lender associated with the Credit Facility and Contingent Credit Facility, including the preparation, execution, delivery and administration of the credit documentation and any amendment or waiver with respect thereto (including the reasonable attorney fees, disbursements and other charges of counsel) and (b) all out of pocket expenses of the Lender(s) (including the fees, disbursements and other charges of counsel) in connection with the enforcement of the credit documentation.
<b>Collateral:</b>	<p>The loans will be secured at all times by:</p> <ul style="list-style-type: none"> <li>a) a continuing first priority lien on and security interest (the “<b>Security Interest</b>”) in all of the Borrower’s right, title and interest in and to (i) any and all project agreements, including any agreements to lease equipment and/or sell electrical energy from the Project to residential power purchaser(s) and the purchasers of any renewable energy credits or environmental attributes available for sale including any proceeds from such agreements, agreements with equipment suppliers, EPC agreements, operation and maintenance agreements (ii) a pledge of 100% of Borrower’s interest in all future cash flows from the Project (iii) all cash, money, currency, and liquid funds, wherever held, in which the Borrower now or hereafter acquires any right, title, or interest including, but not limited to a debt service reserve account for the benefit of the Senior Lender(s) (defined below) and the Lender and such other bank accounts of the Borrower or the Project; and</li> <li>b) a perfected lien on substantially all existing and subsequently acquired assets and real properties, including, but not limited to, receivables, inventory, equipment, furniture, fixtures, improvements, material owned real property, material contracts, assignment of leases, general intangibles, and leasehold mortgages, as determined by the Lender; and</li> <li>c) a perfected lien on 100% of the capital stock of the Borrower and the Borrower’s present and subsequently acquired or established domestic subsidiaries;</li> </ul>

and all Proceeds of each of the foregoing and all accessions to, and replacements for,

each of the foregoing (the “**Collateral**”), such Security Interest, where appropriate, to be subordinate only to commercial lending institution(s) extending loans, advances or lines of credit or otherwise lending funds to the Borrower, the proceeds of which are to be used solely for the development, construction and operation of the Project (“**Senior Debt**”) pursuant to a mutually agreeable intercreditor agreement (“**Intercreditor Agreement**”).

Negative Pledge. The Borrower will not assign any accounts or other Collateral to any person other than the Lender or a provider of Senior Debt (together, the “**Secured Parties**” and at all times in conformity with the Intercreditor Agreement), nor create or permit to be created any lien, encumbrance or security interest of any kind on any Collateral other than for the benefit of the Secured Parties or either of them, nor grant or permit to be granted any corporate guaranty other than for the benefit of the Secured Parties or either of them, unless authorized by the Secured Parties (or, as permitted by the Intercreditor Agreement, either Secured Party) in writing, except for the security interests contemplated herein in connection with granting of the loans evidenced by the Credit Agreement and the Note.

**Voluntary Reductions:**

Commitments under the Credit Facility may be reduced or terminated, in whole or in part, at the Borrower’s option, upon five business days prior notice. Voluntary reductions of commitments under the Credit Facility and Contingent Credit Facility shall be in minimum amounts to be agreed upon.

The Borrower may prepay amounts outstanding under the Credit Facility and/or Contingent Credit Facility in whole or in part (in minimum amounts to be agreed upon), with prior notice but without premium or penalty (but subject to breakage fees, if any, incurred). Prepayments of the Credit Facility shall be applied pro rata against all remaining scheduled installments. Voluntary prepayments of the Loan and/or Contingent Loan may not be re-borrowed.

**Mandatory Reductions:**

Subject to exceptions to be further negotiated, the following mandatory commitment reductions and/or prepayments shall be required:

- a) 100% of the net cash proceeds of any additional debt beyond up to \$10,000,000 in Senior Debt.
- b) 100% of the net proceeds of any additional equity issuance subject to carve-outs for Tax Equity Investments and Company Equity Investments.
- c) 100% of the proceeds of asset sales outside the ordinary course of business, to the extent such proceeds have not been applied to indebtedness of the Secured Parties or reinvested in the business within 180 days.
- d) 100% of the proceeds from any material recovery event, to the extent such proceeds have not been applied to indebtedness of the Secured Parties or reinvested in the business within 180 days.

Mandatory prepayments will be first applied to reduce the Credit Facility in the inverse order of maturity.

All prepayments (including voluntary prepayments) shall be accompanied by payment of accrued interest on the amount prepaid to the date of prepayment.

**Representations and Warranties:**

Organization and qualification; capitalization and ownership; use of proceeds; subsidiaries; solvency; power and authority; validity, binding effect and enforceability; no conflict; absence of material litigation; accuracy of financial statements; margin stock; full disclosure; payment of taxes; consents and approvals; no Event of Default; compliance with instruments; patents, trademarks, copyrights, and licenses; insurance; indebtedness; security interest and mortgage liens; compliance with laws; material contracts; environmental matters; senior debt status; and other Representations and Warranties considered appropriate by the Lender.

**Conditions Precedent to Lending:**

Usual and customary for transactions of this nature, including, but not limited to, the following:

- a) The negotiation, execution and delivery of definitive documentation for the Credit Facilities satisfactory to the Lender, including satisfactory evidence that the Lender holds a perfected, first priority lien (or a lien which, as to be negotiated, is subordinate only to a provider of Senior Debt) in the Collateral for the Credit Facilities and all Connecticut state contracting provisions required by statute.
- b) Evidence of equity funding commitments by Tax Equity Investor;
- c) Delivery of satisfactory opinion(s) of counsel to the Company and the Guarantors.
- d) Closing certificate as to accuracy of Representations and Warranties, compliance with covenants, and absence of an Event of Default or potential Event of Default.
- e) Certified resolutions, incumbency certificate, and corporate documents.
- f) All regulatory approvals and licenses, absence of any legal or regulatory prohibitions or restrictions.
- g) No material litigation.
- h) Receipt of a projection model in form and substance satisfactory to the Lender.
- i) Satisfactory Intercreditor Agreement with Tax Equity Investor (if appropriate).
- j) Completion of Lender's final due diligence.
- k) Evidence of required insurance.
- l) Payment of all fees and expenses of the Lender which are subject to reimbursement, including but not limited to all filing and legal fees.
- m) No material adverse change in or affecting the business, operations, property, condition (financial or otherwise) or prospects of the Company or the Guarantors.

Other Conditions Precedent to Lending as appropriate.

**Affirmative Covenants:**

Usual and customary for financing transactions of this nature and for this transaction in particular, including, but not limited to:

- a) Maintenance of books, records and inspections.
- b) Maintenance of insurance.
- c) Payment of taxes.
- d) Preservation of existence, rights and authority.
- e) Maintenance of properties and equipment.
- f) Compliance with statutes, including environmental laws.
- g) Compliance with all obligations under the project documents;
- h) Any material subsidiary created or acquired subsequent to the closing of the Credit Facilities will be added as a guarantor and appropriate stock pledges and

- other security interests will be obtained.
- i) Use of proceeds.

Other Affirmative and Negative Covenants as appropriate.

**Reporting  
Requirements:**

The Borrower will provide or cause to be provided:

- a) Within 45 days after each fiscal quarter a consolidated balance sheet and consolidated statements of income, retained earnings, and cash flow, together with a Certificate of Compliance from the Chief Executive Officer, President, or Chief Financial Officer of the Borrower.
- b) For the fiscal year ending December 31, 2014 and each fiscal year thereafter, within 120 days after each fiscal year end consolidated audited balance sheet and consolidated audited statements of income, retained earnings, and cash flow, together with (i) a report of an independent certified public accountant reasonably satisfactory to the Agents, (ii) any management letters of such accountants addressed to the Borrower, and (iii) a Certificate of Compliance from the Chief Financial Officer of the Borrower.
- c) The annual budget for the upcoming year within 30 days after each fiscal year end.
- d) Notice of default.
- e) Other information as reasonably requested.

Other Reporting Requirements as appropriate.

**Negative Covenants:**

Usual and customary for transactions of this nature, including, but not limited to, the following: dividends, change of control, asset divestitures, investments, liens, leases, transactions with affiliates, prepayment of other indebtedness, restriction on mergers and acquisitions, and additional indebtedness.

Other Negative Covenants as appropriate.

**Financial Covenants:**

Financial covenants, including, but not limited to, the following:  
[To Be Negotiated]

**Events of Default:**

Customary for facilities of this nature, including but not limited to:

- a) Payment default;
- b) Cross-defaults to other indebtedness and other material obligations;
- c) Failure to perform any covenant or agreement;
- d) Breach of representations and warranties;
- e) Loss of custody or control of property;
- f) Discontinuance of business;
- g) Insolvency or bankruptcy;
- h) Material adverse change;
- i) Judgment defaults; and
- j) Change in control without Lender Consent.

**Assignments and  
Participations:**

[To Be Negotiated]



**Governing Law:** CT

**Lender’s Counsel:** [TBD]

**Miscellaneous:** This Term Sheet does not include all of the terms that would be included in definitive documentation. The terms and conditions of the Credit Facility will be further developed and expanded during the due diligence, negotiation, approval and documentation process. The transactions contemplated by this Term Sheet are expressly contingent upon and subject to, among other things, (i) satisfactory completion of the Green Bank’s due diligence, (ii) the negotiation, execution and delivery of the Loan Documents satisfactory to the Green Bank, (iii) all representations and warranties of the Borrower and, as may apply, Borrower’s subsidiaries, affiliates and representatives in connection with the proposed Credit Facility being complete and correct in all material respects and not containing any untrue statement of any material facts or omitting any material facts, (iv) the satisfaction of the conditions precedent to be contained in the Loan Documents and (v) approval of the Credit Facility by the Green Bank’s Board of Directors. The Green Bank reserves the right to cease all discussions and negotiations at its sole discretion at any time prior to entering into the Loan Documents without any liability whatsoever to the parties to the proposed transactions.

**Enabling Statute and State Contracting Provisions:** Lender is subject to the requirements outlined in Sections 16-245n of the Connecticut General Statutes and Borrower will be responsible for complying with applicable state contracting requirements.



## Multifamily Pre-Development Energy Loan Funds

### Due Diligence Package

June 12, 2015

**Document Purpose:** This document contains background information and due diligence on the Multifamily Pre-Development Energy Loan funds and the organizations involved, including at present, but not limited to, New Ecology, Inc. A major catalyst identified for facilitating the development and execution of energy upgrade projects within the multifamily sector is the availability of predevelopment funds for consulting services and energy audits of buildings for deep energy savings measures. The cost and lack of access to qualified vendors often prevent owners from seeking to include a full range of energy measures when evaluating building upgrades, often leading them to settle for single measures identified by individual contractors in specific trades, or worse, no energy upgrade measures at all. The result is a significant missed opportunity for realizing energy savings by the owners and tenants of both affordable and market rate facilities.

This information is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank. In some cases, this package may contain among other things, trade secrets, and commercial or financial information given to the Connecticut Green Bank in confidence and should be excluded under C.G.S. §1-210(b) and §16-245n(D) from any public discourse under the Connecticut Freedom of Information Act. If such information is included in this package, it will be noted as confidential.

# Program Qualification Memo

**To:** Connecticut Green Bank Board of Directors

**From:** Kim Stevenson, Associate Director, Multifamily Programs; Kerry O’Neill, Managing Director, Residential Programs; Ben Healey, Assistant Director, Clean Energy Finance; Chris Magalhaes, Manager, Clean Energy Finance

**Cc:** Bryan Garcia, President & CEO; Bert Hunter, EVP & CIO; Brian Farnen, General Counsel & CLO; Mackey Dykes, VP & COO

**Date:** June 12, 2015

**Re:** Multifamily Pre-Development Energy Loan Funds

---

## Summary

The Connecticut Green Bank (“Green Bank”) Multifamily Housing Team is developing a set of pre-development energy loan programs to appropriately serve low-income / affordable multifamily properties as well as market rate multifamily properties. The programs will provide loans to fund work necessary to assess, scope, and secure permanent financing for energy improvement projects. Program requirements will ensure that vetted / qualified service providers are used and ensure that owners receive high quality technical assistance and high impact project outcomes. Pre-development loans will be funded out of the \$1MM budget requested for FY16 for multifamily pre-development loan programs, with the expectation that reasonable expenses for third-party administration as determined under standard Green Bank operating procedures will also likely be incurred. The Multifamily Team seeks Board of Directors (“BOD”) approval to:

- (1) Develop and deploy these pre-development loan programs consistent with the broad terms outlined in this memorandum; and
- (2) Establish and deploy a pilot program using the pre-development loan funds described herein, in partnership with New Ecology Inc. “NEI”, per NEI’s May 2015 proposal to the Green Bank’s Multifamily Housing Clean Energy Financing Programs Request for Proposals (originally issued on 4/7/2014).

Adequate and appropriate pre-development work is currently the most significant barrier to developing the multifamily pipeline. Many owners are unwilling or unable to pay these high risk costs upfront, so projects often never get off the ground. Furthermore, most owners don’t know where or how to start the energy improvement process, nor where to turn for trusted technical assistance. They are stressed with other property management priorities, particularly owners serving low-income households, further exacerbating the hurdles to getting started.

The Green Bank Multifamily Team is building the proposed programs to solve these challenges – a critical first step in achieving our broader multifamily goals of (1) dramatically reducing building energy costs for tenants and owners, (2) getting quality, comprehensive, cost effective energy upgrades to multifamily housing mainstreamed, and (3) closing the energy affordability gap.<sup>1</sup>

---

<sup>1</sup> [www.operationfuel.org/wp-content/uploads/Connecticut-2014-HEAG-Final.pdf](http://www.operationfuel.org/wp-content/uploads/Connecticut-2014-HEAG-Final.pdf)

Staff also believes our proposed approach to lending and risk could be an industry game-changer, particularly for affordable / low-income housing, where grants are the norm for energy project assessment and development. Under the proposed program, the Green Bank is developing a process that progressively screens and funds only viable projects, enabled by high quality service providers.

## **Program Description & Objectives**

### **Use of Funds: Eligible Borrowers**

Loan applicants will be approved subject to appropriate staff due diligence of proposed projects and properties, including whether owners are sufficiently capable of completing their proposed development projects, and whether or not owners have a reasonable expectation that they will be able to secure term financing for their projects, either with a Green Bank term lending product or other capital sources.

### **Use of Funds: Eligible Expenses**

Programs will provide loans to fund work necessary to assess, scope and secure permanent financing in order to successfully implement energy improvement projects. Pre-development loans will be repaid at the next phase of financing (i.e. construction or term loans) when projects move forward, essentially establishing a revolving loan fund approach.

Examples of eligible expenses include, but are not limited to:

- Energy performance benchmarking
- Energy opportunity assessments/ building walkthroughs
- Energy audits, green physical needs assessments and engineering studies
- Property appraisals and surveys
- Environmental testing and identification of (energy related) health and safety measures needing remediation prior to weatherization or other energy improvements
- Energy related design and development technical assistance, including scoping and bidding work to meet requirements of funders
- Completion of funding proposals for construction and permanent financing

### **Key Program Requirements**

Program requirements will ensure that vetted / qualified service providers are available to and used by owners, ensuring owners receive high quality technical assistance and high impact project outcomes. Green Bank staff expects to vet service providers through a request for qualifications process.

### **Total Amount Allocated**

Program loans will be funded out of the \$1MM budget requested for FY16 for multifamily pre-development loan programs, with an initial expectation of \$500,000 for low-income/ affordable multifamily properties and \$500,000 for market rate properties (but reserving the right to shift between

the two categories based on actual demand). Low-income/ affordable projects will draw on MacArthur Program Related Investment (“PRI”) dollars for funding.<sup>2</sup>

### **Loan Amounts and Terms**

Staff expects an average loan size of \$15,000 to \$20,000, with some significantly larger loans (up to \$100,000) for large, complex projects. The projected tenors of the pre-development loans offered under this program should be no longer than 24 months (that is, with maturities beyond two years offered only on an exception basis), and the projected annual interest rates should fall between 0.0% - 5.0%, depending on market sector served (i.e. affordable vs. market rate), loan size, projected term, and project risk profile. Loans will be repaid when projects move forward to implementation, typically taken out by permanent financing, thus creating a revolving financing structure. From a downside perspective, however, the Green Bank will be sharing in the risk if a project does not move forward.

### **Programs to be Developed**

- ***Program Scenario 1: Contractor funded jointly by owner and Green Bank, loan accrues to owner, Green Bank manages contractor disbursements***

This is the model proposed under the initial NEI Pilot (as further described below), designed to enable a simple, seamless owner / customer experience through the use of the pre-development loan funds. Green Bank staff will pilot the program with NEI – by building and refining processes – and then expand to an open market program that will include interested contractors who will be vetted and approved through a request for qualifications process. When the program expands to an open market approach, terms and requirements will be appropriately developed for owners with low-income / affordable properties vs. market rate properties.

- ***Program Scenario 2: Direct loans to owner***

Under this model, loans will be made directly to owners, who will be responsible for managing and paying qualified contractors. Terms and requirements will be appropriately developed for owners with low-income / affordable properties vs. market rate properties.

### **Need/ Justification**

Adequate/ appropriate pre-development work is currently the most significant barrier to developing the multifamily pipeline. Owners are unwilling / unable to fund these high risk upfront costs. They don’t know where or how to start and need trusted technical assistance to work through the energy improvement process.

The Multifamily pipeline is presently robust for FY16, consisting of over 75 projects, representing 2,250 affordable and 513 market rate units under review and development. Almost all of these projects, with the exception of the solar only projects, are not advancing because of the pre-development work that needs to be funded and completed.

For publicly supported (i.e. Department of Housing (“DOH”) and Connecticut Housing Finance Agency (“CHFA”)) projects undergoing moderate and substantial capital improvements, all cost-effective energy

---

<sup>2</sup> The Green Bank Board of Directors approved the MacArthur PRI at its January 23, 2015 meeting.

efficiency measures are often not being included in project scopes for a variety of reasons, resulting in significant lost opportunities to reduce energy and maintenance costs. The solution requires appropriate energy assessments and design engineering early on in the process as well as resources to fund this work. The Green Bank is collaborating with CHFA and DOH to streamline the energy upgrade processes and identify resource needs, including Green Bank pre-development funds, where appropriate.<sup>3</sup> Green Bank pre-development funds will be available to and coordinated with DOH and CHFA where needed. However, as DOH/CHFA offer their own pre-development funds, staff anticipates that Green Bank funds will be predominantly used for non-subsidized properties or for subsidized / rent-restricted properties that are in mid-cycle (meaning energy improvements are needed, but the property is not up for refinancing or a major capital improvement event).

### **NEI Pilot Program Description**

The NEI Pilot program is designed to be an owner friendly process that will allow selected multifamily building owners to utilize the pre-development loan funds in order to determine the energy efficiency savings they can achieve at a minimal cost and effort on their part. Approximately 20 owners already in the Green Bank and NEI's pipeline will be selected and offered an opportunity to participate.

After completing an application, owners will receive an Opportunity Assessment and Benchmarking Evaluation from NEI, one of the country's top experts in multifamily clean energy upgrades and an established Green Bank partner. Owners will then get a written report on their potential savings and financing opportunities, and how their building compares to similar buildings. If, after discussing this report with NEI and the Green Bank, the owner chooses to proceed, the next step will be a comprehensive computerized energy audit by NEI that will detail the cost of the recommended retrofit work and the savings they will receive. If, when the audit is completed, it shows that it makes economic sense to proceed, NEI will help prepare the energy related technical documents needed for construction/ permanent loan closing.

There will likely be a *de minimis* fee required with the application, paid by the owner to NEI. Owners who proceed to an audit will pay a minority, to-be-determined percentage of the audit cost to NEI. All other costs, for the benchmarking, site inspection and audit, as well as preparing specifications and closing documents, will be paid to NEI by the Green Bank. These payments to NEI will accrue in the form of a loan to the owner.

If an owner proceeds to do the energy savings work, the pre-development loan will be taken out in the permanent financing and spread out over the term of any such loan. Or the owner could proceed without Green Bank financing and repay the Green Bank at that time. If at any point the owner decides not to proceed, the loan will be forgiven, and the owner will not have to pay anything more than they have already invested. The goal is to get at least ten multifamily owners to close loans with Green Bank assistance.

---

<sup>3</sup> As an outcome of the recent LEAN process, we are looking to execute an interagency MOA between DOH, CHFA, DPH, CGB and the Utility Companies that commits to solving this and other important challenges that will ultimately result in simpler, streamlined and more effective programs for our customers.)

The pilot is a pre-cursor to the open market, one-stop solution approach we are designing that will simplify things even further for owners. The pilot will provide an opportunity to test out many aspects of the future programs; particularly how to get multifamily owners with limited resources interested in pursuing reduced energy use in their buildings.

### **Strategic Plan**

*Is the proposed project consistent with the Board approved Comprehensive Plan and Budget for the fiscal year?*

The Green Bank's Board of Directors has directed staff to develop financing programs focused on the challenge of achieving energy upgrades in multifamily housing, especially properties that serve low-income tenants. The proposed use of funds is consistent with the FY16 budget submitted for Multifamily Housing and consistent with the Comprehensive Plan for Multifamily Housing. It helps solve the most critical roadblock impeding development and deployment of clean energy into the multifamily market.

### **Ratepayer Payback**

*How much clean energy is being produced (i.e. kWh over the projects lifetime) from the project versus the dollars of ratepayer funds at risk?*

Data and statistics are sorely lacking in the multifamily space to estimate payback. Staff expects that investments made and projects implemented as a result of pre-development work funded under this program will deliver results comparable to the energy saved / clean energy produced per dollar under the C-PACE program. Based on C-PACE results thus far, savings and generation data for \$1,000,000 in loans suggests lifetime savings for this program of about 21,000 MMBtu from energy efficiency projects and just under 2,000 MWh of clean energy generation. This will be a matter of ongoing measurement and tracking, which will be a requirement for all Green Bank funded multifamily housing projects.

Bottom line, however, is that without these pre-dev programs, there will not be Multifamily Program to deliver ratepayer payback, as projects won't advance to implementation.

### **Terms and Conditions**

*What are the terms and conditions of ratepayer payback, if any?*

The pre-development energy fund loan programs are intended to bridge a financing gap in the market for clean energy and energy efficiency installations on multifamily properties, and as such, face a relatively elevated risk profile. Recipients of program loans are expected to repay their obligations, potentially with a rate of return, if and when projects reach the stage of construction / term financing. Loans supporting projects that do not reach this stage will most likely not return capital to the Green Bank. The pre-development loan programs will provide a necessary cushion for owners to overcome market-driven obstacles surrounding energy saving investments in multifamily properties, and over time, Green Bank staff will create further protocols to ensure that only those projects most likely to reach term financing will receive pre-development financing.

## Capital Expended

*How much of the ratepayer and other capital that Green Bank manages is being expended on the project?*

On a programmatic basis, \$1,000,000 will be expended across the pre-development energy fund loan programs, split between an estimated \$500,000 for low-income / affordable multifamily properties and an estimated \$500,000 for market rate multifamily properties. Low-income / affordable projects will draw on the MacArthur PRI for funding, if and when received. On a per project basis, it is estimated that individual loans may reach up to, and in some cases above, \$15,000 to \$20,000 in total principal advanced.

## Risk

*What is the maximum risk exposure of ratepayer funds for the project?*

Because program loans will bridge a gap in the market, and because of the potential burden of risk placed on loan principal, the program will be structured to manage those risks as best as possible given the constraints placed on multifamily property owners. The Green Bank will provide funding for the various and necessary stages of the pre-development programs, and will only receive repayment if and when projects close with permanent financing (which will take out the pre-development loan) or an owner decides to self-finance the project and is obligated to repay the pre-development loan. The following outline, a representative example of a potential project, articulates the process surrounding ownership participation, Green Bank financing, and program servicing:

1. Customer Application
  - a. *A de minimis* application fee required, paid by the owner to the program servicer
2. Benchmarking Analysis
  - a. Provided by program servicer, paid in full by CGB
  - b. Up to 5% of total pre-development costs (estimated)
  - c. Eligible projects move forward to next stage
3. Opportunity Assessment (only occurs if benchmarking suggests appropriate energy savings opportunities may exist)
  - a. Provided by program servicer, paid in full by CGB
  - b. Up to 5% - 10% of total pre-development costs (estimated)
  - c. After assessment, owner decision to proceed
4. Audit (only occurs if opportunity assessments suggests high likelihood of potential energy savings)
  - a. Provided by program servicer, minority % paid by owner and rest paid by CGB
  - b. Up to 50% of total pre-development costs (estimated)
  - c. After audit, owner decision to proceed
5. Design Technical Assistance (only occurs if audit identifies concrete energy savings potential)
  - a. Assistance provided by program servicer, paid in full by CGB
  - b. Up to 50% of total pre-development costs (estimated)
  - c. Owner decision to proceed to construction



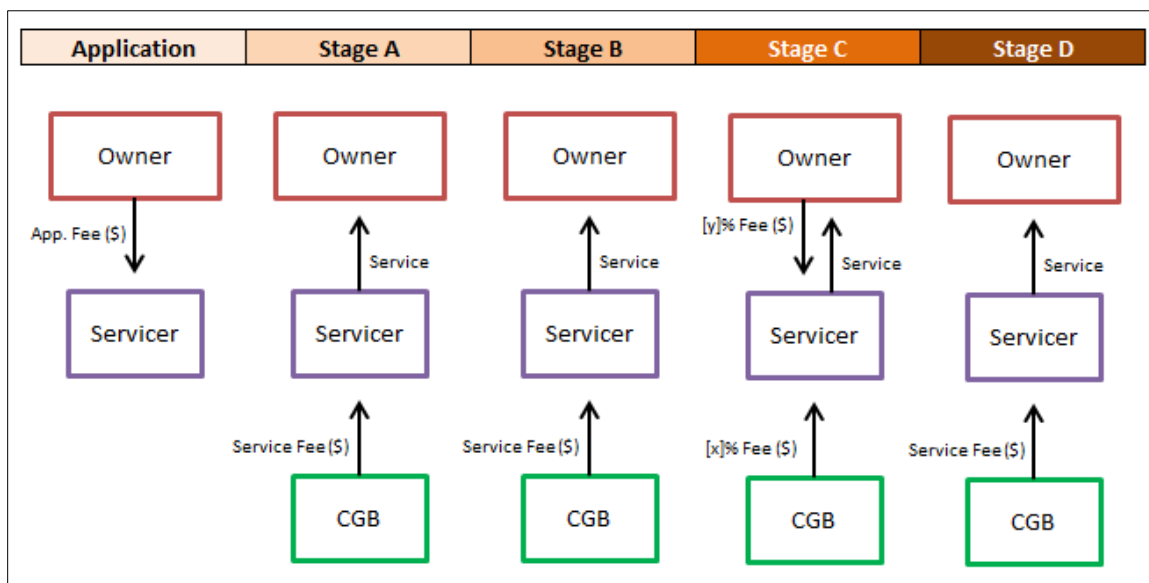
## Financial Statements

*How is the project investment accounted for on the balance sheet and profit and loss statements?*

Advances of pre-development loan funds are accounted for by a reduction in the Green Bank Cash and Cash Equivalents Account (Current Assets on the Balance Sheet) and a corresponding increase in Multifamily Pre-Development Loans (Non-Current Asset on the Balance Sheet).

## Capital Flow Diagram

Representative Program Structure: the diagram below represents the potential steps to completion for an individual project moving through a loan program with a servicing partner. The given stages and service/fee structures are based on discussions with market participants, but are subject to change across actual program implementations. The diagram describes the potential relationship between property owners, program servicers, and the Green Bank. For further elaboration on a potential draw schedule across the stages of a loan program, please refer back to the bullet points in the “Risk” section above.



## Target Market

*Who are the end-users of the project?*

The target market is both low-income / affordable multifamily property owners as well as market rate owners. “Affordable” multifamily housing falls into two general categories: subsidized, rent-restricted properties and non-subsidized, privately owned properties that serve low- and moderate-income tenants (also referred to as naturally occurring affordable housing.) We expect program funds will be predominantly used by non-subsidized, privately owned properties (both naturally occurring affordable and market rate) and for subsidized / rent-restricted properties that are in mid-cycle (meaning energy

improvements are needed, but the property is not up for refinancing or a major capital improvement event).

Many of the state's subsidized housing properties are funded under various CHFA and DOH programs, with their own pre-development loan funds. For these properties, Green Bank pre-development funds will be available to and coordinated with DOH and CHFA if and where needed.

## **Green Bank Role, Financial Assistance & Selection/Award Process**

### **Green Bank Role**

The Green Bank will develop and administer programs for at least the first year, and until we are able to identify a qualified third party to run them on our behalf. Administration includes processing applications, underwriting, and closing and funding loans.

### **Selection / Award Process**

Qualified property owners / borrowers will be qualified and approved for loans on a first-come, first-served basis for as long as funds are available, subject to suitable underwriting standards. Eligible contractors and service providers will be vetted and qualified through a request for qualifications process that outlines and screens for appropriate qualifications and experience.

For the NEI Pilot and its use of pre-development loan funds, NEI is already working as a program partner with the Green Bank. They are national leaders in clean energy improvements to multifamily housing, and highly qualified for the work proposed under the Pilot.

### **Program Partners**

Program partners will include contractors and other service providers screened and vetted through a request for qualifications process.

### **Risk and Mitigation Strategies / Term Sheet**

The NEI Pilot, as the initial use of funds under this program, will be funded on a project-by-project basis as specified in this memo. For an outline of NEI's proposed scope of work (which is representative of a potential project's evaluation and steps to completion), please refer to Exhibit A for more detail.

## Resolutions

**WHEREAS**, the Connecticut Green Bank (“Green Bank”) has a mandate to deploy private capital to support clean energy upgrades across the state’s built environment;

**WHEREAS**, the multifamily sector is an area of active focus for the Green Bank, given the unique challenges of financing clean energy upgrades on multifamily properties, and especially on affordable multifamily properties;

**WHEREAS**, Green Bank staff has determined that a key reason for the lack of progress in financing clean energy upgrades for multifamily properties is a surfeit of upfront support and a lack of the capital needed to navigate the complicated energy upgrade process for these buildings, including but not limited to the steps of benchmarking, assessing, and auditing properties, as well as determining appropriate design and financing solutions; and

**WHEREAS**, given the acuteness of these challenges for affordable multifamily building owners, as well as the high energy burden borne by tenants living in these properties, the Green Bank Board of Directors (“Board of Directors”) authorized staff to accept a Program Related Investment from the MacArthur Foundation on January 23, 2015, in the amount of \$5,000,000, to support financing for these properties;

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to deploy up to \$1,000,000 to create a multifamily pre-development loan fund (the “Loan Fund”), with an initial expectation of \$500,000 of that total to be used for affordable multifamily properties, with terms and conditions consistent with the memorandum and associated exhibits submitted to the Board of Directors dated June 12, 2015, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers, with a fund launch date no later than 120 days from June 19, 2015;

**RESOLVED**, that a portion of the proceeds of the Loan Fund, not to exceed \$280,000, may be used to support a pilot initiative run by New Ecology, Inc. (“NEI”), to drive volume and uptake of the Loan Fund, per NEI’s response to the Green Bank’s Multifamily Housing Clean Energy Financing Program Request for Proposals originally released on April 7, 2014; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Kerry O’Neill, Managing Director, Residential Programs; Kim Stevenson, Associate Director, Multifamily Programs; Ben Healey, Assistant Director, and Chris Magalhaes, Manager, Clean Energy Finance

## Exhibit A

### Representative New Ecology, Inc. Scope of Work Outline

#### **Purpose**

*The purpose of the Connecticut Green Bank's ("CGB") Pre-Retrofit Financing for Energy Improvements Pilot Program ("Program") is to provide and fund pre-construction stage technical assistance to building owners and developers to drive clean energy in existing multifamily housing. The goal is to close financing on and initiate construction of ten retrofit projects, and to define parameters for designing an on-going program. New Ecology, Inc., is a community-based sustainable developer that works with building owners to implement programs and projects that protect environmental quality and provide direct, meaningful economic opportunities for communities. New Ecology will be paid for services rendered on a project by project basis through Multifamily Pre-development Loan Program funds.*

#### **PROGRAM SERVICES –**

*The following Tasks will be performed by NEI in delivering direct services offered to owners under the Program. Fees will be jointly paid by project owners and the Green Bank to NEI, in accordance with the schedule for each Task. All fees paid by the Green Bank on an owner's behalf, will accrue as a loan obligation to the owner, per the Participation Agreement, and will be repaid to CGB if, and when, permanent project financing is secured and the project moves forward to implementation and completion.*

#### **Task 1 - Benchmarking**

##### **Scope of Work**

*Provide benchmarking services for multifamily housing using the Wegowise energy and water-tracking tool. Benchmarking will include the following activities:*

- *Assist owners in creating a Wegowise account;*
- *Assist owners in loading building data and utility account information into the Wegowise system necessary for a complete Wegowise Pro account.*
- *Provide a development-level, historical energy and water analysis to identify usage patterns, consumption trends, anomalies, and comparisons to other comparable buildings within the Wegowise database.*

##### **Deliverables:**

*NEI will complete the following deliverables:*

- *An Energy and Water Analysis report that documents the benchmarking results; and*

- *A Wegowise account for each building that includes utility data for at least one utility (water, electricity, gas, or oil). Accounts can be either common area accounts or tenant-based accounts. Accounts will be shared with the Connecticut Green Bank (CGB) Wegowise aggregator account as follows:*
  - *Username: CEFIAProperties*
  - *Password: CEFIAProp*
- *Host a conference call with the project owner to discuss benchmarking results if, after conferring with the CGB, there is a decision not to proceed.*

## **Task 2 – Opportunity Assessments**

### **Scope of Work**

*The purpose of this task is to provide a low cost, quick turn-around assessment of potential clean energy opportunities for a single building or development with many units/buildings. This task is intended to screen projects, and help owners make informed decisions about investing in audits and other predevelopment costs in pursuit of a retrofit project. During the building walk-through the following building systems will be evaluated by an experienced energy analyst who will also discuss the buildings operations with the building superintendent:*

- *building envelope;*
- *major HVAC systems;*
- *energy management system appropriateness;*
- *lighting and appliances;*
- *elevator and other whole building electric loads as applicable;*
- *plumbing fixtures including water, hot and cold, conservation opportunities;*
- *visible health and safety improvement needs;*
- *kitchen and bathroom vents;*
- *common area laundry equipment;*
- *ventilation upgrades; and*
- *renewable and alternative energy production.*

### **Deliverables:**

*NEI will prepare an opportunity assessment report, which will summarize the findings of the building walk-through as well as the benchmarking results. NEI will host a conference call with the CGB to discuss findings and next steps with the project owner.*

## **Task 3 – Clean Energy Audits**

### **Scope of Work**

*The purpose of this task is to provide comprehensive building assessments for clean energy opportunities within a residential development. The audit will focus on identification of the existing conditions and upgrade opportunities, and will project potential energy savings and implementation costs. The intent is*

*to provide sufficient detail to allow owners and the Green Bank to formulate a project scope, and to make decisions about whether or not to move forward with the design phase of a project. The audit methodology to be used for the audit will first be approved by the CGB via a work order, and will meet the requirements of potential funding and financing sources. The base-level audit shall be an ASHRAE Level II audit (“Base-Level Audit”) as currently defined under the CPACE program. It will include the following:*

- *Conduct a computerized analysis of the energy saving potential of the:*
  - *building envelope;*
  - *major HVAC systems;*
  - *energy management systems*
  - *lighting and appliances;*
  - *kitchen and bathroom venting*
  - *elevator other whole building electric loads as applicable;*
  - *water and plumbing fixtures;*
  - *common area laundry equipment;*
  - *ventilation upgrades; and*
  - *renewable energy opportunities.*
- *Recommend clean energy measures to upgrade the building to improve overall performance including lowering energy and water consumption, lowering operating expenses, improving indoor air quality, making the building more durable, and improving the overall value of the asset.*
- *Project energy and water savings opportunities within the development based the clean energy recommendations.*
- *Project implementation costs of the upgrades based on the scope of the clean energy recommendations.*
- *Project Return on Investment for the proposed clean energy recommendations*
- *Work with appropriate utility and any government agency to achieve integration of all available rebates and incentive grants into the project financing analysis and owners Return on Investment.*

### ***Deliverables:***

*NEI will prepare an audit report, which will detail the findings of the on-site audit assessment and the potential opportunities for clean energy retrofits within the development. The report will include the following:*

- *Summary of historical energy consumption analysis;*
- *Record of audit findings and existing conditions;*
- *Identification of clean energy and water retrofit opportunities within the development;*
- *Estimates of energy and water savings opportunities;*
- *Cost estimates of retrofit work;*
- *Return on Investment; and,*

- *Recommendations for installation, quality control, systems commissioning, measurement and verification, and post construction training.*
- *Analysis of likely rebates and incentive grants and gap requiring owner financing.*

*NEI will host a conference call with the CGB and owner to discuss findings and next steps. The CGB will provide the owner with an analysis of any available private and public financing for the project. NEI will make any changes to audit that are needed after conference call; and provide a final audit report satisfactory to CGB and owner.*

## ***Task 4 – Design Technical Assistance***

### ***Scope of Work***

*The purpose of this task is to provide owners with the technical assistance necessary to design and fund a clean energy retrofit. Services will be tailored to the needs of the owner and the project. Services provided to owners between completion of Task 3 and the closing of a retrofit loan (or the start of construction for a self-financed project) will be included in this task. The exact scope of work for this task will be proposed by NEI and approved by CGB on a case-by-case basis. Typical activities in this task include, but may not be limited to, the following:*

- *Preparation of bid documents;*
- *Design and specifications for HVAC systems;*
- *Design and specifications for elevator upgrades; and*
- *Design and specifications for renewable energy projects.*
- *Advanced diagnostics and testing;*
- *Design services (Design reviews, preparation of plans and specs);*
- *Assistance with processing all government and utility rebates and incentives; CGB to provide assistance needed to prepare for any public or private loan closing.*

### ***Deliverables:***

*Task 4 deliverables will be defined in a work order prepared by NEI and approved by CGB prior to starting the work in this task. NEI will also assist CGB in its work with other Connecticut agencies to establish a common set of standard specifications for energy retrofits in multiple dwellings.*

- *Audits: in accordance with the schedule on the approved work order;*
- *Design Technical Assistance: in accordance with the schedule on the approved work order.*
- *Work orders will be provided within two weeks of NEI and owner decision to proceed.*



# Memo

**To:** Board of Directors of the Connecticut Green Bank  
**From:** Mackey Dykes (VP and COO)  
**CC:** Bryan Garcia (President and CEO)  
**Date:** June 12, 2015  
**Re:** Fiscal Year 2016 Proposed Program Targets

Presented here are the proposed targets for the Connecticut Green Bank in fiscal year 2016 and each of its program sectors.

## STATUTORY AND INFRASTRUCTURE

Program	Projects	Capital Deployed	Clean Energy Deployed	Annual Clean Energy Generated and Saved
RSIP	11,987	\$402,869,745	90.0	376,603
Anaerobic Digester	3	\$62,825,000	6.2	193,681
Combined Heat and Power	2	\$8,900,000	2.8	79,505
<b>Total</b>	<b>11,987</b>	<b>\$474,594,745</b>	<b>99.0</b>	<b>649,789</b>

## RESIDENTIAL

Program	Projects	Capital Deployed	Clean Energy Deployed	Annual Clean Energy Generated and Saved
Smart-E	1,062	\$16,287,000	1.8	21,310
<i>CHIF/HES Channel</i>	600	\$7,800,000	0.0	9,900
<i>Existing EE/HVAC Channels</i>	235	\$2,585,000	0.0	3,878
<i>Solar (some with EE)</i>	227	\$5,902,000	1.8	7,532
CT Solar Lease	451	\$16,000,000	3.4	14,227
Low Income Loans/Leases	606	\$13,750,000	3.0	14,203
Multifamily	43	\$11,500,000	1.2	16,648
<b>Total</b>	<b>2,162</b>	<b>\$57,537,000</b>	<b>9.4</b>	<b>66,388</b>



## INSTITUTIONAL

Program	Projects	Capital Deployed	Clean Energy Deployed (MW)	Annual Clean Energy Produced and Saved
Lead By Example – State	4	\$95,000,000	0.0	228,000
Lead By Example – Municipal	3	\$20,000,000	0.0	56,250
Institutional Off Credit ESA	2	\$1,000,000	0.0	28,750
CT Solar Lease	10	\$6,000,000	2.0	8,369
<b>Total</b>	<b>19</b>	<b>\$122,000,000</b>	<b>2.0</b>	<b>321,369</b>

## COMMERCIAL AND INDUSTRIAL

Program	Projects	Capital Deployed	Clean Energy Deployed	Annual Clean Energy Generated and Saved
C-PACE	90	\$53,000,000	9.0	160,000

## CONNECTICUT GREEN BANK

Sector	Projects	Capital Deployed	Clean Energy Deployed (MW)	Annual Clean Energy Produced and Saved
Statutory & Infrastructure	11,992	\$474,594,745	99.0	649,789
Residential	2,162	\$57,537,000	9.4	66,388
Institutional	19	\$122,000,000	2.0	321,369
Commercial & Industrial	90	\$53,000,000	9.0	160,000
<b>Total<sup>1</sup></b>	<b>13,079</b>	<b>\$672,579,745</b>	<b>111.2</b>	<b>1,175,787</b>

<sup>1</sup> Residential solar projects that receive financing from CGB also receive an incentive in RSIP so are counted in each sector's goal. They have been removed from the total to avoid double counting

# Memo

**To:** Board of Directors of the Connecticut Green Bank

**From:** George Bellas (VP of Finance and Administration) and Mackey Dykes (VP and COO)

**CC:** Bryan Garcia (President and CEO)

**Date:** June 19, 2016

**Re:** Fiscal Year 2016 Proposed Annual Budget

---

In accordance with Section V of the Connecticut Green Bank operating procedures, presented here is the Fiscal Year 2016 Annual Operating Budget and Plan of Operations. The Budget and Operations Committee met on May 29, 2015 and June 11, 2015 to review the proposal and has recommended approval by the Board of Directors.

The 2016 Annual Budget highlights (on a cash basis) include:

1. Expected revenues of \$37,119,000.
2. Expected operating expenses of \$20,462,800 and incentive expenses of \$16,239,000
3. Projected net income of \$417,200
4. Continued growth in sector financing programs and Residential Solar Investment Program.
5. Projected loan advances of \$64,186,300.
6. Projected asset sales of \$51,650,000.
7. Creation of a majority privately-funded C-PACE warehouse
8. Administrative budget represents 3% of total capital (public and private) deployed

As a result of the budgeted activities for fiscal year 2016, the Connecticut Green Bank seeks to deploy over \$700 million of investment supporting over 14,000 projects, 120 MW of renewable energy, and produce and/or save 1,200,000 MMBtu of clean energy.

**Connecticut Green Bank**  
**FY 2016 Operating and Program Budget**  
**Table of Contents**  
**Recommended by B&O Committee - June 11, 2014**  
**Primary Schedules**

**Page**

<b>P-1</b>	Statement of Revenues and General Operations and Program Expenses - Accrual Basis
<b>P-2</b>	Statement of Revenues and General Operations and Program Expenses - Cash Basis
<b>P-3</b>	Projected Statement of Cash Flows FYE June 30, 2016 - Unrestricted Cash
<b>P-4</b>	Projected Statement of Cash Flows FYE June 30, 2016 - Restricted Cash
<b>P-5</b>	Projected Balance Sheet and Supporting Schedules FYE June 30, 2016
<b>P-6</b>	Utility Customer Assessment Projections
<b>P-7</b>	Employee Staffing Plan

**Connecticut Green Bank**  
**FY 16 Operations and Program Budget**  
**Statement of Revenues and General Operations and Program Expenses**

	Accrual Basis							
	FY 2016 Budget		FY 2015 Budget				FY 2015	FY 2015
	General Operations	Programs	Total Operations & Program Budget	Total Operations & Program Budget	Inc(Dec)	% Inc.	Actual YTD May	Projected FY15 12 months
<b>Revenues</b>								
Utility customer assessments	\$ 27,111.1	\$ -	\$ 27,111.1	\$ 27,525.0	\$ (413.86)	-1.5%	\$ 25,072.7	\$ 27,272.0
RGGI auction proceeds - renewables, CPACE loan funding	\$ -	\$ 5,200.0	\$ 5,200.0	\$ 6,800.0	\$ (1,600.00)	-23.5%	\$ 4,149.7	\$ 5,631.1
RGGI proceeds - energy efficiency (n/a for FY2016)	\$ -	\$ -	\$ -	\$ 12,200.0	\$ (12,200.00)	-100.0%	\$ 8,005.7	\$ 10,952.4
Proceeds from State bond allocations, no repayment	\$ -	\$ -	\$ -	\$ 5,000.0	\$ (5,000.00)	-100.0%	\$ -	\$ -
Interest Income, cash received	\$ 43.0	\$ 610.1	\$ 653.1	\$ 505.0	\$ 148.09	29.3%	\$ 693.0	\$ 750.0
Interest Income, capitalized	\$ -	\$ 400.0	\$ 400.0	\$ 726.0	\$ (326.00)		\$ 674.8	\$ 710.0
Grant income (Federal Programs)	\$ -	\$ 120.0	\$ 120.0	\$ 146.0	\$ (26.00)	-17.8%	\$ 126.2	\$ 134.0
REC sales, general	\$ -	\$ 1,764.1	\$ 1,764.1	\$ 575.0	\$ 1,189.06	206.8%	\$ 1,419.0	\$ 1,474.0
REC Sales, SHREC program	\$ -	\$ 296.3	\$ 296.3	\$ -	\$ 296.30		\$ -	\$ -
CPACE Loan closing fees	\$ -	\$ 1,200.0	\$ 1,200.0	\$ 773.8	\$ 426.25	55.1%	\$ 428.1	\$ 500.0
Other income	\$ 67.5	\$ 120.0	\$ 187.5	\$ 100.0	\$ 87.50	87.5%	\$ 226.4	\$ 250.0
<b>Total Revenues:</b>	<b>\$ 27,221.6</b>	<b>\$ 9,710.5</b>	<b>\$ 36,932.1</b>	<b>\$ 54,350.8</b>	<b>\$ (17,418.7)</b>	<b>-32.0%</b>	<b>\$ 40,795.6</b>	<b>\$ 47,673.5</b>
<b>Expenses</b>								
Employee compensation	\$ 769.2	\$ 4,304.3	\$ 5,073.4	\$ 4,375.6	\$ 697.78	15.9%	\$ 3,667.9	\$ 4,239.1
Employee benefits and payroll taxes	\$ 576.9	\$ 3,228.2	\$ 3,805.1	\$ 3,359.0	\$ 446.10	13.3%	\$ 2,661.4	\$ 3,068.3
Shared CI employees	\$ 139.1	\$ -	\$ 139.1	\$ 328.4	\$ (189.28)	-57.6%	\$ 246.9	\$ 265.8
Temporary employees	\$ 10.0	\$ 56.8	\$ 66.8	\$ 105.0	\$ (38.20)	-36.4%	\$ 55.3	\$ 75.0
Program development and administration	\$ -	\$ 5,410.8	\$ 5,410.8	\$ 4,007.3	\$ 1,403.48	35.0%	\$ 1,782.8	\$ 2,002.0
Marketing	\$ 950.3	\$ 2,111.0	\$ 3,061.3	\$ 3,139.9	\$ (78.60)	-2.5%	\$ 1,786.2	\$ 2,036.2
EM&V	\$ -	\$ 395.3	\$ 395.3	\$ 160.0	\$ 235.30	147.1%	\$ 32.0	\$ 75.0
Consulting fees	\$ 675.0	\$ 248.0	\$ 923.0	\$ 407.0	\$ 516.00	128.8%	\$ 171.5	\$ 250.0
Professional fees, legal and accounting	\$ 205.0	\$ 295.0	\$ 500.0	\$ 429.0	\$ 71.00	16.6%	\$ 233.6	\$ 350.0
Rent and location related expenses	\$ 83.2	\$ 465.5	\$ 548.7	\$ 497.6	\$ 51.09	10.3%	\$ 450.9	\$ 485.0
Office, computer & other expenses	\$ 99.3	\$ 555.7	\$ 655.0	\$ 500.5	\$ 154.53	30.9%	\$ 414.2	\$ 450.0
<b>Expenses before Financial Incentives:</b>	<b>\$ 3,508.0</b>	<b>\$ 17,070.5</b>	<b>\$ 20,578.5</b>	<b>\$ 17,309.3</b>	<b>\$ 3,269.2</b>	<b>18.9%</b>	<b>\$ 11,502.7</b>	<b>\$ 13,296.4</b>
Federal Grant expenditures	\$ -	\$ 35.7	\$ 35.7	\$ 75.0	\$ (39.32)	-52.4%	\$ 33.6	\$ 50.0
Financial Incentives- Grants	\$ -	\$ 13,730.0	\$ 13,730.0	\$ 23,025.0	\$ (9,295.00)	-40.4%	\$ 8,101.2	\$ 10,000.0
Interest Rate Buydowns - ARRA	\$ -	\$ 1,645.3	\$ 1,645.3	\$ 904.7	\$ 740.60	81.9%	\$ 409.3	\$ 450.0
Interest Rate Buydowns - Ratepayer	\$ -	\$ 828.0	\$ 828.0	\$ -	\$ 828.00		\$ -	\$ -
Provision for Loan Loss	\$ -	\$ 1,851.1	\$ 1,851.1	\$ 3,983.5	\$ (2,132.37)	-53.5%	\$ -	\$ 1,000.0
<b>Financial Incentives:</b>	<b>\$ -</b>	<b>\$ 18,090.1</b>	<b>\$ 18,090.1</b>	<b>\$ 27,988.2</b>	<b>\$ (9,898.1)</b>	<b>-35.4%</b>	<b>\$ 8,544.1</b>	<b>\$ 11,500.0</b>
<b>Total Expenditures:</b>	<b>\$ 3,508.0</b>	<b>\$ 35,160.6</b>	<b>\$ 38,668.6</b>	<b>\$ 45,297.5</b>	<b>\$ (6,628.9)</b>	<b>-14.6%</b>	<b>\$ 20,046.8</b>	<b>\$ 24,796.4</b>
<b>Total Revenues over (under) Expenditures:</b>			<b>\$ (1,736.5)</b>	<b>\$ 9,053.2</b>			<b>\$ 20,748.8</b>	<b>\$ 22,877.1</b>

Connecticut Green Bank  
 FY 16 Operations and Program Budget  
 Statement of Revenues and General Operations and Program Expenses

	Cash Basis				Adjustments	Total Operations & Program Budget	% Inc. (Dec)
	FY 2016 Budget - Accrual Basis		FY 2016 Budget - Cash Basis				
	General Operations	Programs	Restricted Income and expenses	Total Operations & Program Budget			
<b>Revenues</b>							
Utility customer assessments	\$ 27,111.1	\$ -	\$ -	\$ 27,111.1	\$ 386.9	\$ 27,498.04	1.4%
RGGI auction proceeds - renewables,CPACE loan fundin	\$ -	\$ -	\$ 5,200.0	\$ 5,200.0	\$ 200.0	\$ 5,400.00	3.8%
RGGI proceeds - energy efficiency (n/a for FY2016)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Procceds from State bond allocations, no repayment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Interest Income, cash received	\$ 43.0	\$ 610.1	\$ -	\$ 653.1	\$ -	\$ 653.09	0.0%
Interest Income ,capitalized	\$ -	\$ 400.0	\$ -	\$ 400.0	\$ (400.0)	\$ -	-100.0%
Grant income (Federal Programs)	\$ -	\$ 120.0	\$ -	\$ 120.0	\$ -	\$ 120.00	0.0%
REC sales, general	\$ -	\$ 1,764.1	\$ -	\$ 1,764.1	\$ -	\$ 1,764.06	0.0%
REC Sales, SHREC program	\$ -	\$ 296.3	\$ -	\$ 296.3	\$ -	\$ 296.30	0.0%
CPACE Loan closing fees	\$ -	\$ 1,200.0	\$ -	\$ 1,200.0	\$ -	\$ 1,200.00	0.0%
Other income	\$ 67.5	\$ 120.0	\$ -	\$ 187.5	\$ -	\$ 187.50	0.0%
<b>Total Revenues:</b>	<b>\$ 27,221.6</b>	<b>\$ 4,510.5</b>	<b>\$ 5,200.0</b>	<b>\$ 36,932.1</b>	<b>\$ 186.9</b>	<b>\$ 37,119.0</b>	<b>0.5%</b>
<b>Expenses</b>							
Employee compensation	\$ 769.2	\$ 4,304.3	\$ -	\$ 5,073.4	\$ -	\$ 5,073.42	0.0%
Employee benefits and payroll taxes	\$ 576.9	\$ 3,228.2	\$ -	\$ 3,805.1	\$ -	\$ 3,805.07	0.0%
Shared CI employees	\$ 139.1	\$ -	\$ -	\$ 139.1	\$ -	\$ 139.12	0.0%
Temporay employees	\$ 10.0	\$ 56.8	\$ -	\$ 66.8	\$ -	\$ 66.80	0.0%
Program development and administration	\$ -	\$ 5,410.8	\$ -	\$ 5,410.8	\$ -	\$ 5,410.80	0.0%
Marketing	\$ 950.3	\$ 2,111.0	\$ -	\$ 3,061.3	\$ -	\$ 3,061.34	0.0%
EM&V	\$ -	\$ 395.3	\$ -	\$ 395.3	\$ -	\$ 395.30	0.0%
Consulting fees	\$ 675.0	\$ 248.0	\$ -	\$ 923.0	\$ -	\$ 923.00	0.0%
Professional fees, legal and accounting	\$ 205.0	\$ 295.0	\$ -	\$ 500.0	\$ -	\$ 500.00	0.0%
Rent and location related expenses	\$ 83.2	\$ 465.5	\$ -	\$ 548.7	\$ -	\$ 548.68	0.0%
Office, computer & other expenses	\$ 99.3	\$ 555.7	\$ -	\$ 655.0	\$ (115.7)	\$ 539.30	-17.7%
<b>Expenses before Financial Incentives:</b>	<b>\$ 3,508.0</b>	<b>\$ 17,070.5</b>	<b>\$ -</b>	<b>\$ 20,578.5</b>	<b>\$ (115.7)</b>	<b>\$ 20,462.8</b>	
Federal Grant expenditures	\$ -	\$ 35.7	\$ -	\$ 35.7	\$ -	\$ 35.68	0.0%
Financial Incentives- Grants	\$ -	\$ 13,730.0	\$ -	\$ 13,730.0	\$ -	\$ 13,730.00	0.0%
Interest Rate Buydowns - ARRA	\$ -	\$ -	\$ 1,645.3	\$ 1,645.3	\$ -	\$ 1,645.30	0.0%
Interest Rate Buydowns - Ratepayer	\$ -	\$ 828.0	\$ -	\$ 828.0	\$ -	\$ 828.00	0.0%
Provision for Loan Loss	\$ -	\$ 1,851.1	\$ -	\$ 1,851.1	\$ (1,851.1)	\$ -	-100.0%
<b>Financial Incentives:</b>	<b>\$ -</b>	<b>\$ 16,444.8</b>	<b>\$ 1,645.3</b>	<b>\$ 18,090.1</b>	<b>\$ (1,851.1)</b>	<b>\$ 16,239.0</b>	<b>-10.2%</b>
<b>Total Expenditures:</b>	<b>\$ 3,508.0</b>	<b>\$ 33,515.3</b>	<b>\$ 1,645.3</b>	<b>\$ 38,668.6</b>	<b>\$ (1,966.8)</b>	<b>\$ 36,701.8</b>	<b>-5.1%</b>
<b>Total Revenues over (under) Expenditures:</b>				<b>\$ (1,736.5)</b>	<b>\$ 2,153.7</b>	<b>\$ 417.2</b>	

## Connecticut Green Bank

### Cash Flow Projection - FY16 - Unrestricted Cash Balances

<u>Projected Unrestricted Cash Balances:</u>	<u>6/30/2015</u>	<u>Projected Cash Flows FY2016</u>
Connecticut Green Bank - Operations	\$ 25,642.6	
Connecticut Green Bank- RGGI for CPACE	\$ 11,123.0	
	\$ 36,765.6	
	Projected Cash Balance - July 1, 2015: \$	36,765.6
 <u>Cash In - Operations:</u>		
Utility customer assessments	\$	27,498.0
RGGI auction proceeds - renewables	\$	5,400.0
Interest - cash deposits	\$	48.0
Interest - Solar lease I promissory notes, net of serving fees	\$	96.0
Principal repayments - Solar Lease I promissory Notes	\$	720.0
Interest- Non CPACE loan portfolio	\$	384.7
Principal repayments - Non CPACE loan portfolio	\$	65.4
Interest - CGB CPACE Warehouse, benefit assessments held by CGB	\$	103.1
CSPACE Closing Fees - Private Capital CSPACE Warehouse	\$	1,200.0
REC Sales, Non SHREC	\$	1,885.9
REC Sales, SHREC	\$	296.3
Other Income	\$	187.5
 <u>Cash Out - Operations:</u>	 \$	 (20,546.1)
<u>Cash Out - Financial Incentives</u>	\$	(14,558.9)
<u>Cash Out - Capital Expenditures</u>	\$	(53.5)

**Connecticut Green Bank**

**Cash Flow Projection - FY16 - Unrestricted Cash Balances**

**Projected Unrestricted Cash Balances:**

**6/30/2015**

Connecticut Green Bank - Operations	\$	25,642.6
Connecticut Green Bank- RGGI for CPACE	\$	11,123.0
	\$	36,765.6

**Projected  
Cash Flows  
FY2016**

**Cash Out - Loan Advances**

**Alpha/Op Demo Programs:**

CGB Advances under Alpha/Op Demo Legacy Program \$ (350.0)

**Anaerobic Digester/Pilot Program:**

CGB advances - Supreme Industries/Southington Facility \$ (1,333.3)

**CHP Pilot Program:**

CGB advances - Twain River Energy/Thunderbird Project-New Britain \$ (1,000.0)

**Micro Grid Program:**

CGB advances - Bridgeport \$ (503.0)

CGB advances - unidentified microgrid projects \$ (2,500.0)

**Grid Tied Program:**

CGB advances - Wind Colebrook \$ (1,000.0)

**CES Innovation Fund:**

CGB advances - CES Innovation Fund \$ (1,000.0)

**C&I Programs:**

CGB advances - C&I ESA RFP \$ (250.0)

CGB advances - C&I Loans \$ (250.0)

**CHIF Programs:**

CGB advances - CHIF Multifamily - LIME \$ (1,000.0)

CGB advances - CHIF Bridge Loan \$ (900.0)

CHIF Bridge Loan - repayment \$ 900.0

**Connecticut Green Bank**

**Cash Flow Projection - FY16 - Unrestricted Cash Balances**

<u>Projected Unrestricted Cash Balances:</u>	<u>6/30/2015</u>	<u>Projected Cash Flows FY2016</u>
Connecticut Green Bank - Operations	\$ 25,642.6	
Connecticut Green Bank- RGGI for CPACE	\$ 11,123.0	
	<u>\$ 36,765.6</u>	
<b>Multifamily Programs:</b>		
CGB advances -Pre Development Loan Fund - Marketrate		\$ (500.0)
CGB Advances - Multifamily Credit Enhancement Fund RFP		\$ (1,000.0)
<b>Residential Programs:</b>		
Posigen		\$ (5,000.0)
<b>CSPACE Program:</b>		
Private Warehouse - New FY2016 commitments funded by CGB in FY16		\$ (10,000.0)
CSPACE Warehouse - 6/30/2015 open commitments to be funded by CGB in FY16		\$ (31,000.0)
CSPACE Warehouse - TERM FUNDING by GREEN BANK (Subordinated Debt held by CGB)		\$ (6,000.0)
<u>Transfers to Restricted Cash Account</u>		\$ (1,000.0)
<u>Advances from &amp; Repayments to Timeliness Reserves</u>		\$ 61.0
<u>Cash In - Sales of Portfolio Loans</u>		\$ 51,650.0
<u>Working Capital Advances to Affiliates</u>		\$ (7,402.6)
<u>Working Capital Advance Repayments from Affiliates</u>		\$ 8,847.4
<b>Projected Cash Balance - June 30, 2015:</b>	<u>\$ 28,961.5</u>	
		<u>Net Cash Used: (7,804.1)</u>



**Connecticut Green Bank  
Cash Flow Projection - FY16 - Restricted Cash Balances**

**Restricted** Cash Balances:

Connecticut Green Bank - Tremaine Foundation  
 Connecticut Green Bank - MacArthur Foundation  
 Connecticut Green Bank - LBE State  
 Connecticut Green Bank- ARRA

**6/30/2015**

\$	13.8
\$	100.0
\$	1,000.0
\$	2,406.0
\$	<b>3,519.8</b>

**Projected Cash  
Flows FY2016**

**TREMAINE FOUNDATION**

**Cash In**

Grant - Tremaine Foundation

**Cash Out**

Grant Expenses

<b>Cash Balance - Beginning Balance:</b>	13.8
	-
	-
<b>Cash Balance - Ending Balance:</b>	<u>13.8</u>

**MacARTHUR FOUNDATION**

**Cash In**

Drawdown - MacArthur Foundation loan

**Cash Out**

PreDevelopment Loans - Affordable Housing

<b>Cash Balance - Beginning Balance:</b>	100.0
	2,400.0
	(500.0)
<b>Cash Balance - Ending Balance:</b>	<u>2,000.0</u>

**LBE PROGRAM**

**Cash In**

**Cash Out**

Loan advances

<b>Cash Balance - Beginning Balance:</b>	1,000.0
	-
	(1,000.0)
<b>Cash Balance - Ending Balance:</b>	<u>-</u>

**ARRA PROGRAMS**

**Cash In**

New ARRA funds through CT SEP

**Cash Out**

IRB - Smart E

IRB CT Solar Loan I

IRB CT Solar Lease 2 - Internal

<b>Cash Balance - Beginning Balance:</b>	2,406.0
	-
	(1,541.0)
	(59.0)
	(650.0)
<b>Cash Balance - Ending Balance:</b>	<u>156.0</u>

Connecticut Green Bank  
 FY 16 Operations and Program Budget  
 Projected Balance Sheet for the fiscal year ending June 30, 2016

	<u>May 31, 2015</u>	<u>June 30, 2016</u>	<u>\$ Change</u>	<u>% Change</u>
<b>ASSETS</b>				
Current Assets				
Cash and cash equivalents				
Cash - unrestricted	\$ 34,394,641	\$ 28,961,500	\$ (5,433,141)	-18.8%
Cash - restricted	\$ 3,724,607	\$ 3,169,800	\$ (554,807)	-17.5%
<i>Total Cash and cash equivalents</i>	<u>\$ 38,119,248</u>	<u>\$ 32,131,300</u>	<u>\$ (5,987,948)</u>	<u>-18.6%</u>
Other Current Assets				
Receivables - utility/RGGI auctions	\$ 5,941,977	\$ 3,250,000	\$ (2,691,977)	-82.8%
Receivables - REC Sales	\$ 1,265,974	\$ 1,000,000	\$ (265,974)	-26.6%
HOPBI working capital loans	\$ 2,876,091	\$ -	\$ (2,876,091)	
Other receivables	\$ 228,277	\$ 250,000	\$ 21,723	8.7%
Prepaid assets	\$ 69,518	\$ 75,000	\$ 5,482	7.3%
<i>Total Other Current Assets</i>	<u>\$ 10,381,837</u>	<u>\$ 4,575,000</u>	<u>\$ (5,806,837)</u>	<u>-126.9%</u>
<i>Total Current Assets</i>	<u>\$ 48,501,085</u>	<u>\$ 36,706,300</u>	<u>\$ (11,794,785)</u>	<u>-32.1%</u>
Fixed Assets				
Furniture, Equipment & Software, net	\$ 186,682	\$ 123,682	\$ (63,000)	-50.9%
L/H Improvements, net	\$ 80,960	\$ 75,960	\$ (5,000)	-6.6%
<i>Total Fixed Assets</i>	<u>\$ 267,642</u>	<u>\$ 199,642</u>	<u>\$ (68,000)</u>	<u>-34.1%</u>
Other Assets				
Investment/advances to affiliates (Schedule 1)	\$ 23,836,835	\$ 22,392,019	\$ (1,444,816)	-6.5%
Solar Lease I promissory notes, net of reserve	\$ 9,935,881	\$ 9,215,881	\$ (720,000)	-7.8%
CPACE & other loans, net of reserves (Schedule 2)	\$ 33,793,198	\$ 43,149,032	\$ 9,355,834	21.7%
CPACE sell-down bonds	\$ 1,600,000	\$ 1,600,000	\$ -	0.0%
Equity investment	\$ 1,000,000	\$ 1,000,000	\$ -	0.0%
Commercial RECs	\$ 1,069,390	\$ 869,390	\$ (200,000)	-23.0%
<i>Total Other Assets</i>	<u>\$ 71,235,304</u>	<u>\$ 78,226,322</u>	<u>\$ 6,991,018</u>	<u>8.9%</u>
<b>TOTAL ASSETS</b>	<u>\$ 120,004,031</u>	<u>\$ 115,132,264</u>	<u>\$ (4,871,767)</u>	<u>-4.2%</u>

Connecticut Green Bank  
 FY 16 Operations and Program Budget  
 Projected Balance Sheet for the fiscal year ending June 30, 2016

	<u>May 31, 2015</u>	<u>June 30, 2016</u>	<u>\$ Change</u>	<u>% Change</u>
<b>ASSETS</b>				
<b>LIABILITIES &amp; EQUITY</b>				
<i>Current Liabilities</i>				
Accounts payable & accrued expenses	\$ 602,904	\$ 1,002,904	\$ 400,000	39.9%
Deferred Revenue	\$ 13,841	\$ 13,841	\$ -	0.0%
Custodial Liability - DEEP	\$ 292,000	\$ 192,000	\$ (100,000)	-52.1%
Total Current Liabilities	<u>\$ 908,745</u>	<u>\$ 1,208,745</u>	<u>\$ 300,000</u>	<u>24.8%</u>
<i>Net Position</i>				
Investment in capital assets	\$ 267,642	\$ 199,642	\$ (68,000)	-34.1%
Restricted-energy programs	\$ 3,724,607	\$ 3,374,607	\$ (350,000)	-10.4%
Unrestricted	\$ 115,103,037	\$ 110,349,270	\$ (4,753,767)	-4.3%
Total Net Position	<u>\$ 119,095,286</u>	<u>\$ 113,923,519</u>	<u>\$ (5,171,767)</u>	<u>-4.5%</u>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u>\$ 120,004,031</u>	<u>\$ 115,132,264</u>	<u>\$ (4,871,767)</u>	<u>-4.2%</u>

Connecticut Green Bank  
 FY 16 Operations and Program Budget  
 Projected Balance Sheet for the fiscal year ending June 30, 2016  
 Supporting Schedules

	<u>May 31, 2015</u>	<u>June 30, 2016</u>	<u>\$ Change</u>	<u>% Change</u>
<i>Schedule 1 - Investment/advances to affiliates</i>				
Investment in CEFIA Holdings LLC	\$ 99,000	\$ 99,000	\$ -	0.0%
Due from CEFIA Holdings LLC	\$ 12,815,344	\$ 12,815,344	\$ -	0.0%
Due from CT Solar Loan I LLC	\$ 3,855,000	\$ 755,000	\$ (3,100,000)	-410.6%
Due from CT Solar Services, Inc	\$ 6,721,325	\$ 8,376,509	\$ 1,655,184	19.8%
Due from CT Solar Lease 2 LLC	\$ 346,166	\$ 346,166	\$ -	0.0%
	<u>\$ 23,836,835</u>	<u>\$ 22,392,019</u>	<u>\$ (1,444,816)</u>	<u>-6.5%</u>
<i>Schedule 2 - CPACE &amp; other loans, net of reserves</i>				
CSPACE	\$ 26,431,397	\$ 24,056,397	\$ (2,375,000)	-9.9%
Alpha and OpDemo	\$ 668,000	\$ 1,018,000	\$ 350,000	34.4%
Anaerobic Digesters	\$ -	\$ 1,333,334	\$ 1,333,334	100.0%
Bridgeport Fuel Cell Park	\$ 6,025,782	\$ 1,525,782	\$ (4,500,000)	-294.9%
CES Innovation Fund	\$ -	\$ 1,000,000	\$ 1,000,000	100.0%
CHP	\$ -	\$ 1,000,000	\$ 1,000,000	100.0%
C&I programs	\$ -	\$ 500,000	\$ 500,000	100.0%
GreenerU/Campus Efficiency Now	\$ 640,268	\$ 640,268	\$ -	0.0%
MicroGrid program	\$ -	\$ 3,003,000	\$ 3,003,000	100.0%
Multifamily programs	\$ -	\$ 4,900,000	\$ 4,900,000	100.0%
Timeliness reserves	\$ -	\$ 61,000	\$ 61,000	100.0%
Posigen	\$ -	\$ 5,000,000	\$ 5,000,000	100.0%
Pre development - grid tied programs	\$ 737,245	\$ 737,245	\$ -	0.0%
Wind	\$ 1,697,112	\$ 2,697,112	\$ 1,000,000	37.1%
Other programs	\$ 674,365	\$ 608,965	\$ (65,400)	-10.7%
Loan loss reserves	\$ (3,080,971)	\$ (4,932,071)	\$ (1,851,100)	37.5%
	<u>\$ 33,793,198</u>	<u>\$ 43,149,032</u>	<u>\$ 9,355,834</u>	<u>21.7%</u>

**Connecticut Green Bank  
FY 16 Operations and Program Budget  
Utility Customer Assessment Projections**

	<u>FY 16 Budget</u>	<u>FY15 Actual</u>	(Under) Over <u>FY 15</u>	<u>FY15 Budget</u>	(Under) Over <u>FY15 Budget</u>
July	\$ 2,603	\$ 2,534	\$ 70	\$ 2,643	\$ (40)
August	\$ 2,799	\$ 2,449	\$ 350	\$ 2,842	\$ (43)
September	\$ 2,357	\$ 2,352	\$ 5	\$ 2,393	\$ (36)
October	\$ 2,112	\$ 1,939	\$ 173	\$ 2,144	\$ (32)
November	\$ 1,965	\$ 2,043	\$ (78)	\$ 1,995	\$ (30)
December	\$ 2,210	\$ 2,344	\$ (133)	\$ 2,244	\$ (34)
January	\$ 2,406	\$ 2,477	\$ (70)	\$ 2,443	\$ (37)
February	\$ 2,260	\$ 2,510	\$ (250)	\$ 2,294	\$ (34)
March	\$ 2,210	\$ 2,399	\$ (188)	\$ 2,244	\$ (34)
April	\$ 2,211	\$ 2,177	\$ 34	\$ 2,245	\$ (34)
May	\$ 1,817	\$ 1,850 B	\$ (33)	\$ 1,845	\$ (28)
June	\$ 2,159	\$ 2,200 B	\$ (41)	\$ 2,192	\$ (33)
Total assessments:	<u>\$ 27,111</u>	<u>\$ 27,272</u>	<u>\$ (161)</u>	<u>\$ 27,524</u>	<u>\$ (413)</u>
			<u>-0.6%</u>		<u>-1.5%</u>

**Connecticut Green Bank  
FY 2016 Operations and Program Budget  
Staffing Plan**

<u>Position</u>		<b>FY16 Staffing Budget</b>	<b>FY15 Staffing Budget</b>
VP, Finance and Administration	Bellas, George	2,080	2,080
Director, Institutional Programs	Brydges, Andy	2,080	2,080
Associate, Clean Energy Finance	Buonannata, Joe	2,080	2,080
Manager of Evaluation Measurement and Verification	Charpentier, Lucy	2,080	2,080
Director of Marketing	Connolly, Craig	2,080	2,080
Senior Manager, Residential Programs	D'Agostino, John	2,080	2,080
Loan Investment Administrator	Duncan, Catherine	2,080	2,080
VP & COO	Dykes, Mackey	2,080	2,080
Chief Legal Officer and General Counsel	Farnen, Brian	2,080	2,080
Contracts Administrator	French, Loyola	2,080	2,080
President & CEO	Garcia, Bryan	2,080	2,080
Senior Associate, Statutory & Infrastructure Program (durational)	Hazlewood, Isabelle	2,080	1,560
Assistant Director, Clean Energy Finance	Healey, Ben	2,080	2,080
Managing Director, Statutory & Infrastructure Programs	Hedman, Dale	2,080	2,080
Executive Vice President and Chief Investment Officer	Hunter, Bert	2,080	2,080
Assistant, Marketing	Janecko, Andrea	2,080	2,080
VP, Human Resources	Kaswan, Suzanne	1,040	1,040
Senior Associate & Junior Counsel, Commercial & Industrial Program	Kovtunenکو, Alex	2,080	2,080
Senior Associate, Statutory & Infrastructure Programs	Kranich, Ed	2,080	2,080
Accounting Manager	Landry, Joe	1,560	998
Program Assistant, Commercial & Industrial Programs	Lembo-Buzzelli, Alysse	2,080	2,080
Senior Program Assistant, Statutory & Infrastructure Programs	Lewis, Lynne	2,080	2,080
Legislative Liaison & Marketing Manager	Macunas, Matt	2,080	2,080
Manager, Clean Energy Finance	Magalhaes, Christopher	2,080	2,080
Associate, Statutory & Infrastructure Programs	McCarthy, Neil	2,080	2,080
Senior Manager, Marketing	Murphy, John	2,080	2,080
Director, Residential Programs	O'Neill, Kerry	2,080	2,080
Manager, Residential Programs Multifamily	Pantileakis, Demetrios	2,080	1,560
Senior Manager, Statutory & Infrastructure Programs	Price, Selya	2,080	2,080
Associate, Residential Programs	Priest, Madeline	2,080	2,080
Program Assistant, Statutory & Infrastructure Programs (durational)	Pyne, Sara	2,080	1,560
Senior Manager, Marketing	Rivera, Gladys	2,080	2,080
Associate Director, Statutory & Infrastructure Programs	Ross, Rick	2,080	2,080
Executive Assistant	Samuels, Cheryl	2,080	2,080
Senior Associate, Marketing	Schmitt, Robert	2,080	2,080
Staff Accountant	Soares, Natalia	2,080	2,080
Director, Commercial & Industrial Programs	Sherman, Genevieve	2,080	2,080
Associate Director, Multifamily Housing Programs	Stevenson, Kim	2,080	2,080
Associate, Clean Energy Finance	Stewart, Fiona	2,080	2,080

**Connecticut Green Bank  
FY 2016 Operations and Program Budget  
Staffing Plan**

<u>Position</u>		<b>FY16 Staffing Budget</b>	<b>FY15 Staffing Budget</b>
Staff Accountant	Turker,Irene	2,080	2,080
Senior Program Assistant, Statutory & Infrastructure Programs	Vigil,Marycruz	2,080	2,080
Associate Director, Outreach	Wall,Bob	2,080	2,080
Senior Manager, Clean Energy Finance	Yu,Mike	2,080	2,080
<b>FY15 Vacant Positions</b>			
Assistant Director, Commercial and Industrial Programs	vacant	2,080	2,080
Senior Manager, Commercial & Industrial Programs	vacant	2,080	2,080
Manager, Clean Energy Finance	vacant	2,080	2,080
<b>FY16 New Hires</b>			
Controller		2,080	-
Office Manager & Receptionist		1,560	-
S&I Program Manager (3 year durational)		2,080	-
S&I Program Associate (3 year durational)		2,080	-
		-	-
<b>CI Shared Employees</b>			
Manager,Human Resources	Baisden, Chris	832	832
Director IT and Facilities	Casparino,Joe	-	624
IT Staff	Peretto,Kim	156	624
Reception/Switchboard	Perusse,Gina	312	624
		103,220	94,702
		49.63	45.53
<b>Dollars:</b>			
	CGB Employees	\$ 4,738,565	\$ 4,146,565
	CI Shared Employees	\$ 139,122	\$ 176,875
	COLA	\$ -	\$ -
	Merit Pool	\$ 212,610	\$ 186,595
	Promotion Pool	\$ 47,247	\$ 41,466
	Intern Pool:	\$ 75,000	\$ 75,000
	<b>Total:</b>	<b>\$ 5,212,544</b>	<b>\$ 4,626,501</b>

**Connecticut Green Bank**  
**FY 2016 Operating and Program Budget**  
**Table of Contents**  
**Recommended by B&O Committee - June 11, 2014**  
**Supplementary Schedules**

<b>Page</b>	
<b>S-1</b>	<b>Program Loans and Working Capital Advances</b>
<b>S-2</b>	<b>Credit Enhancements</b>
<b>S-3</b>	<b>Program grants and incentives</b>
<b>S-4</b>	<b>Consulting and Professional Fees</b>
<b>S-5</b>	<b>Marketing and External Relations</b>
<b>S-6</b>	<b>Other Operating Expenses</b>
<b>S-7</b>	<b>Capital Expenditures</b>
<b>S-8</b>	<b>General Operations Budget</b>
<b>S-9</b>	<b>Statutory and Infrastructure Budget</b>
<b>S-10</b>	<b>Residential/Multifamily Budget</b>
<b>S-11</b>	<b>C&amp;I Budget</b>
<b>S-12</b>	<b>Institutional Budget</b>
<b>S-13</b>	<b>Other Programs Budget</b>



**Connecticut Green Bank**  
**FY16 Operations and Program Budget**  
**Schedule of New Program Loans & Provision for Loan Losses**  
**FY2016**

Program loans funded during the fiscal year		
	FY16 Budget	FY15 Budget
Alpha/Op Demo Legacy Program	\$ 350.0	\$ 732.0
Anaerobic Digester Pilot	\$ 1,333.3	\$ 12,500.0
C&I ESA RFP	\$ 250.0	\$ 3,000.0
C&I Loans	\$ 250.0	\$ 2,000.0
CES Innovation Fund	\$ 1,000.0	\$ 2,000.0
CHIF Multifamily - LIME	\$ 1,000.0	\$ 1,000.0
CHP Pilot	\$ 1,000.0	\$ 9,000.0
CPACE Loan Program	\$ 47,000.0	\$ 50,000.0
Grid tied Loan Program	\$ 1,000.0	\$ 2,800.0
Micro Grid program	\$ 3,003.0	\$ 5,000.0
Multifamily:	\$ -	\$ 5,000.0
Multifamily-Pre Development Loan Fund -affordable housing	\$ 500.0	\$ -
Multifamily-Pre Development Loan Fund -marketrate housing	\$ 500.0	\$ -
Multifamily Credit Enhancement Fund RFP	\$ 1,000.0	\$ 4,000.0
Posigen	\$ 5,000.0	\$ -
Solar PV Capital Competition	\$ -	\$ 1,000.0
State- LBE Working Capital Loan Fund	\$ 1,000.0	\$ -
WINN LISC Program	\$ -	\$ 1,875.0
	<u>\$ 64,186.3</u>	<u>\$ 99,907.0</u>

**Connecticut Green Bank**  
**FY16 Operations and Program Budget**  
**Schedule of New Program Loans & Provision for Loan Losses**  
**FY2016**

<b>Program Loans sold during the fiscal year</b>		
	<b>FY16 Budget</b>	<b>FY15 Budget</b>
Alpha/Op Demo Legacy Program	\$ -	\$ -
Anaerobic Digester Pilot	\$ -	\$ -
C&I ESA RFP	\$ -	\$ -
C&I Loans	\$ -	\$ -
CES Innovation Fund	\$ -	\$ -
CHIF Multifamily -LIME	\$ -	\$ -
CHP Pilot	\$ -	\$ -
CSPACE Loan Program	\$ (47,150.0)	\$ (40,000.0)
Grid tied Loan Program	\$ (4,500.0)	\$ (5,000.0)
Micro Grid program	\$ -	\$ -
Multifamily	\$ -	\$ -
Multifamily-Pre Development Loan Fund -marketrate	\$ -	\$ -
Multifamily Credit Enhancement Fund RFP	\$ -	\$ -
Solar PV Capital Competition	\$ -	\$ -
State- LBE Working Capital Loan Fund	\$ -	\$ -
WINN LISC Program	\$ -	\$ -
	<u>\$ (51,650.0)</u>	<u>\$ (45,000.0)</u>

**Connecticut Green Bank**  
**FY16 Operations and Program Budget**  
**Schedule of New Program Loans & Provision for Loan Losses**  
**FY2016**

<b>Provisions for Loan Losses</b>			
	<u>Loss Ratio</u>	<u>FY16 Budget</u>	<u>FY15 Budget</u>
Alpha/Op Demo Legacy Program	50%	\$ 175.0	\$ 366.0
Anaerobic Digester Pilot	10%	\$ 133.3	\$ 1,250.0
C&I ESA RFP	10%	\$ 25.0	-
C&I Loans	10%	\$ 25.0	-
CES Innovation Fund	25%	\$ 250.0	-
CHIF Multifamily - LIME	25%	\$ 250.0	-
CHP Pilot	10%	\$ 100.0	\$ 900.0
CPACE Loan Program	5%	\$ (7.5)	\$ 500.0
Grid tied Loan Program	10%	\$ (350.0)	\$ 280.0
Micro Grid program	10%	\$ 300.3	\$ 500.0
Multifamily-Pre Development Loan Fund - affordable housing	20%	\$ 100.0	-
Multifamily-Pre Development Loan Fund -marketrate housing	20%	\$ 100.0	-
Multifamily Credit Enhancement Fund RFP		\$ -	-
Posigen	15%	\$ 750.0	-
Solar PV Capital Competition		\$ -	-
State- LBE Working Capital Loan Fund		\$ -	-
WINN LISC Program	10%	\$ -	\$ 187.5
		<u>\$ 1,851.1</u>	<u>\$ 3,983.5</u>

<b>Working Capital Advances to and Repayments from Affiliates</b>			
	<u>Lease Program</u>	<u>Loan Program</u>	
	<u>CEFIA Holdings</u>	<u>CT Solar Loan I</u>	<u>Total</u>
	<u>&amp; CEFIA Services</u>		
Due from affiliate - working capital advances- May 21,2015	\$ 12,737	\$ 3,855	\$ 16,592
Projected working capital advances in FY2016	\$ 7,003	\$ 400	\$ 7,403
Projected working capital repayments in FY2016	\$ (5,347)	\$ (3,500)	\$ (8,847)
Projected balance - due from affiliates - working capital advances June 30, 2016	<u>\$ 14,392</u>	<u>\$ 755</u>	<u>\$ 15,147</u>

Connecticut Green Bank  
 FY16 Operations and Program Budget  
 Schedule of Credit Enhancements

FY2016

Credit Enhancements
ARRA Funds

**LLR, and IRB programs:**

**LLR:**

*Loan Loss Reserves (LLR) are "credit enhancement" mechanisms provided to incentivize lenders into a loan fund. Until a "loss" which utilizes the reserve occurs, cash to support the reserve is segregated on the balance sheet as labeled "restricted cash".*

*Setting up the reserve is a cash movement, balance sheet phenomenon.*

*There is NO P&L effect to establish a Loan Loss Reserve - only "actual losses" hit the P&L.*

*If a loss occurs, the restricted cash is reduced, and the P&L is charged a "loss" in equal amount.*

<b>Loan Loss Reserves - ARRA funds</b>	<b>Program Administrator</b>	<b>Board Allocations</b>	<b>Reserve Balance 7/1/2015</b>	<b>Proposed Reallocations</b>	<b>Reserve Drawdowns Pre FY16</b>	<b>Projected Drawdowns FY16</b>
CHIF/MPEL product	CHIF	\$ 300.0	\$ (300.0)	\$ -	\$ -	\$ -
Cozy Loan product through HDF	HDF	\$ 360.0	\$ (360.0)	\$ -	\$ -	\$ -
Smart E Loan product through financial institutions	CGB	\$ 1,004.7	\$ (1,004.7)	\$ -	\$ -	\$ -
Solar Loan product through CT Solar Loan I LLC	CT Solar Loan I LLC	\$ 300.0	\$ (300.0)	\$ -	\$ -	\$ -
Solar Lease product through CT Solar Lease 2 LLC	CT Solar Lease 2 LLC	\$ 3,500.0	\$ (3,500.0)	\$ -	\$ -	\$ -
		<b>\$ 5,464.7</b>	<b>\$ (5,464.7)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**IRB - ARRA Funds:**

*An interest rate buydown (IRB) is a "yield enhancement" sum in cash paid to the lender in order for the loan rate to the end use borrower to be reduced. When the IRB is paid, cash is reduced and the P&L is charged in equal amount reflecting an "incentive expense".*

<b>Interest Rate Buydowns - ARRA funds</b>	<b>Program Administrator</b>	<b>Board Allocations</b>	<b>Deployed to Program Administrator</b>	<b>Proposed Reallocations</b>	<b>Payments Made Pre FY16</b>	<b>Budgeted Payments FY16</b>
Cozy Loan product	HDF	\$ 50.0	\$ (50.0)	\$ -	\$ -	\$ -
Smart E Loan product through financial institutions	CGB	\$ 1,800.0	\$ (1,800.0)	\$ 236.7	\$ (450.0)	\$ 1,586.7
Solar Loan product through CT Solar Loan I LLC	CGB	\$ 288.0	\$ (288.0)	\$ (119.4)	\$ (110.0)	\$ 58.6
Solar Loan financing through CT Solar Loan I LLC	CGB	\$ 117.3	\$ (117.3)	\$ (117.3)	\$ -	\$ -
Solar Lease product through CT Solar Lease 2 LLC	CGB	\$ 641.6	\$ (641.6)	\$ -	\$ -	\$ -
		<b>\$ 2,896.9</b>	<b>\$ (2,896.9)</b>	<b>\$ (0.0)</b>	<b>\$ (560.0)</b>	<b>\$ 1,645.3</b>
		<b>\$ 8,361.6</b>				

**Total ARRA Funds allocated to programs:**

Connecticut Green Bank  
 FY16 Operations and Program Budget  
 Schedule of Credit Enhancements  
 FY2016

Credit Enhancements
Ratepayer Funds

**LLR, Timeliness reserves and IRB programs:**

**LLR:**

*Loan Loss Reserves (LLR) are "credit enhancement" mechanisms provided to incentivize lenders into a loan fund. Until a "loss" which utilizes the reserve occurs, cash to support the reserve is segregated on the balance sheet as labeled "restricted cash".*

*Setting up the reserve is a cash movement, balance sheet phenomenon.*

*There is NO P&L effect to establish a Loan Loss Reserve - only "actual losses" hit the P&L.*

*If a loss occurs, the restricted cash is reduced, and the P&L is charged a "loss" in equal amount.*

	Program Administrator	Board Allocations	Reserve Balance 7/1/2015	Additions to Reserve FY 2016	Reserve Drawdowns Pre FY16	Projected Drawdowns FY16
Loan Loss Reserves						
Smart E Program	CGB	\$ -	\$ -	\$ 1,000.0	\$ -	\$ 1,000.0
		\$ -	\$ -	\$ 1,000.0	\$ -	\$ 1,000.0

**CPACE timeliness reserve:**

*This reserve will be set up by CGB to match the Lender's repayment to the bond repayment schedule.*

*Activity in reserve does not effect CGB's P&L. It effects CGB's cash flow statement and thus the projected FY16 activity is reflected in the cash flow statement.*

	Board Allocations	Reserve Balance 07/01/2015	Reserve Additions FY16	Projected Repayments FY16	Reserve Balance 06/30/2015
<b><u>CPACE timeliness reserve- CGB Funds:</u></b>	\$ 300.0	\$ 114.0	\$ 200.0	\$ (314.0)	\$ -
	\$ 300.0	\$ 114.0	\$ 200.0	\$ (314.0)	\$ -

Connecticut Green Bank  
 FY16 Operations and Program Budget  
 Schedule of Credit Enhancements  
 FY2016

<b>Credit Enhancements</b>
----------------------------

**OBR timeliness reserve:**

*This reserve will be set up by CGB to match the Lenders' repayment schedule with the Utilities billing and collections schedule and to allow for set-up and lead time once a loan goes to repayment. Activity in reserve does not effect CGB's P&L. It effects CGB's cash flow statement and thus the projected FY16 activity is reflected in the cash flow statement.*

**OBR timeliness reserve- CGB Funds:**

Board Allocations	Reserve Balance 07/01/2015	Reserve Additions FY16	Projected Repayments FY16	Reserve Balance 06/30/2015
\$ 500.0	\$ -	\$ 53.0	\$ -	\$ 53.0
<b>\$ 500.0</b>	<b>\$ -</b>	<b>\$ 53.0</b>	<b>\$ -</b>	<b>\$ 53.0</b>

**IRB**

*An interest rate buydown (IRB) is a "yield enhancement" sum in cash paid to the lender in order for the loan rate to the end use borrower to be reduced. When the IRB is paid, cash is reduced and the P&L is charged in equal amount reflecting an "incentive expense".*

**Interest Rate Buydowns**

CPACE Promotion  
 Smart-E Program

Program Administrator	Board Allocations	Deployed to Program Administrator	Proposed reallocations	Payments Made Pre FY16	Budgeted Payments FY16
CGB	\$ -	\$ -		\$ -	\$ 700.0
CGB	\$ -	\$ -		\$ -	\$ 128.0
	\$ -	\$ -		\$ -	\$ -
	\$ -	\$ -		\$ -	\$ -
	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 828.0</b>

**Connecticut Green Bank  
 FY16 Operations and Program Budget  
 Schedule of Financial Incentives  
 FY2016**

**Financial Incentives - Grants and Rebates**

	<b>FY16 Budget</b>	<b>FY15 Budget</b>
<i>Anaerobic Digester Pilot</i>	\$ -	\$ -
<i>CHP Pilot</i>	\$ -	\$ -
<i>Clean Energy Business Solutions</i>	\$ 1,000.0	\$ 4,500.0
<i>Clean Energy Communities</i>	\$ 500.0	\$ 500.0
<i>Community Innovation Grants</i>	\$ -	\$ 25.0
<i>EPBB/HOPBI/PBI</i>	\$ 11,330.0	\$ 14,400.0
	<u>\$ 12,830.0</u>	<u>\$ 19,425.0</u>
<i>Pre FY16 Legacy Commitments</i>	\$ 900.0	\$ 3,600.0
	<u>\$ 13,730.0</u>	<u>\$ 23,025.0</u>

**Connecticut Green Bank**  
**FY 2016 Operations and Program Budget**  
**Consulting and Professional Fees**

	<u>FY 2016</u> <u>Budget</u>		<u>FY 2015</u> <u>Budget</u>		<u>FY 2015 Budget</u> <u>Inc. (Dec.)</u>	<u>%</u> <u>Inc.(Dec.)</u>
<b>Summary:</b>						
Legal - General	\$ 65.0	\$	65.0	\$	-	0%
Accounting	\$ 140.0	\$	60.0	\$	80.0	133%
Advisory fees	\$ 675.0	\$	97.0	\$	578.0	596%
	<u>\$ 880.0</u>	\$	<u>222.0</u>	\$	<u>658.0</u>	<u>296%</u>
<b>Detail:</b>						
<b><u>Accounting</u></b>						
Annual Audit	\$ 60.0	\$	45.0	\$	15.0	33%
Accounting Software Yearly License	\$ 35.0	\$	-	\$	35.0	
Accounting Software Implementation	\$ 40.0	\$	-	\$	40.0	
Other matters	\$ 5.0	\$	15.0	\$	(10.0)	-67%
	<u>\$ 140.0</u>	\$	<u>60.0</u>	\$	<u>80.0</u>	<u>133%</u>
<b><u>Advisory Fees</u></b>						
<b>Consultants:</b>						
Recruiting Efforts/Onboarding	\$ -	\$	2.0	\$	(2.0)	-100%
Organization EM&V	\$ 125.0	\$	40.0	\$	85.0	213%
Risk Management/Insurance	\$ -	\$	35.0	\$	(35.0)	-100%
Studies	\$ 410.0	\$	-	\$	410.0	
Strategic Plan/Process Improvement Consulting	\$ 130.0	\$	10.0	\$	120.0	1200%
Other	\$ 10.0	\$	10.0	\$	-	0%
	<u>\$ 675.0</u>	\$	<u>97.0</u>	\$	<u>578.0</u>	<u>596%</u>
<b><u>Advisory Fees - Clean Energy Communities Program</u></b>						
Consultants/Inspectors for Program	\$ -	\$	45.0	\$	(45.0)	
	<u>\$ -</u>	\$	<u>45.0</u>	\$	<u>(45.0)</u>	



**Connecticut Green Bank**  
**FY 16 Operations and Program Budget**  
**Marketing Department**  
**2016 Budget**

	General Operations	All Programs	Total	FY2015 Budget General Ops and Programs
<i>Marketing</i>				
- Advertising & Branding	\$ 320.00	\$ 165.00	\$ 485.0	\$ 390.0
- Campaigns: Agency	\$ 45.00	\$ 211.00	\$ 256.0	\$ 595.0
- Sales Support	\$ -	\$ 260.00	\$ 260.0	\$ 65.0
- Events and consultants	\$ -	\$ 70.00	\$ 70.0	\$ 50.0
- Incentive promotions	\$ -	\$ 80.00	\$ 80.0	\$ 104.0
-Memberships	\$ 125.34	\$ -	\$ 125.3	\$ 115.3
-Municipal marketing grants	\$ -	\$ 50.00	\$ 50.0	\$ 60.0
- Outreach campaigns	\$ 75.00	\$ 560.00	\$ 635.0	\$ 790.0
- Paid media	\$ 45.00	\$ 290.00	\$ 335.0	\$ 261.5
- Public relations	\$ 95.00	\$ 135.00	\$ 230.0	\$ 140.0
- Relationship managers	\$ -	\$ 85.00	\$ 85.0	\$ 250.0
- Sponsorships & Events	\$ 70.00	\$ -	\$ 70.0	\$ 85.0
- Web development	\$ 175.00	\$ 145.00	\$ 320.0	\$ 130.0
- other (misc) costs	\$ -	\$ -	\$ -	\$ 104.1
-User registration (performance based pricing)	\$ -	\$ 60.00	\$ 60.0	\$ -
<b>Total Marketing Department Expenses:</b>	<b>\$ 950.3</b>	<b>\$ 2,111.0</b>	<b>\$ 3,061.3</b>	<b>\$ 3,139.9</b>

**Connecticut Green Bank  
FY 2016 Operations and Program Budget  
Other Operating Costs**

	<u>FY16 Budget</u>	*	<u>FY15 Budget</u>	*	<u>FY 2015 Budget Inc. (Dec)</u>	<u>% Inc. (Dec)</u>
<u>Rent</u>	\$ 332.2	*	\$ 243.9	*	\$ 88.3	36%
<u>Telephone/Communications</u>	\$ 100.8	*	\$ 70.2	*	\$ 30.6	44%
<u>Office expense</u>	\$ 85.4	*	\$ 76.0	*	\$ 9.4	12%
<u>Equipment Leases</u>	\$ 8.4	*	\$ 9.6	*	\$ (1.2)	-13%
<u>IT operations</u>	\$ 281.2	*	\$ 178.9	*	\$ 102.3	57%
<u>Consultant/IT Support Services</u>	\$ 188.4	*	\$ 118.2	*	\$ 40.2	34%
<u>Software Maintenance/Annual Licenses/Hosted Services</u>	\$ 81.2	*	\$ 50.9	*	\$ 30.3	60%
<u>Web Hosting &amp; Conferencing</u>	\$ 1.6	*	\$ 1.6	*	\$ -	0%
<u>Noncapitalized hardware &amp; supplies</u>	\$ 10.0	*	\$ 8.2	*	\$ 1.9	23%
<u>Staff training/education/subscriptions</u>	\$ 55.0	*	\$ 46.0	*	\$ 9.0	20%
<u>Insurance</u>	\$ 70.0	*	\$ 60.0	*	\$ 10.0	17%
<u>Travel &amp; Travel Related Expense</u>	\$ 110.0	*	\$ 110.0	*	\$ -	0%
<b>Total:</b>	<u>\$ 1,043.0</u>	*	<u>\$ 794.6</u>	*	<u>\$ 248.4</u>	<u>31%</u>

**Connecticut Green Bank  
 FY 2016 Operations and Program Budget  
 Capital Expenditure Budget**

	<u>FY15 Budget</u>	*	FY16		<u>Annual Depreciation</u>	<u>Depreciation Period</u>
			<u>Total by Line</u>	<u>Total by Category</u>		
<b><u>IT Hardware</u></b>						
New/Replacement Desktops & Laptops	\$ 16.0	*	\$ 25.0			
Conference Phones	\$ -	*	\$ 2.5			
Firewalls and Traffic Analyzer	\$ 15.0	*	\$ 6.0			
Server & Ethernet switch hardware	\$ 5.0	*	\$ -	\$ 33.5	\$ 6.7	5 Years
		*				
<b><u>IT Software</u></b>						
Telephone system software upgrade	\$ 2.0	*	\$ -			
Human Resources Tracking System	\$ 20.0	*	\$ -			
Accounting/Financial Management Software	\$ 75.0	*	\$ -	\$ -	\$ -	3 Years
		*				
<b><u>Office Furniture, Equipment and Improvements</u></b>						
<b><u>Rocky Hill</u></b>						
Cubicles/Furniture/Leasehold Improvements	\$ 20.0	*	\$ 20.0			
		*				
<b><u>Stamford</u></b>						
Cubicles/Furniture/Leasehold Improvements	\$ 5.0	*	\$ -	\$ 20.0	\$ 2.0	10 Years
	<u>\$ 158.0</u>		<u>\$ 53.5</u>	<u>\$ 53.5</u>	<u>\$ 8.7</u>	
					Depreciation on existing capitalized assets	\$ 107.0
					Projected FY 16 depreciation:	<u>\$ 115.7</u>

**Connecticut Green Bank**  
**FY 16 Operations and Program Budget**  
**General Operations Budget**

	2016		2015			
	Budget		Budget		Inc(Dec)	% Inc.
<u>Expenses</u>	General Operations		General Operations		Inc(Dec)	% Inc.
<u>Compensation and benefits</u>						
-Salaries & Wages - CGB Employees	\$ 769.2		\$ 938.5		\$ (169)	-18.0%
-Employee Benefits - CGB Employees	\$ 576.9		\$ 713.3		\$ (136)	-19.1%
-CI Shared Services	\$ 139.1		\$ 328.4		\$ (189)	-57.6%
-Temporary employees	\$ 10.0		\$ 55.0		\$ (45)	-81.8%
						\$ 1,495.2
<u>Consulting fees</u>	\$ 675.0		\$ 97.0		\$ 578	595.9%
<u>Professional fees, legal and accounting</u>	\$ 205.0		\$ 125.0		\$ 80	64.0%
<u>Rent and location related expenses</u>						
-Rent/Utilities/Maintenance	\$ 50.4		\$ 51.4		\$ (1)	-2.0%
-Telephone/Communications	\$ 15.3		\$ 14.8		\$ 0	3.3%
-Depreciation FF&E	\$ 17.5		\$ 38.7		\$ (21)	-54.7%
<u>Office, computer &amp; other expenses</u>						
-Office expense	\$ 14.2		\$ 18.1		\$ (4)	-21.4%
-IT operations	\$ 42.6		\$ 37.7		\$ 5	13.1%
-Training/education/subscriptions	\$ -		\$ 9.7		\$ (10)	-100.0%
-Travel, meeting & related expenses	\$ -		\$ 23.2		\$ (23)	-100.0%
-Insurance	\$ -		\$ 60.0		\$ (60)	-100.0%
<b>Total General Operations expenses:</b>	<b>\$ 2,515.2</b>		<b>\$ 2,510.8</b>		<b>\$ 4</b>	<b>0.2%</b>

Connecticut Green Bank  
 FY 16 Operations and Program Budget  
 Statutory and Infrastructure Programs

	2016					2015		Inc(Dec)	% Inc.
	Anaerobic Digester Pilot	Micro Grid CHP Pilot	Budget Residential Solar PV Investment Program	Federal Grant Programs	All Programs	All Programs	Budget		
<b>Expenses</b>									
<u>Compensation and benefits</u>									
-Salaries & Wages	\$ 201.4	\$ 99.9	\$ 961.9	\$ 73.0	\$ 1,336.3	\$ 1,024.3	\$ 311.98	30.5%	
-Employee Benefits	\$ 151.1	\$ 74.9	\$ 721.5	\$ 54.8	\$ 1,002.2	\$ 778.5	\$ 224	28.7%	
-Temporary employees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 2,338.5
<u>Program development and administration</u>									
- Program development costs	\$ -	\$ 15.0	\$ -	\$ -	\$ 15.0	\$ 50.0	\$ (35)	-70.0%	
- Technology support costs	\$ -	\$ -	\$ 1,080.0	\$ -	\$ 1,080.0	\$ 290.0	\$ 790		
- Third party servicing fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
- Municipal fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
- Project Inspection fees	\$ 5.0	\$ 5.0	\$ 1,100.0	\$ -	\$ 1,110.0	\$ 360.0	\$ 750	208.3%	\$ 2,205.0
<u>EM&amp;V</u>	\$ 15.0	\$ 10.0	\$ 85.0	\$ -	\$ 110.0	\$ 150.0	\$ (40)	-26.7%	\$ 150.0
<u>Professional fees</u>									
- Consulting	\$ 10.0	\$ 15.0	\$ 125.0	\$ -	\$ 150.0	\$ 70.0	\$ 80		\$ 150.0
- Legal	\$ 20.0	\$ 5.0	\$ 50.0	\$ -	\$ 75.0	\$ 25.0	\$ 50		\$ 75.0
<u>Rent and location related expenses</u>									
-Rent/Utilities/Maintenance	\$ 13.2	\$ 6.5	\$ 63.0	\$ 4.8	\$ 87.5	\$ 56.1	\$ 31	56.0%	
-Telephone/Communications	\$ 4.0	\$ 2.0	\$ 19.1	\$ 1.5	\$ 26.5	\$ 16.2	\$ 10	63.9%	
-Depreciation FF&E	\$ 4.6	\$ 2.3	\$ 21.9	\$ 1.7	\$ 30.5	\$ 42.2	\$ (12)	-27.8%	\$ 144.5
<u>Office, computer &amp; other expenses</u>									
-Office expense	\$ 3.7	\$ 1.8	\$ 17.8	\$ 1.4	\$ 24.7	\$ 19.7	\$ 5	25.4%	
-IT operations	\$ 11.2	\$ 5.5	\$ 53.3	\$ 4.0	\$ 74.1	\$ 41.2	\$ 33	79.8%	
-Training/education/subscriptions	\$ -	\$ -	\$ 15.0	\$ -	\$ 15.0	\$ 10.6	\$ 4	41.5%	
-Travel,meeting& related expenses	\$ -	\$ -	\$ 10.0	\$ -	\$ 10.0	\$ 25.3	\$ (15)	-60.5%	
-Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 123.8
<b>Total Statutory and Infrastructure Program expenses:</b>	<b>\$ 439.1</b>	<b>\$ 243.0</b>	<b>\$ 4,323.5</b>	<b>\$ 141.1</b>	<b>\$ 5,146.8</b>	<b>\$ 2,959.1</b>	<b>\$ 2,187.7</b>	<b>73.9%</b>	

Connecticut Green Bank  
 FY 16 Operations and Program Budget  
 Residential and Multifamily Programs

	2016										2015		
	Budget										Budget		
	Smart E Loans & RPACE	Low Income/ Cozy	CT Solar Lease 2 program	CT Solar Loan 1 program	Total Residential	CHIF Multifamily Permanent Energy Loan	CHFA Pilot	Multifamily Programs	Total Multifamily	Total Residential & Multifamily	Total	Inc(Dec)	% Inc.
<b>Expenses</b>													
<u>Compensation and benefits</u>													
-Salaries & Wages	\$ 316.9	\$ 152.6	\$ 204.3	\$ 109.2	\$ 782.9	\$ 59.4	\$ 40.1	\$ 326.5	\$ 426.0	\$ 1,208.9	\$ 1,023.10	\$ 186	18.2%
-Employee Benefits	\$ 237.7	\$ 114.5	\$ 153.2	\$ 81.9	\$ 587.2	\$ 44.5	\$ 30.1	\$ 244.9	\$ 319.5	\$ 906.7	\$ 777.60	\$ 129	16.6% \$ 2,115.7
-Temporary employees	\$ 46.8	\$ 10.0	\$ -	\$ -	\$ 56.8	\$ -	\$ -	\$ -	\$ -	\$ 56.8	\$ -	\$ 57	\$ 56.8
<u>Program development and administration</u>													
- Program development costs	\$ 25.0	\$ 60.0	\$ -	\$ -	\$ 85.0	\$ -	\$ 231.8	\$ 291.0	\$ 522.8	\$ 607.8	\$ 225.00	\$ 383	170.1%
- OBR Program development costs	\$ 276.0	\$ -	\$ -	\$ -	\$ 276.0	\$ -	\$ -	\$ -	\$ -	\$ 276.0	\$ 50.00	\$ 226	
- Program administration costs	\$ 235.4	\$ 8.4	\$ 32.8	\$ 3.3	\$ 279.9	\$ -	\$ -	\$ 284.8	\$ 284.8	\$ 564.7	\$ 256.90	\$ 308	
- OBR Program administration costs	\$ 38.6	\$ -	\$ -	\$ -	\$ 38.6	\$ -	\$ -	\$ -	\$ -	\$ 38.6	\$ 80.00	\$ (41)	
-Technology support costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 245.00	\$ (245)	-100.0%
- Municipal fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
- Project Inspection fees	\$ 167.0	\$ 20.0	\$ -	\$ -	\$ 187.0	\$ -	\$ -	\$ -	\$ -	\$ 187.0	\$ 50.00	\$ 137	274.0% \$ 1,674.1
<u>EM&amp;V</u>	\$ 90.0	\$ 18.0	\$ 36.0	\$ 36.0	\$ 180.0	\$ -	\$ -	\$ 15.3	\$ 15.3	\$ 195.3	\$ -	\$ 195	\$ 195.3
<u>Professional fees</u>													
- Consulting Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
- Legal	\$ 30.0	\$ 5.0	\$ 20.0	\$ -	\$ 55.0	\$ -	\$ 5.0	\$ 15.0	\$ 20.0	\$ 75.0	\$ 60.00	\$ 15	25.0% \$ 75.0
<u>Rent and location related expenses</u>													
-Rent/Utilities/Maintenance	\$ 20.7	\$ 10.0	\$ 13.4	\$ 7.1	\$ 51.3	\$ 3.9	\$ 2.6	\$ 21.4	\$ 27.9	\$ 79.2	\$ 56.10	\$ 23	41.1%
-Telephone/Communications	\$ 6.3	\$ 3.0	\$ 4.1	\$ 2.2	\$ 15.6	\$ 1.2	\$ 0.8	\$ 6.5	\$ 8.5	\$ 24.0	\$ 16.10	\$ 8	49.2%
-Depreciation FF&E	\$ 7.2	\$ 3.5	\$ 4.7	\$ 2.5	\$ 17.9	\$ 1.4	\$ 0.9	\$ 7.4	\$ 9.7	\$ 27.6	\$ 42.20	\$ (15)	-34.7% \$ 130.7
<u>Office, computer &amp; other expenses</u>													
-Office expense	\$ 5.9	\$ 2.8	\$ 3.8	\$ 2.0	\$ 14.5	\$ 1.1	\$ 0.7	\$ 6.0	\$ 7.9	\$ 22.4	\$ 19.70	\$ 3	13.5%
-IT operations	\$ 17.6	\$ 8.5	\$ 11.3	\$ 6.1	\$ 43.4	\$ 3.3	\$ 2.2	\$ 18.1	\$ 23.6	\$ 67.0	\$ 41.10	\$ 26	63.0%
-Training/education/subscriptions	\$ 4.0	\$ -	\$ -	\$ -	\$ 4.0	\$ -	\$ -	\$ -	\$ -	\$ 4.0	\$ 10.60	\$ (7)	-62.3%
-Travel,meeting& related expenses	\$ 15.0	\$ 2.0	\$ -	\$ -	\$ 17.0	\$ -	\$ -	\$ 10.0	\$ 10.0	\$ 27.0	\$ 25.30	\$ 2	6.7% \$ 120.4
-Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Total Residential and Multifamily Program expenses:</b>	<b>\$ 1,540.1</b>	<b>\$ 418.3</b>	<b>\$ 483.4</b>	<b>\$ 250.2</b>	<b>\$ 2,692.0</b>	<b>\$ 114.7</b>	<b>\$ 314.3</b>	<b>\$ 1,247.0</b>	<b>\$ 1,676.0</b>	<b>\$ 4,368.0</b>	<b>\$ 2,978.70</b>	<b>\$ 1,389</b>	<b>46.6%</b>

Connecticut Green Bank  
FY 16 Operations and Program Budget

C & I Programs

	2016					2015		Inc(Dec)	% Inc.
	Budget					Budget			
	CPACE	Clean Energy Business Solutions	New Product Development	SL2 Commercial	Total	Total			
<b>Expenses</b>									
<u>Compensation and benefits</u>									
-Salaries & Wages	\$ 860.5	\$ 28.8	\$ 187.6	\$ 177.5	\$ 1,254.4	\$ 895.2	\$ 359.24	40.1%	
-Employee Benefits	\$ 645.4	\$ 21.6	\$ 140.7	\$ 133.1	\$ 940.8	\$ 680.4	\$ 260.43	38.3%	
-Temporary employees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,195.3	
<u>Program development and administration</u>									
- Program development costs/consultants	\$ 25.0	\$ -	\$ 70.3	\$ -	\$ 95.3	\$ 175.0	\$ (79.70)	-45.5%	
-Technology support costs	\$ 21.3	\$ -	\$ -	\$ -	\$ 21.3	\$ 25.0	\$ (3.70)	-14.8%	
-Technical administrator	\$ 967.5	\$ -	\$ -	\$ -	\$ 967.5	\$ 800.0	\$ 167.50	20.9%	
- Third party servicing fees	\$ 50.0	\$ -	\$ -	\$ -	\$ 50.0	\$ 75.0	\$ (25.00)	-33.3%	
- Municipal support	\$ 73.8	\$ -	\$ -	\$ -	\$ 73.8	\$ 80.0	\$ (6.20)	-7.8%	
- Project Inspection fees	\$ 73.8	\$ -	\$ -	\$ -	\$ 73.8	\$ 20.0	\$ 53.80	\$ 1,281.7	
<u>EM&amp;V</u>	\$ 50.0	\$ -	\$ -	\$ -	\$ 50.0	\$ 50.0	\$ -	0.0%	
<u>Professional Fees</u>									
- Consulting	\$ 68.0	\$ 10.0	\$ 20.0	\$ -	\$ 98.0	\$ 125.0	\$ (27.00)	\$ 98.0	
- Legal	\$ 105.0	\$ -	\$ 5.0	\$ 5.0	\$ 115.0	\$ 135.0	\$ (20.00)	\$ 115.0	
<u>Rent and location related expenses</u>									
-Rent/Utilities/Maintenance	\$ 56.3	\$ 1.9	\$ 12.3	\$ 11.6	\$ 82.1	\$ 49.1	\$ 33.03	67.3%	
-Telephone/Communications	\$ 17.1	\$ 0.6	\$ 3.7	\$ 3.5	\$ 24.9	\$ 14.1	\$ 10.82	76.8%	
-Depreciation FF&E	\$ 19.6	\$ 0.7	\$ 4.3	\$ 4.0	\$ 28.6	\$ 36.9	\$ (8.29)	-22.5%	
<u>Office, computer &amp; other expenses</u>									
-Office expense	\$ 15.9	\$ 0.5	\$ 3.5	\$ 3.3	\$ 23.2	\$ 17.2	\$ 5.99	34.8%	
-IT operations	\$ 47.7	\$ 1.6	\$ 10.4	\$ 9.8	\$ 69.5	\$ 36.0	\$ 33.53	93.1%	
-Training/education/subscriptions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9.3	\$ (9.30)	-100.0%	
-Travel,meeting& related expenses	\$ 10.0	\$ -	\$ -	\$ -	\$ 10.0	\$ 22.1	\$ (12.10)	-54.8%	
-Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 102.7	
<b>Total C&amp;I Program expenses:</b>	<b>\$ 3,107.0</b>	<b>\$ 65.7</b>	<b>\$ 457.8</b>	<b>\$ 347.9</b>	<b>\$ 3,978.4</b>	<b>\$ 3,245.3</b>	<b>\$ 733.1</b>	<b>22.6%</b>	

Connecticut Green Bank  
FY 16 Operations and Program Budget

Institutional Programs

	2016						2015					
	Budget						Budget					
	Institutional ESA	LBE - State	LBE - Municipal	SL2 Muni and Institutional	New Product Development	Total	Total	Inc(Dec)	% Inc.			
<b>Expenses</b>												
<u>Compensation and benefits</u>												
-Salaries & Wages	\$ 79.9	\$ 145.3	\$ 128.9	\$ 53.0	\$ 30.5	\$ 437.6	\$ 504.9	\$ (67)	-13.3%			
-Employee Benefits	\$ 60.0	\$ 109.0	\$ 96.7	\$ 39.7	\$ 22.8	\$ 328.2	\$ 383.7	\$ (55)	-14.5%	\$ 765.9		
-Temporary employees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
<u>Program development and administration</u>												
- Program development costs	\$ 100.0	\$ -	\$ -	\$ -	\$ 50.0	\$ 150.0	\$ -	\$ 150				
-Technology support costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
- Third party servicing fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
- Municipal fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
- Project Inspection fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 150		
<u>EM&amp;V</u>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -		
<u>Professional fees</u>												
- Consulting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -		
- Legal fees	\$ -	\$ 25.0	\$ -	\$ 5.0	\$ -	\$ 30.0	\$ 9.0	\$ 21	233.3%	\$ 30.0		
<u>Rent and location related expenses</u>												
-Rent/Utilities/Maintenance	\$ 5.2	\$ 9.5	\$ 8.4	\$ 3.5	\$ 2.0	\$ 28.7	\$ 27.7	\$ 1	3.4%			
-Telephone/Communications	\$ 1.6	\$ 2.9	\$ 2.6	\$ 1.1	\$ 0.6	\$ 8.7	\$ 8.0	\$ 1	8.7%			
-Depreciation FF&E	\$ 1.8	\$ 3.3	\$ 2.9	\$ 1.2	\$ 0.7	\$ 10.0	\$ 20.8	\$ (11)	-52.0%	\$ 47.3		
<u>Office, computer &amp; other expenses</u>												
-Office expense	\$ 1.5	\$ 2.7	\$ 2.4	\$ 1.0	\$ 0.6	\$ 8.1	\$ 9.7	\$ (2)	-16.6%			
-IT operations	\$ 4.4	\$ 8.1	\$ 7.1	\$ 2.9	\$ 1.7	\$ 24.3	\$ 20.3	\$ 4	19.5%			
-Training/education/subscriptions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5.2	\$ (5)				
-Travel,meeting& related expenses	\$ -	\$ 1.0	\$ 1.0	\$ -	\$ -	\$ 2.0	\$ 12.5	\$ (11)	-84.0%	\$ 34.3		
-Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
<b>Tptal Institutional Program expenses:</b>	<b>\$ 254.5</b>	<b>\$ 306.8</b>	<b>\$ 250.1</b>	<b>\$ 107.4</b>	<b>\$ 108.9</b>	<b>\$ 1,027.5</b>	<b>\$ 1,001.8</b>	<b>\$ 26</b>	<b>2.6%</b>			



**Connecticut Green Bank  
FY 16 Operations and Program Budget**

<b>Other Programs</b>						
<b>FY 16 Budget</b>					<b>2015</b>	
	<b>CES Innovation Fund</b>		<b>Total</b>		<b>Budget</b>	
<b><u>Expenses</u></b>						
<i><u>Compensation and benefits</u></i>						
-Salaries & Wages	\$ 66.9	\$	66.9	\$	63.60	
-Employee Benefits	\$ 50.2	\$	50.2	\$	48.30	\$ 117.2
-Temporary employees	\$ -	\$	-	\$	-	
<i><u>Program development and administration</u></i>						
- Program development costs	\$ 100.0	\$	100.0	\$	100.00	
-Technology support costs	\$ -	\$	-	\$	-	
- Third party servicing fees	\$ -	\$	-	\$	-	
- Municipal fees	\$ -	\$	-	\$	-	
- Project Inspection fees	\$ -	\$	-	\$	-	\$ 100.00
<i><u>EM&amp;V</u></i>	\$ -	\$	-	\$	-	\$ -
<i><u>Professional Fees</u></i>	\$ -	\$	-	\$	-	\$ -
<i><u>Rent and location related expenses</u></i>						
-Rent/Utilities/Maintenance	\$ 4.4	\$	4.4	\$	3.50	
-Telephone/Communications	\$ 1.3	\$	1.3	\$	1.00	
-Depreciation FF&E	\$ 1.5	\$	1.5	\$	2.60	\$ 7.2
<i><u>Office, computer &amp; other expenses</u></i>						
-Office expense	\$ 1.2	\$	1.2	\$	1.20	
-IT operations	\$ 3.7	\$	3.7	\$	2.60	
-Training/education/subscriptions	\$ -	\$	-	\$	0.70	
-Travel,meeting& related expenses	\$ -	\$	-	\$	1.60	\$ 4.9
-Insurance	\$ -	\$	-	\$	-	
<b>Total Other Programs expenses:</b>	<b>\$ 229.3</b>	<b>\$</b>	<b>229.3</b>	<b>\$</b>	<b>225.10</b>	

# Memo

**To:** Board of Directors of the Connecticut Green Bank

**From:** George Bellas (VP of Finance and Administration), Mackey Dykes (VP and COO), Bryan Garcia (President and CEO), and Bert Hunter (EVP & CIO)

**Date:** June 12, 2015

**Re:** Green Connecticut Loan Guaranty Program and Renewable Energy and Efficient Energy Finance Program – FY 2016 Budget Proposal and Anticipated Use of Proceeds

---

We are proposing that proceeds from the Green Connecticut Loan Guaranty Program and the Renewable Energy and Efficient Energy Finance Program (see attachments) be included as sources of revenue in the FY 2016 budget of the Connecticut Green Bank. For FY 2016, we propose using \$10.0 million of the Green Connecticut Loan Guaranty Program to expand local lending for individuals and small businesses seeking to purchase or install clean energy, and \$7.45 million of the Renewable Energy and Efficient Energy Program to support workforce development, solar PV for low income individuals, and food/organic waste to energy projects. Both programs are noted in the Comprehensive Plan of the Connecticut Green Bank for FY 2015 and FY 2016.

The use of these proceeds from these programs will result in the following benefits:

- **Investment and Leverage** – we will use approximately \$17.5 million to attract up to \$132.1 million of private investment for a total investment of up to \$149.6 million or about an 8:1 leverage ratio. It should be noted that (with the exception of the workforce development funds) these funds are not being used as subsidies or grants, they are being used as credit enhancements or loans that will increase the future leverage of public funds with private capital;
- **Affordability and Accessibility** – we will increase access to private capital for credit challenged customers, including low to moderate income single families and small businesses; and
- **Waste and Energy** – we will reduce regional food and solid waste by converting it to renewable energy through the deployment of anaerobic digesters and combined heat and power facilities;

The sections below provide an overview of these programs and the anticipated use of proceeds.

---

## **Green Connecticut Loan Guaranty Program**

Per C.G.S. §§ 16a-40d through 40f, the legislature authorized up to \$18 million in bond proceeds to be used for guaranteeing loans made by participating lending institutions<sup>1</sup> to a participating qualified non-profit organization<sup>2</sup> for eligible energy conservation projects<sup>3</sup> through the Green Connecticut Loan Guaranty Program. The Connecticut Green Bank, in consultation with the Energy Conservation Management Board and the Connecticut Health and Educational Facilities Authority, shall establish priorities for financing eligible energy conservation projects. Through the work of the Joint Committee of the Energy Conservation Management Board and the Connecticut Green Bank, individuals and small businesses have been identified as key areas of focus for coordination of financing programs.

In FY 2016, \$10.0 million will be requested from the Green Connecticut Loan Guaranty Program to attract an estimated \$90.5 million of local lending from banks, credit unions and other eligible financial institutions for individuals and small businesses.

### *Individuals*

Through the Smart-E Loan for Homeowners, \$7.0 million will be requested – \$3.5 million by the end of 2015 and \$3.5 million before June 30, 2016 – to be used as first or second loss loan loss reserves (as conditions warrant) to attract up to \$77.0 million of low-cost and long-term private capital financing and investment in clean energy resources for homeowners.

The key elements of the program include:

- **Public Policy** – to attract low-cost and long-term private capital to help finance clean energy policies (i.e., Comprehensive Energy Strategy, Comprehensive Plan of the Connecticut Green Bank, etc.);
- **Coordination** –to ensure that the program is in coordination with existing financing programs to enable efficiency improvements, per the statute, we will commit to a target of reaching 15% of single family homes in Connecticut by the end of 2020. This target will be coordinated with other financing programs through the joint efforts of the Connecticut Green Bank and the Connecticut Energy Efficiency Fund;
- **Increase Access** – to expand access to affordable capital from banks and credit unions for more credit challenged customers and seek to engage them to:
  - Expand lending to credit challenged homeowners with FICO scores < 680;
  - Extend maturities beyond the existing 12 year Smart-E Loan term to up to 20 years; and
  - Participate in the on bill repayment program to improve security of loan repayment, support alternative underwriting (e.g., utility bill repayment history), and work towards an “open market” or syndicated “pooled loan” platform for increased lending from financial institutions.

---

<sup>1</sup> Means a bank, trust company, savings banks, savings and loan association or credit union, whether chartered by the United States of America of this state, or any insurance company authorized to do business in this state.

<sup>2</sup> Means individuals, non-profit organizations, and small businesses (i.e., a business entity employing not more than fifty full-time employees).

<sup>3</sup> Means, but is not limited to, the purchase and installation of insulation, alternative energy devices, energy conservation materials, replacement furnaces and boilers, and technologically advanced energy-conserving equipment

This is not a new program. These funds will be used to engage more lenders and “ramp-up” existing programs.

#### *Small Business*

Through a to-be designed Smart-E Loan for Small Businesses, \$3.0 million will be requested – \$1.5 million by the end of 2015 and \$3.5 million before June 30, 2016 – to be used as first or second loss loan loss reserves (as conditions warrant) to attract \$13.5 million of low-cost and long-term private investment in clean energy resources for small businesses.

The key elements of the program include:

- **Public Policy** – to attract low-cost and long-term private capital to help finance clean energy policies (i.e., Comprehensive Energy Strategy, Comprehensive Plan of the Connecticut Green Bank, etc.);
- **Coordination** –to lower the cost of capital of the Small Business Energy Advantage program<sup>4</sup> by attracting local lenders into the market to finance clean energy projects for small businesses and provide working capital for small clean energy businesses;
- **Increase Access** – to expand access to affordable capital from banks and credit unions for small business customers and seek to engage them to:
  - Offer competitive and affordable rate lending to small businesses;
  - Provide maturities of 5, 7, 10, and 12 years;
  - Participate in the on bill repayment program to improve security of loan repayment and support alternative underwriting (e.g., utility bill repayment history).

This is a new program. These funds will be used to attract lenders to finance clean energy projects and working capital for small businesses while lowering the costs of buying down the interest rate of the Small Business Energy Advantage program.

---

#### **Renewable Energy and Efficient Energy Finance Program**

Per C.G.S. §§ 16-245aa and 16-245bb, the legislature authorized up to \$18 million in bond proceeds to be used to make grants, investments, loans or other forms of financial assistance for renewable energy sources and energy-efficient generation sources through the Renewable Energy and Efficient Energy Finance Program. The Connecticut Green Bank, in consultation with the Department of Energy and Environmental Protection, the Department of Economic and Community Development, and the State Treasurer, shall establish a renewable energy and efficient energy finance program.

In FY 2016, \$7.45 million will be requested from the Renewable Energy and Efficient Energy Finance Program to attract an estimated \$27.0 million of private capital for workforce development, solar PV on low income households, and food/organic waste to energy projects.

---

<sup>4</sup> Currently the Small Business Energy Advantage program buys down the utility cost of capital from about 10% to 0%. By lowering the cost of capital for small business lending, the interest rate buy down costs can be lowered, resulting in more funds available for other programs.

### *Workforce Development*

Up to 2.5% of the funds available through the Renewable Energy and Efficient Energy Finance Program – or \$450,000 – can be set aside for grants to support workforce development initiatives in connection with the deployment of these projects. These funds would be designated to the Department of Economic and Community Development, or their designee, to support appropriate workforce development initiatives.

### *Solar PV for Low Income*

The Connecticut Green Bank has identified the need to expand access of solar PV technology to low income households.<sup>5</sup> \$5.0 million will be used as subordinated debt to attract \$18.0 million of private capital investment from tax equity and debt providers. As a new policy goal of 300 MW of residential solar PV in Connecticut by 2022 has been established, we want to see an increase in low income household participation in the market.

The key elements of the program include:

- **Public Policy** – to increase the number of projects and penetration rates of low income households in the Residential Solar Investment Program per the Comprehensive Plan of the Connecticut Green Bank; and
- **Increase Access** – through a competitive RFP, to identify a partner to finance solar PV and energy efficiency improvements and provide energy education services to low income households.

This is a new program. These funds will be used to attract private investment in a financing program that will make solar PV and energy efficiency more affordable and accessible to low income households.

### *Food Waste to Energy*

The Connecticut Green Bank, in partnership with the Department of Energy and Environmental Protection, has identified the need to reduce food and solid waste through the production of renewable energy through anaerobic digestion and combined heat and power projects. \$2.0 million will be used as subordinated debt to attract up to \$9.0 million of private capital investment from a local bank.

The key elements of the program include:

- **Public Policy** – to support the implementation of both PA 11-217 to collect food waste at a centralized recycling location within a 20-mile radius of the point of origin and Section 103 of PA 11-80 to support pilot anaerobic digester and combined heat and power projects producing renewable energy, and support the Comprehensive Plan of the Connecticut Green Bank; and
- **Increase Access** – to provide opportunities for local lenders to invest in food waste to energy projects.

---

<sup>5</sup> Market Analysis of Residential Solar Deployment and Housing Characteristics of CT's Low Income Sector (December 12, 2014)

This is not a new program. These funds will be used to attract local lenders to invest in waste reduction and renewable energy projects.



Connecticut General Statutes     **Section 16a-40e, 16a-40f and 16a-40d**

***Green Connecticut Loan Guaranty Fund***

***(\$18 Million in Account)***

***Green Connecticut Loan Guaranty Program***

**Sec. 16a-40e. Green Connecticut Loan Guaranty Fund.** The Connecticut Green Bank shall establish a “Green Connecticut Loan Guaranty Fund”. Such fund shall be used for the purposes of guaranteeing loans authorized under section 16a-40f, and may be used for expenses incurred by said authority in the implementation of the program under said section.

**Sec. 16a-40f. Green Connecticut Loan Guaranty Fund program.** (a) For the purposes of this section:

- (1) “Participating qualified nonprofit organizations” means individuals, nonprofit organizations and small businesses;
- (2) “Small business” means a business entity employing not more than fifty full-time employees;
- (3) “Eligible energy conservation project” means an energy conservation project meeting the criteria identified, as provided in subsection (d) of this section;
- (4) “Participating lending institution” means any bank, trust company, savings bank, savings and loan association or credit union, whether chartered by the United States of America or this state, or any insurance company authorized to do business in this state that participates in the Green Connecticut Loan Guaranty Fund program; and
- (5) “Bank” means the Connecticut Green Bank.

(b) The bank shall establish the Green Connecticut Loan Guaranty Fund program from the proceeds of the bonds issued pursuant to section 16a-40d for the purpose of guaranteeing loans made by participating lending institutions to a participating qualified nonprofit organization for eligible energy conservation projects, including for two or more joint eligible energy conservation projects. In carrying out the purposes of this section, the bank shall have and may exercise the powers provided in subsection (d) of section 16-245n.

(c) Participating qualified nonprofit organizations may borrow money from a participating lending institution for any energy conservation project for which the bank provides guaranties pursuant to this section. In connection with the provision of such a guaranty by the bank, (1) a participating qualified nonprofit organization shall enter into any loan or other agreement and make such covenants, representations and indemnities as a participating lending institution deems necessary or appropriate; and (2) a participating lending institution shall enter into a guaranty agreement with the bank, pursuant to which the bank has agreed to provide a first loss guaranty of an agreed percentage of the original principal amount of loans for eligible energy conservation projects.

(d) In consultation with the Energy Conservation Management Board and the Connecticut Health and Educational Facilities Authority, the Connecticut Green Bank shall identify types of projects that qualify as eligible energy conservation projects, including, but not limited to, the purchase and installation of insulation, alternative energy devices, energy conservation materials, replacement furnaces and boilers, and technologically advanced energy-conserving equipment. The bank, in consultation with said entities, shall establish priorities for financing eligible energy conservation projects based on need and quality determinants. The bank shall adopt procedures, in accordance with the provisions of section 1-121, to implement the provisions of this section.

(e) The bank shall, in consultation with the Energy Conservation Management Board and the Connecticut Health and Educational Facilities Authority, (1) ensure that the program established pursuant to this section integrates with existing state energy efficiency and renewable energy programs; (2) establish performance targets for the program to ensure that the program in coordination with existing financing programs will enable efficiency improvements for at least fifteen per cent of single family homes in the state by 2020; (3) enter into agreements with participating lending institutions that provide loan origination services; and (4) exercise such other powers as are necessary for the proper administration of the program.

(f) Financial assistance provided by participating lending institutions pursuant to this section shall be subject to the following terms:



- (1) Eligible energy conservation projects shall meet cost-effectiveness standards adopted by the bank in consultation with the Energy Conservation Management Board and the Connecticut Health and Educational Facilities Authority.
- (2) Loans shall be at interest rates determined by the bank to be no higher than necessary to result in the participation of participating lending institutions in the program.
- (3) The amount of a fee paid for an energy audit provided pursuant to this program may be added to the amount of a loan to finance the cost of an eligible project conducted in response to such energy audit. In such cases, the amount of the fee may be reimbursed from the fund to the borrower.

**Sec. 16a-40d. Bond authorization for the Energy Conservation Loan Fund and the Green Connecticut Loan Guaranty Fund.**

(a) The State Bond Commission shall have the power, from time to time, to authorize the issuance of bonds of the state in one or more series and in principal amounts not exceeding in the aggregate five million dollars per year. Except as provided in subsection (b) of this section, the proceeds of the sale of said bonds shall be deposited in the Energy Conservation Loan Fund established under section 16a-40a for the purposes of making and guaranteeing loans and deferred loans as provided in section 5 of public act 05-2 of the October 25 special session\* and section 16a-46e. All provisions of section 3-20, or the exercise of any right or power granted thereby which are not inconsistent with the provisions of sections 16a-40 to 16a-40b, inclusive, and this section are hereby adopted and shall apply to all bonds authorized by the State Bond Commission pursuant to said sections 16a-40 to 16a-40b, inclusive, and this section, and temporary notes in anticipation of the money to be derived from the sale of any such bonds so authorized may be issued in accordance with said section 3-20 and from time to time renewed. Such bonds shall mature at such time or times not exceeding twenty years from their respective dates as may be provided in or pursuant to the resolution or resolutions of the State Bond Commission authorizing such bonds. Said bonds issued pursuant to said sections 16a-40 to 16a-40b, inclusive, and this section shall be general obligations of the state and the full faith and credit of the state of Connecticut are pledged for the payment of the principal of and interest on said bonds as the same become due, and accordingly and as part of the contract of the state with the holders of said bonds, appropriation of all amounts necessary for punctual payment of such principal and interest is hereby made, and the Treasurer shall pay such principal and interest as the same become due.

(b) As of July 1, 2010, proceeds of the sale of said bonds which have been authorized as provided in subsection (a) of this section, but have not been allocated by the State Bond Commission, and the additional amount of five million dollars authorized by this section on July 1, 2010, shall be deposited in the Green Connecticut Loan Guaranty Fund established pursuant to section 16a-40e, and shall be used by the Connecticut Health and Educational Facilities Authority for purposes of the Green Connecticut Loan Guaranty Fund program established pursuant to section 16a-40f, provided not more than eighteen million dollars shall be deposited in the Green Connecticut Loan Guaranty Fund. Such additional amounts may be deposited in the Green Connecticut Loan Guaranty Fund as the State Bond Commission may, from time to time, authorize.

**Use of Proceeds**

We would use \$18.0 million of Green Loan Guaranty Funds requested over 3 fiscal years – FY 2016 (\$10 million – CY 2015 and CY 2016), FY 2017 (\$5 million – CY 2017), and FY 2018 (\$3 million – CY 2018). Funds would attract up to \$188.0 million of private capital investment from lending institutions (as defined in the statute) with a Connecticut presence, including local banks (i.e. Eastern Savings, Ion, etc.) and credit unions (i.e. Nutmeg, Core Plus, etc.) into financing clean energy projects for individuals (through the Smart-E Loan – \$12.0 million of funds attracting up to \$132.0 million), and small business (through the Smart-E Loan – \$6.0 million of funds attracting up to \$56.0 million).

**Calendar Year 2015 – Proposed FY 2016 Budget**

<b>Program</b>	<b>Beneficiary</b>	<b>Financial Institution</b>	<b>Amount Requested</b>	<b>Private Capital Attracted</b>
Smart-E Loan (Home)	Single Family	Banks-CU	\$3.5 million	\$38.5 million
Smart-E Loan (Small Bus)	Small Business	Banks-CU	\$1.5 million	\$6.0 million
<b>Total</b>			<b>\$5.0 million</b>	<b>\$44.5 million</b>

- Smart-E Loan (Home)
  - Commit to target of reaching 15% of single family homes by the end of 2020 – about 170,000 homes (1-4 families)
  - Seek to continue second loan loss reserve position to ensure standard underwriting procedures from financial institutions
  - Seek to expand access to capital from community banks, credit unions and other financial institutions for credit challenged customers:
    1. FICO scores 640-679
    2. FICO scores below 640
  - Support on bill repayment (OBR) mechanism for:
    1. Improved security of repayment
    2. Alternative underwriting – utility bill repayment history

3. A “syndicated” or “Open Market” OBR to attract more financial institutions
  - Seek to expand maturities to offer 15, 17, and 20 year terms
  - Smart-E Loan (Small Bus)<sup>1</sup>
    - Attract lending from community banks, credit unions and other financial institutions into the small business sector
    - Seek second loan loss reserve position to ensure standard underwriting operating procedures from financial institutions
    - Lower the cost of capital needed to buydown the interest rate for the Small Business Energy Advantage (SBEA) program from the utility cost of capital (i.e., greater than 9%)
    - Provide working capital for installers in the clean energy industry
    - Support small and minority owned businesses
    - Work with DECD to attract local lenders into small businesses

### **Calendar Year 2016 – Proposed FY 2016 Budget**

<b>Program</b>	<b>Beneficiary</b>	<b>Financial Institution</b>	<b>Amount Requested</b>	<b>Private Capital Attracted</b>
Smart-E Loan (Home)	Single Family	Banks-CU	\$3.5 million	\$38.5 million
Smart-E Loan (Small Bus)	Small Business	Banks-CU	\$1.5 million	\$7.5 million
<b>Total</b>			<b>\$5.0 million</b>	<b>\$46.0 million</b>

- Smart-E Loan (Home) – same as above
- Smart-E Loan (Small Bus) – same as above

### **Calendar Year 2017 – Proposed FY 2017 Budget**

<b>Program</b>	<b>Beneficiary</b>	<b>Financial Institution</b>	<b>Amount Requested</b>	<b>Private Capital Attracted</b>
Smart-E Loan (Home)	Single Family	Banks-CU	\$2.5 million	\$27.5 million
Smart-E Loan (Small Bus)	Small Business	Banks-CU	\$2.5 million	\$17.5 million
<b>Total</b>			<b>\$5.0 million</b>	<b>\$45.0 million</b>

- Smart-E Loan (Home) – same as above
- Smart-E Loan (Small Bus) – same as above<sup>2</sup>

### **Calendar Year 2018 – Proposed FY 2018 Budget**

<b>Program</b>	<b>Beneficiary</b>	<b>Financial Institution</b>	<b>Amount Requested</b>	<b>Private Capital Attracted</b>
Smart-E Loan (Home)	Single Family	Banks-CU	\$2.5 million	\$27.5 million
Smart-E Loan (Small Bus)	Small Business	Banks-CU	\$2.5 million	\$25.0 million

<sup>1</sup> Target is a 5:1 leverage ratio for Calendar Year 2015 and 2016

<sup>2</sup> Target is a 7:1 leverage ratio

<b>Total</b>			<b>\$3.0 million</b>	<b>\$52.5 million</b>
--------------	--	--	----------------------	-----------------------

- Smart-E Loan (Home) – same as above
- Smart-E Loan (Small Bus) – same as above<sup>3</sup>

---

<sup>3</sup> Target is a 10:1 leverage ratio



Connecticut General Statutes **Section 16-245aa and 16-245bb**

**(\$18 Million in Account)**

***Renewable Energy and Efficient Energy Finance Program***

**Sec. 16-40aa. Renewable energy and efficient energy finance program.** (a) There is established an account to be known as the “renewable energy and efficient energy finance account”, which shall be a separate, nonlapsing account within the Clean Energy Fund, established pursuant to section 16-245n. The account shall contain any moneys required or permitted by law to be deposited in the account and any funds received from any public or private contributions, gifts, grants, donations, bequests or devises to the account. The Connecticut Green Bank may make grants, investments, loans or other forms of financial assistance from the account in accordance with the provisions of subsection (b) of this section.

(b) The Connecticut Green Bank, in consultation with the Department of Energy and Environmental Protection, the Department of Economic and Community Development and the State Treasurer, shall establish a renewable energy and efficient energy finance program. Said bank shall make grants, investments, loans or other forms of financial assistance under said program to projects for the purchase and installation of (1) renewable energy sources, including solar energy, geothermal energy, thermal energy storage, electric storage and fuel cells or other energy-efficient hydrogen-fueled energy, or (2) energy-efficient generation sources, including units providing combined heat-and-power operations with greater than sixty-five per cent efficiency or such higher efficiency level as said bank may prescribe. Said bank may make grants under said program of up to two and one-half per cent of the balance in the account to support workforce development initiatives in connection with deployment of the projects. Said bank shall give priority to applications for grants, investments, loans or other forms of financial assistance to projects that use major system components manufactured or assembled in Connecticut. Each grant, investment, loan or other form of financial assistance shall be in an amount that makes the cost of purchasing, installing and

operating the renewable energy or energy-efficient generation source competitive with the grid's or other end users' current electricity expenses.

(c) On or before November 1, 2012, the Connecticut Green Bank shall develop an application for grants, investments, loans or other forms of financial assistance under this section for the purpose of purchasing, installing and operating renewable energy or energy-efficient generation sources and may receive applications for such grants, investments, loans or other forms of financial assistance on and after the date the application is developed. Applications shall include, but not be limited to, a complete description of the proposed renewable energy or energy-efficient generation source.

(d) On or before January 1, 2013, and annually thereafter, the Connecticut Green Bank shall report on the effectiveness of said program to the joint standing committee of the General Assembly having cognizance of matters relating to energy.

**Sec. 16-245bb. Bond authorization.** (a) For the purposes described in subsection (b) of this section, the State Bond Commission shall have the power, from time to time, to authorize the issuance of bonds of the state in one or more series and in principal amounts not exceeding in the aggregate eighteen million dollars.

(b) The proceeds of the sale of said bonds, to the extent of the amount stated in subsection (a) of this section, shall be used by the Connecticut Green Bank for the purpose of providing grants, investments, loans or other forms of financial assistance pursuant to section 16-245aa.

(c) All provisions of section 3-20, or the exercise of any right or power granted thereby, which are not inconsistent with the provisions of this section are hereby adopted and shall apply to all bonds authorized by the State Bond Commission pursuant to this section, and temporary notes in anticipation of the money to be derived from the sale of any such bonds so authorized may be issued in accordance with said section 3-20 and from time to time renewed. Such bonds shall mature at such time or times not exceeding twenty years from their respective dates as may be provided in or pursuant to the resolution or resolutions of the State Bond Commission authorizing such bonds. None of said bonds shall be authorized except upon a finding by the State Bond Commission that there has been filed with it a request for such authorization which is signed by or on behalf of the Secretary of the Office of Policy and Management and states such terms and conditions as said commission, in its discretion, may require. Said bonds issued pursuant to this section shall be general obligations of the state and the full faith and credit of the state of Connecticut are pledged for the payment of the principal of and interest on said bonds as the same become due, and accordingly and as part of the contract of the state with the holders of said bonds, appropriation of all amounts necessary for punctual payment of such principal and interest is hereby made, and the State Treasurer shall pay such principal and interest as the same become due.

## Use of Proceeds

We would use \$18.0 million of the Renewable Energy and Efficient Energy Finance Account requested over 2 fiscal years – FY 2016 (\$7.45 million) and FY 2017 (\$10.55 million). Funds would attract up to \$80.5 million of private capital investment into financing food waste to energy anaerobic digestion (“AD”) projects (through \$12.55 million of funds attracting up to \$62.5 million), and low income solar (through \$5.0 million of funds attracting up to \$18.0 million). We would also set aside \$450,000 for workforce development in these emerging technology areas.

## Proposed FY 2016 Budget

<b>Program</b>	<b>Amount Requested</b>	<b>Private Capital Attracted</b>
Workforce Development	\$0.45 million	-
Low Income Solar	\$5.0 million	\$18.0 million
AD Pilot (Southington)	\$2.0 million	\$9.0 million
<b>Total</b>	<b>\$7.45 million</b>	<b>\$27.0 million</b>

- Workforce Development – set aside 2.5% of the Renewable Energy and Efficient Energy Finance Account for workforce development in clean energy. Provide resources to DECD (or other appropriate agency) to manage.
- Low Income Solar
  - Support Governor Malloy’s target of 300 MW by 2022
  - Enable more low to moderate income households to enter the residential solar PV market to increase market penetration
- AD (Southington project)
  - Attracting lenders with a Connecticut presence to invest in municipalities
  - Supporting food waste policy to remove regional environmental problems on collection
  - Deploying new AD technologies from GE and Europe

## Proposed FY 2017 Budget

<b>Program</b>	<b>Amount Requested</b>	<b>Private Capital Attracted</b>
AD Pilot (Bridgeport)	\$3.5 million	\$14.5 million
AD Pilot (Southington)	\$4.0 million	\$19.0 million
AD Pilot (Milford)	\$3.05 million	\$20.0 million
<b>Total</b>	<b>\$10.55 million</b>	<b>\$53.5 million</b>

- AD (Bridgeport, Milford and Southington) – same as above, including distressed municipality



# Memo

**To:** Connecticut Green Bank Board of Directors  
**From:** Kim Stevenson and Kerry O'Neill  
**CC:** Bryan Garcia, Bert Hunter, Mackey Dykes  
**Date:** June 12, 2015  
**Re:** Multifamily Affordable Housing LEAN Event

---

During the week of May 11<sup>th</sup>, 2015, DEEP sponsored a LEAN event focused on streamlining inter-agency financing of clean energy improvements to affordable multifamily housing (MFAH). LEAN is all about analyzing and improving our work processes in order to work smarter, have greater impact, and do more with less. We pulled together a very broad group of key stakeholders to look at how we are collectively serving the multifamily market, and analyzed how we can do a better job.

The impetus for the LEAN week was to address challenges faced by MFAH property owners in implementing comprehensive, cost-effective, and impactful energy improvements. Currently there is uneven availability and predictability of financing options for energy efficiency, renewable energy, health and safety, and other capital improvement projects in the affordable multifamily housing sector. The team's charter was to streamline the process of providing financing by coordinating utility financing with options provided by other institutions.

This was truly an interagency endeavor, with close to 50 participants, representing:

- 
- |                                 |                                     |
|---------------------------------|-------------------------------------|
| • DEEP                          | • CT Housing Investment Fund (CHIF) |
| • Green Bank                    | • Contractors – 5+ cos              |
| • CHFA                          | • Yale Institute for Sustainability |
| • Dept of Housing               | • CT Children's Medical Center      |
| • Department of Public Health   | • Customers/ Owners                 |
| • Department of Social Services | – Housing Authority                 |
| • CT HUD Office                 | – Non Profit owner/ developer       |
| • EEB board member              | – Private owner/ developer          |
| • Utilities – Eversource and UI |                                     |
-



Throughout the week we learned about each other's programs, challenges, and drivers. We problem solved to identify streamlined processes, solutions and implementation goals.

We focused on challenges confronting our key customer (building owners) and designing solutions that will address their priorities and needs. We identified two key scenarios:

- 1) Projects driven by capital improvements, energy improvements are a subcomponent.
- 2) Projects driven by energy improvements, capital improvements are a subcomponent

### What does Customer Value?

- NOI ( Net Operating Income )
- Reduced number service calls
- Increased tenant retention
- Simplified financing process with a reliable outcome
- Increased asset values
- Improved quality of life for tenants
- Reduced energy bills



Connecticut Department of Energy and Environmental Protection

### Customer identified challenges

- Often cost-engineer energy improvements out due to timing issues – need to value back in
- Lack of simple application process including consolidated forms across agencies
- For some programs – no application form or clear process in place for owners
- Owners don't know how to get started and who to trust

### Key Performance Indicators (Metrics)

- 1) Financed/completed MFAH projects will achieve at least:
  - X % Average Cost Savings per Unit
  - X % Average Energy Savings per Unit
- 2) 100 % of completed DOH/CHFA funded projects include identified energy improvements **implemented**
- 3) 100 % Letters of Agreement for utility incentives are issued at financing application (not closing)
  - CHFA/DOH – LOA delivered at 40 % design
  - All others – LOA included with financing application
- 4) Increase number of MFAH units served by financing



Connecticut Department of Energy and Environmental Protection

We asked - **What does good look like?**

*Most (all!) utility incentive letters of agreement are issued by the time of financing app.*

**What does great look like? - Energy efficiency is mainstreamed for multifamily properties and all capital improvement projects on multifamily properties incorporate energy improvements.**

We identified key performance indicators for measuring success

We culminated the week with an implementation plan that includes an ongoing interagency collaboration to establish and implement better solutions for our customers:

- Develop recommendations for utilities 2016-2018 energy efficiency investment plan
- Create a Memorandum of Understanding between agencies to establish a new consolidated process and work plan
- Develop common goals and metrics
- Align various predevelopment processes including energy savings methodology and underwriting
- Create a consolidated application form for utilities and the Green Bank
- Create a pre-assessment tool for utility incentives and financing options

- Map resources for health and safety concerns that must be addressed before energy work begins
- Conduct training for vendors and contractors

The LEAN week was a tremendous opportunity for the Green Bank Multifamily team. We are deeply grateful to DEEP for sponsoring the event and to all our partners, stakeholders and customers for the significant amount of time everyone took away from their daily jobs to participate. The outcome of this event will inform all of our program and product development going forward. It has deepened already strong relationships with CHFA, DOH, the utility companies, and others. We believe there is agreement and commitment by the stakeholders to implement the resulting recommendations, which will be a major undertaking.

Some of our team's key takeaways and ah ha moments from the week:

- Driving transparency in market segmentation, performance metrics and processes is critical for understanding this market and how well it is being served
- What customers value (NOI) is not what we (the service providers) value or are measured on – an important disconnect
- Critical importance of energy assessment and design work (good value engineering) being done up front – for both scenarios – resources and education very important here
- Shifting utility LOA commitments earlier in the process and engaging with the utility companies early on
- Notion that financing enables incentives to be leveraged to achieve deeper measures – and that everyone is aligned in wanting to achieve deeper energy measures (and cost/energy savings) – including a turnkey solution for owners/customers
- Terms and acronyms create confusion, lack of understanding, and are understood differently by each group
- We didn't understand each other's products and processes well – how important it was to stop, stake stock, listen, understand, and strategize better solutions together

# Memo

**To:** Board of Directors  
**From:** Dale Hedman  
**CC:** Bryan Garcia, Bert Hunter, Rick Ross  
**Date:** June 19, 2015  
**Re:** Wind Colebrook South Update

---

## Background

The Wind Colebrook South Project, owned by BNE Energy Inc. (BNE), was approved by the Connecticut Green Bank (CGB) Board of Directors for an investment in the project totaling \$2,800,000 (\$2,000,000 subordinate secured loan, a portion of which was used to immediately pay off the CCEF \$500,000 predevelopment loan and a working capital facility in the amount of \$800,000). A loan agreement between CGB and BNE for the project was executed on December 23, 2014. The project is the first utility-scale wind project in Connecticut, costing approximately \$22,500,000 and will supplying up to 5,000 kW to the grid via an interconnection with Eversource Energy (formally Connecticut Light and Power Company). Pursuant to Section 127 of Public Act 11-80, BNE and Eversource Energy have entered into a 20-yr Power Purchase Agreement (“PPA”) guaranteeing the energy offtake from this project at a price of 20 cents per kWh, inclusive of both energy and Renewable Energy Credits (“RECs”) – 11.51 cents / kWh plus \$84.90 per REC.

On September 23, 2014 the project received an affirmative decision from the Connecticut State Supreme Court upholding a lower court’s ruling that the Connecticut Siting Council’s decision to approve the project for construction was within its jurisdiction. With this ruling, BNE has been able to proceed with executing an Engineering, Procurement and Construction (EPC) contract with The Ryan Company, Inc. (Ryan) from Norton, MA and various other construction and financing contracts, including a \$12.7 million senior credit facility with Webster Bank. In April of this year CGB executed a PSA with EAPC Wind Energy, LLC to serve as Lender Inspector for CGB and Webster Bank. CGB will be reimbursed for the cost of this engagement by BNE per the loan agreements with CGB and Webster Bank.

## **Project Construction Progress**

On January 9, 2015 BNE issued a Full Notice To Proceed with construction of the project to Ryan. Since that date Ryan has made steady progress in mobilizing sufficient resources in preparing the construction site for the installation of the two GE 2.85 MW wind turbines, procuring the contracted turbines, interconnection components, specialty tools and other material for the project. EAPC has been monitoring the EPC progress and has submitted a report to CGB and Webster Bank informing us that construction of the project is progressing on schedule. On May 6, CGB, together with Webster Bank, EAPC, BNE and Ryan met at the project site to review the past and current project status and to achieve a clear project understanding between these parties. Commissioning and testing is anticipated by mid-October with a commercial operation date of December 15, 2015. To date, nothing has been identified by EAPC that would materially alter these expected milestones. EAPC did evaluate the construction schedule for risks that could delay the scheduled completion of the project. The table below outlines these risks and possible actions to mitigate the risks.

<b>Risk</b>	<b>Consequence</b>	<b>Mitigation</b>
Late delivery or damage to main transformer. 14-16 week lead delivery at time of order (~May 1, 2015)	Delay in line energization and commissioning	Possible installation of portable substation Use generators for commissioning Delayed COD
WTG delivery delay (complex shipping from various locations by ship, train & truck)	Delay installation	
Bad weather & high winds	Delay project completion	Work extended hours and days. Project owners have granted Ryan Co. permission to work longer hours and extra days without incurring extra cost to project
Open RFIs from Ryan Co.: - RFI #014 – Rigging & Erection	Delays	Risk is low: - Continued discussions with GE.
- RFI #016 – Mechanical Completion		- Continue discussions, backfeed, fiber & scada
- RFI #027 – GE Special Tooling		- Continued discussions with GE
- RFI #029 – GE Blade Sock		- Continued discussions with GE.
- RFI #34 – GE Electrical Connections		- Waiting for response.