

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



June 10, 2016

Dear Connecticut Green Bank Board of Directors:

We have a meeting of the Board of Directors scheduled for Friday, June 17, 2016 from 9:00 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.

On the agenda we have the following items:

- **Consent Agenda** – review and approval of the meeting minutes for the April 22, 2016 meeting, an update on the transactions less than \$300,000 and no more in aggregate than 1,000,000 to clear the queue, and procedural modifications and CT SL2 LLC audited financial statements with recommendations for approval from the Audit, Compliance and Governance Committee.
- **President's Update** – we will provide an update on some recent additions to the staff, including interns.
- **Strategic Discussions** – for this meeting, we have invited Atlas Public Policy to discuss the market potential study on alternative fuel vehicles and infrastructure that they conducted. As we begin to explore this emerging market opportunity, we wanted to share with you the findings of our research and to get your feedback.
- **Committee Recommendations** – over the course of the past several months, we have had several meetings with the Budget and Operations Committee on the Comprehensive Plan (including Goals by Sector), Targets, and Budget. They will be recommending the approval of the Targets and Budget for FY 2017. We also have secured a new auditor through a competitive RFP process that the Audit, Compliance, and Governance Committee will be recommending for approval.
- **Staff Transaction Recommendations** – we have several transactions that we are recommending for approval, including:
  - a. **Residential Sector** – a revision of the terms of the Connecticut Housing Investment Fund (CHIF) Low Income Multifamily Energy (LIME) Loan.
  - b. **Commercial and Industrial Sector** – a final grant request underneath the Clean Energy Business Solutions program to support high efficiency heating and cooling equipment through DECD's investment in Conair.

- c. **Statutory and Infrastructure Sector** – a follow-on investment request through tax exempt private activity revenues bonds to continue our support of the Bridgeport District Energy Facility, and revisions of our loan in support of the Bridgeport Microgrid Project. On the latter project, the transaction memo will be distributed to the Board of Directors by COB on Wednesday, June 15<sup>th</sup>.
- **Other Business** – if we have time, and you have something else you would like to discuss, we have included other business on the agenda.

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 'B. Garcia', with a long horizontal flourish extending to the right.

Bryan Garcia  
President and CEO



## **AGENDA (REVISED)**

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

Friday, June 17, 2016  
9:00-11:00 a.m.

Staff Invited: George Bellas, Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey, Dale Hedman, Bert Hunter, Kerry O'Neill, and Eric Shrago

1. Call to order
2. Public Comments – 5 minutes
3. Consent Agenda\* – 5 minutes
  - a. Approval of Meeting Minutes for April 22, 2016\*
  - b. Under \$300,000 and No More in Aggregate than \$1,000,000\*
  - c. Approval of Modification of Internal Control Procedure CGB 101\* – Purchasing and Accounts Payable, and CGB 102 – Consulting and Advisory Services to reflect the hiring of Eric Shrago, Director of Operations, to replace Mackey Dykes, COO
  - d. Approval of CT SL2 LLC audited financial statements issued May 11, 2016\*
4. President's Update – 5 minutes
5. Board of Directors Strategic Discussions – 30 minutes
  - a. Alternative Fuel Vehicles and Infrastructure – 30 minutes
6. Committee Recommendations\* – 45 minutes
  - a. Budget and Operations Committee\* – Approval of FY 2017 Budget and Targets – 40 minutes
  - b. Audit, Compliance and Governance Committee – Approval of Audit RFP Process and Firm Selection – 5 minutes
7. Staff Transaction Recommendations\* – 25 minutes
  - a. Residential Sector Programs Transaction Recommendations\* – 5 minutes
    - i. CHIF LIME Loan\* – 5 minutes

- b. Commercial and Industrial Sector Program Transaction Recommendations\* – 10 minutes
  - i. Clean Energy Business Solutions Transaction\* – Conair
  - ii. C-PACE Transaction – Canaan
- c. Statutory and Infrastructure Transaction Recommendations\* – 10 minutes
  - i. District Heating Project\* – Bridgeport
  - ii. Microgrid Project (Revision)\* – Bridgeport
  - iii. NEHC Hydro Facility (Revision)\* - Meriden
- 8. Other Business – 5 minutes
- 9. Adjourn

\*Denotes item requiring Board action

Join the meeting online at <https://global.gotomeeting.com/join/980312069>

Or call in using your telephone:

Dial (872) 240-3311

Access Code: 980-312-069

Next Regular Meeting: Friday, July 15, 2016 from 9:00-11:00 a.m.  
Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT



## **RESOLUTIONS (REVISED)**

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

Friday, June 17, 2016  
9:00-11:00 a.m.

Staff Invited: George Bellas, Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey, Dale Hedman, Bert Hunter, Kerry O'Neill, and Eric Shrago

1. Call to order
2. Public Comments – 5 minutes
3. Consent Agenda\* – 5 minutes
  - a. Approval of Meeting Minutes for April 22, 2016\*

### **Resolution #1**

Motion to approve the minutes of the Board of Directors Meeting for April 22, 2016.

- b. Under \$300,000 and No More in Aggregate than \$1,000,000\*

### **Resolution #2**

**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 17, 2016 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 17, 2016 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.

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

**Resolution #3**

**WHEREAS**, on May 25, 2016 the Connecticut Green Bank Audit, Compliance and Governance Committee recommended to the Board of Directors approval of the proposed revisions to Internal Control Procedures CGB101, CGB102 and CGB103.

**NOW**, therefor be it:

**RESOLVED**, that the Connecticut Green Bank Board of Directors (the “Board”) hereby approves the proposed revisions to Internal Control Procedures CGB101, CGB102 and CGB103 outlined in the Memo dated June 10, 2016 (along with attachments) which was submitted to the Board.

- d. Approval of CT SL2 LLC audited financial statements issued May 11, 2016

**Resolution #4**

**WHEREAS**, on May 25, 2016 the Connecticut Green Bank Audit, Compliance and Governance Committee recommended to the Board of Directors approval of the CT SL2 LLC audited financial statements issued on May 11, 2016.

**NOW**, therefor be it:

**RESOLVED**, that the Green Bank Board of Directors hereby approves the proposed CT SL2 LLC audited financial statements issued May 11, 2016.

- 4. President’s Update – 5 minutes
- 5. Board of Directors Strategic Discussions – 30 minutes
  - a. Alternative Fuel Vehicles and Infrastructure – 30 minutes
- 6. Committee Recommendations\* – 45 minutes
  - a. Budget and Operations Committee\* – Approval of FY 2017 Budget and Targets – 40 minutes

## **Resolution #5**

**WHEREAS**, on June 7th, 2016 the Connecticut Green Bank Budget and Operations Committee recommended that the Green Bank Board of Directors approve the Fiscal Year 2017 Budget and Targets; and

**WHEREAS**, on June 7th, 2016 the Connecticut Green Bank Budget and Operations Committee recommended that the Connecticut Green Bank Board of Directors authorize Connecticut Green Bank staff to extend the professional services agreements (PSAs) currently in place or adopt new PSAs with:

- I. Archaeological & Historical Services, Inc.
- II. The Cadmus Group, Inc.
- III. Clean Power Research LLC
- IV. Cortland Capital Markets Services, LLC
- V. EnergySage, Inc.
- VI. Lamont Financial Services Corporation
- VII. Locus Energy, LLC
- VIII. METIS Financial Network, Inc.
- IX. New Ecology Inc.
- X. Opinion Dynamics Corporation
- XI. SmartPower, Inc.
- XII. Sustainable Real Estate Solutions, Inc.
- XIII. WegoWise, Inc
- XIV. Yale University

For fiscal year 2017 with the amounts of each PSA not to exceed the applicable approved budget line item.

**NOW**, therefor be it:

**RESOLVED**, that the Connecticut Green Bank Board of Directors hereby approves: (1) the FY 2017 Budget and Targets and, (2) the fourteen PSAs listed above, as both items were recommended by the Connecticut Green Bank Budget and Operations Committee.

- b. Audit, Compliance and Governance Committee – Approval of Audit RFP Process and Firm Selection – 5 minutes

## **Resolution #6**

**WHEREAS**, on May 25, 2016 the Audit, Compliance and Governance Committee recommended to the Board of Directors approval of Blum Shapiro to perform professional audit services for the Connecticut Green Bank (Green Bank) for the fiscal years 2016, 2017 and 2018 and further instructed that staff seek additional clarification and pricing concessions from Blum Shapiro.

**NOW**, therefor be it:

**RESOLVED**, that the Green Bank Board of Directors hereby approves Blum Shapiro to perform professional audit services for the Green Bank for the fiscal years

2016, 2017 and 2018.

7. Staff Transaction Recommendations\* – 25 minutes
  - a. Residential Sector Programs Transaction Recommendations\* – 5 minutes
    - i. CHIF LIME Loan\* – 5 minutes

**Resolution #7**

**WHEREAS**, the Connecticut Green Bank (Green Bank) selected the Capital for Change (C4C) under Green Bank’s competitive solicitation process for the Clean Energy Financial Innovation Program and subsequently entered into negotiations with Green Bank that led to the development of the C4C Low Income Multifamily Energy (LIME) Loan Program (“the Program”);

**WHEREAS**, on March 7th, 2014, Green Bank’s Deployment Committee approved funding for the LIME Loan program in an amount of not-to-exceed \$1,000,000 in capital financing, and \$300,000 for a Loan Loss Reserve (Credit Enhancements) through the use of repurposed ARRA-SEP program funds, or ratepayer funds, if necessary; and

**WHEREAS**, at a regular meeting of the Board of Directors (“Board”) held on April 25<sup>th</sup>, 2014, the Board approved the Program;

**WHEREAS**, C4C has developed a pipeline of potential projects for financing under the Program;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the extension of the not-to-exceed \$1,000,000 funding to capitalize and support the Program;

**RESOLVED**, that the \$1,000,000 in funds advanced under the Program shall be supported by the previously approved \$300,000 worth of Credit Enhancements, plus an additional \$325,000 of Credit Enhancements from unused CT Solar Lease II ARRA-SEP funds for a total of \$625,000 of Credit Enhancements;

**RESOLVED**, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the Program on such terms and conditions as are materially consistent with the memorandum submitted to the Green Bank Board on February 28<sup>th</sup>, 2014 and as modified by the June 10, 2016 memorandum to align the loan terms with market project demand for financing; 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 the above-mentioned legal instrument.

- b. Commercial and Industrial Sector Program Transaction Recommendations\* – 10 minutes
  - i. Clean Energy Business Solutions Transaction\* – Conair



### **Resolution #8**

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver a Clean Energy Business Solutions financial assistance award of \$1,000,000, to Conair Corporation; 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 instrument not later than three months from the date of this resolution.

ii. C-PACE Transaction – Canaan\*

### **Resolution #9**

**WHEREAS**, pursuant to Section 16a-40g of the Connecticut General Statutes, as amended, (the “Act”), the Connecticut Green Bank (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 (the “Board”) has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a **\$425,527** construction and (potentially) term loan under the C-PACE program to David G. Sandefer & Cynthia L. Sandefer, the building owners of 136 Sand Rd., Canaan, 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 Act, 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 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 dated June 15, 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 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.

c. Statutory and Infrastructure Transaction Recommendations\* – 10 minutes

i. District Heating Project – Bridgeport

**Resolution #10**

**WHEREAS**, NuPower Thermal Bridgeport LLC, a Connecticut limited liability company (the “Company”), has requested that the Connecticut Green Bank (the “Issuer”), provide assistance in funding the costs of installing and constructing a district thermal loop in downtown Bridgeport, Connecticut, including all piping and other needed equipment, that will serve academic, municipal and commercial buildings through the delivery of hot and chilled water to these buildings (the “Project”) through the issuance of tax-exempt debt in an amount up to \$40,000,000 (the “Bonds”); and

**WHEREAS**, the Internal Revenue Service has promulgated regulations (the “Regulations”) under the Internal Revenue Code of 1986, as amended (the “Code”) that govern the allocation of the proceeds of tax-exempt debt issued to reimburse expenditures made for governmental purposes paid by a borrower of tax-exempt debt, prior to the issuance of such debt; and

**WHEREAS**, such Regulations set forth the circumstances under which allocations of proceeds to reimburse such expenditures shall be treated as an expenditure of proceeds of the Bonds on the date of such allocations; and

**WHEREAS**, generally, in order to satisfy the Regulations and be able to reimburse expenditures (except for certain de minimis expenditures and preliminary costs as defined in the Regulations) with the proceeds of tax-exempt debt, the Company and the Issuer must, among other things, declare not later than sixty (60) days after the date of any such expenditure, a reasonable official intent to so reimburse such expenditures with the proceeds of tax-exempt debt; and

**WHEREAS**, the Company has approved a resolution declaring its official intent to reimburse such expenditures with the proceeds of tax-exempt debt; and

**WHEREAS**, the purpose of this official intent resolution is to provide objective evidence that on the date of this declaration, the Issuer intends to reimburse prior expenditures paid by the Company for the Project, solely from the proceeds of such tax-exempt debt and otherwise without recourse to the Issuer.

**NOW THEREFORE**, be it resolved that:

1. The Issuer reasonably expects to reimburse expenditures made for governmental purposes in connection with the Project and paid by the Company (the “Expenditures”).
2. The Issuer reasonably expects to make such reimbursements of Expenditures, solely from the proceeds of the Bonds and otherwise without recourse to the Issuer, within eighteen (18) months after the date of any such Expenditures or the date the Project is placed in service or abandoned, whichever is later, but in no event more than three (3) years after the Expenditures are paid. The maximum principal amount of the Bonds is not expected to exceed \$40,000,000.
3. This resolution is the Issuer’s declaration of official intent made pursuant to Section 1.150-2 of the Regulations.

ii. Microgrid Project (Revision) – Bridgeport

**Resolution #11**

**WHEREAS**, this proposed microgrid power generation system project (Project) meets the requirements of the statutorily mandated Combined Heat and Power (CHP) Pilot program set forth under Public Act 11-80, Section 103, which is administered by the Connecticut Green Bank (Green Bank);

**WHEREAS**, the Project was selected by Green Bank staff pursuant to a request for proposals under the statutorily mandated CHP Pilot program and approved by the Deployment Committee on March 3, 2016 (the “Original Approval”); and

**WHEREAS**, subsequent to the Original Approval, certain material changes were negotiated between the Project, the senior lender providing additional capital to the Project and Green Bank, namely:

1. Green Bank is able to make multiple advances during the construction period, i.e., prior to Commercial Operation Date, provided that the Project shall have received advances from the senior lender such that the ratio of the aggregate amount of such senior loan advances to the maximum principal amount permitted to be drawn from the senior lender equals or exceeds the ratio of the aggregate amount of Green Bank advances (including any advance then being requested) to the maximum principal amount of the Green Bank loan and provided further that no advance shall be made later than July 1, 2017.
2. The maturity date of the Green Bank loan will be 20 years from the earlier of: (a) the date that is twenty (20) years from the date on which the final advance of the Green Bank loan is made; (b) acceleration of maturity upon an event of default or other mandatory prepayments as set forth in the Subordinated Loan

agreement; or (c) the date of the consummation and closing of any sale of the Project to a non-affiliated third party. Repayment commences the first month following the final advance with each of the 240 monthly payments being in the form of fully amortizing level payments of principal and interest (mortgage-style basis).

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank to execute and deliver a sub-debt loan in the amount of \$502,860, to be funded from the CHP Pilot program budget, and with terms and conditions consistent with the memorandum and term sheet submitted to the Deployment Committee dated February 23, 2015 and as revised by the memorandum to the Board of Directors dated June 17, 2016; 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.

iii. NEHC Hydro Facility (Revision)\* - Meriden (highlighted sections new)  
**Resolution #12**

**WHEREAS**, in accordance with (1) the statutory mandate of the Connecticut Green Bank (“Green Bank”) to foster the growth, development, and deployment of clean energy sources that serve end-use customers in the State of Connecticut, (2) the State’s Comprehensive Energy Strategy and (3) Green Bank’s Comprehensive Plan for Fiscal Years 2015 and 2016 (the “Comprehensive Plan”), Green Bank continuously aims to drive private capital investment into clean energy projects;

**WHEREAS**, pursuant to the development of a small hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in Meriden (“Project”), on February 26, 2016 the Green Bank Board of Directors (the “Board”) authorized:

- i) construction financing in an amount not to exceed \$3.1 million,
- ii) a working capital guaranty in an amount not to exceed \$300,000 to New England Hydropower Company (“NEHC”), the project developer, under the Green Bank’s existing working capital facility partnership with Webster Bank; and,
- iii) term financing based on the following
  - a. the issuance of New Clean Renewable Energy Bonds (“CREBs”) in an amount not to exceed \$3,100,000, and
  - b. securing the issuance of CREBs utilizing the Special Capital Reserve Fund (“SCRF”) subject to further Board approval; and

**WHEREAS, Green Bank staff recommends that the Board authorize the creation of a Special Purpose Entity that will be wholly owned by the Green Bank;**

**WHEREAS, Green Bank staff now recommends that the Board authorize an increase in the working capital guaranty afforded to NEHC in connection to the Project under the Green Bank's existing working capital facility partnership with Webster Bank; and**

**WHEREAS, Green Bank staff now recommends the Green Bank to issue a guaranty to a third party lender for construction finance for the Project instead of a loan by the Green Bank as originally contemplated by staff and authorized by the Board on February 26, 2016.**

**NOW, therefore be it:**

**RESOLVED, that the Green Bank may increase the amount of its working capital guaranty under the Green Bank's existing working capital facility partnership with Webster Bank, for draws made by NEHC solely in connection with this Project and in an amount not to exceed \$600,000 and may issue a guaranty to a third party lender for construction finance for the Project as more completely described in a memorandum to the Board of Directors dated April 15, 2016 and as revised on April 20, 2016;**

**RESOLVED, that the Green Bank may establish a wholly owned Special Purpose Entity with all the requisite powers to own, operate and manage the Project, as required by CREBs and as described in the memorandum to the Board of Directors dated April 15, 2016 and as revised on June 14, 2016; 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. Other Business – 5 minutes

9. Adjourn

\*Denotes item requiring Board action

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Or call in using your telephone:

Dial (872) 240-3311

Access Code: 980-312-069

Next Regular Meeting: Friday, July 15, 2016 from 9:00-11:00 a.m.  
Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT



CONNECTICUT  
**GREEN BANK**

# Board of Directors Meeting

June 17, 2016



# 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

## Resolutions 1 through 4



- **Meeting Minutes** – approval of meeting minutes of April 22, 2016\*
- **Under \$300,000 and No More in Aggregate than \$1,000,000** – memo to update board on transactions reviewed and approved by staff and clearing the queue for future transactions consistent with Comp Plan and Budget
- **Procedures** – recommendations from ACG Committee for procedural changes
- **CT SL2 LLC Audit** – recommendation from ACG Committee for CT SL2 LLC Audit approval

# Consent Agenda

No More in Aggregate than \$1,000,000



Project Name	Comprehensive Plan	Amount	Type
St. John Episcopal Church	C-PACE and SL2	\$15,929	Benefit Assess.
<b>Sand Road Animal Hospital</b>	<b>C-PACE</b>	<b>\$42,533</b>	<b>Benefit Assess.</b>
Fonte Enterprise	C-PACE	\$50,030	Benefit Assess.
DFC-ERG CT, LLC	S&I	\$10	Grant
<b>Total</b>	<b>4</b>	<b>\$115,108</b>	

Approximately \$115,000 in loans

Board of Directors  
Agenda Item #4  
President's Update

# President's Update

## Program Progress to Targets for FY 2016



- **Director of Operations** – welcome and congratulations to Eric Shrago (getting married this weekend)
- **Summer Interns** – competitive recruitment process

Division	# of Applicants	# of Interns	Interns
Corporate	62	2	Kristie Beahm – UCONN (Law) Ryan Shelby – McGill (Undergrad)
Program	131	3	Francesco Biancardi – UCONN (Undergrad) <sup>1</sup> Bryant Ebright – URI (Undergrad) <sup>2</sup> Madeline Tiscareno – Gonzaga (Undergrad) <sup>3</sup>
Investment	261	2	Marina Fenley – Columbia (SIPA - MPA) Jeevan Ramoo – Yale (SOM-FES)
<b>Total</b>	<b>454</b>	<b>7</b>	

### REFERENCES

1. Working with Infrastructure Sector
2. Working with Residential Sector
3. Working with Commercial, Industrial and Institutional Sector

# President's Update

## Program Progress to Targets for FY 2016



- **EDF Climate Corps Pilot** – partnership to apply EDF model to help build pipeline for C-PACE projects – 3 EDF Climate Corps Fellows on staff of the CT Green Bank (i.e., Anthony Clark, Eric Shrago, and Nick Zuba). 919 applicants to EDF in 2016 and 125 fellows placed.

Climate Corps Fellows	Assignment
Theresa McCarty (Yale – FES)	DECD – expand “Energy on the Line” and other channels
Reagan Richmond (Bard College)	CGB Stamford – strategic partnerships and metrics for C-PACE
Divya Srinivasan (Presidio)	City of Hartford – under DEEP to conduct GHG emissions inventory
Geoff Willard (UC Santa Barbara)	MetroHartford Alliance – underserved subsectors of C&I market



CLIMATE CORPUS

# Board of Directors

Agenda Item #5a

Board of Directors Strategic Discussions

Alternative Fuel Vehicles and Infrastructure



# Market Potential Assessment for Alternative Fuels in Connecticut

Findings and next steps for the  
Connecticut Green Bank

*Nick Nigro, Atlas Public Policy*

*June 17, 2016*





# Study Overview

- Comprehensive data collection effort
- Summary of transportation sector in Connecticut
  - State energy and climate goals
  - State of play for conventional and alternative fuel vehicles
- Market potential assessment of alternative fuels
  - Near-term market feasibility
  - Environmental performance
  - Cost effectiveness
  - Local economic impact
- Conclusions and next steps

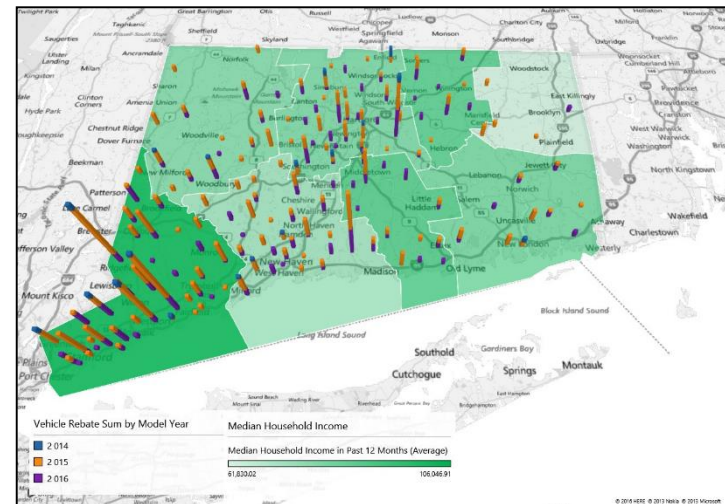
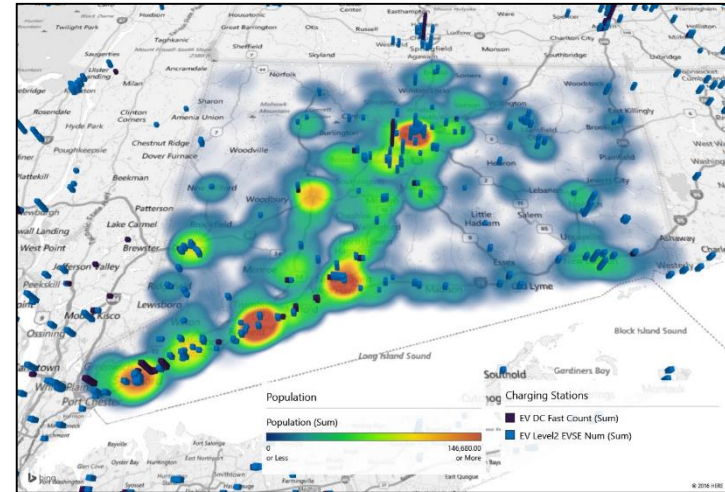


# Relational Database for Connecticut

- Compare multiple datasets at once
  - Create compelling visualizations with Microsoft Power BI and Excel
  - Time series (monthly, yearly) & geolocation (ZIP code)
- Current datasets available
  - Monthly vehicle registrations
  - Alternative fuel/charging stations<sup>1,2</sup>
  - Monthly gasoline & annual electricity prices<sup>1,2</sup>
  - Annual vehicle miles traveled<sup>1</sup>
  - Policies & programs (e.g., CHEAPR)
  - U.S. Census Bureau demographics<sup>1,2</sup>
  - Solar installations<sup>1,2</sup>

<sup>1</sup> Publicly available dataset accessed through web API

<sup>2</sup> Multi-state data available





# State of Play Summary

- Transportation is largest source of emissions in CT (40%)
  - Current federal policy and state programs help, but not enough
  - State expected to have 3x more transportation emissions in 2050 than its long-term climate goal
- Light-duty vehicles dominate CT market
  - 95% of vehicle stock, 70% of energy use
- 10 alternative fuel options for vehicles
  - Plug-in electric vehicles most widely available alternative fuel vehicle



# Near-Term Market Feasibility

Vehicle Type	Alternative Fuel	Key Factors
Passenger Vehicle	Electricity	<ul style="list-style-type: none"><li>● ZEV Program participation</li><li>● Vehicle incentives</li><li>● Available charging infrastructure</li></ul>
Medium- and Heavy-duty Vehicles	Renewable Diesel	<ul style="list-style-type: none"><li>● Drop-in fuel</li><li>● Cost effective compared to diesel</li><li>● Limited supply</li></ul>

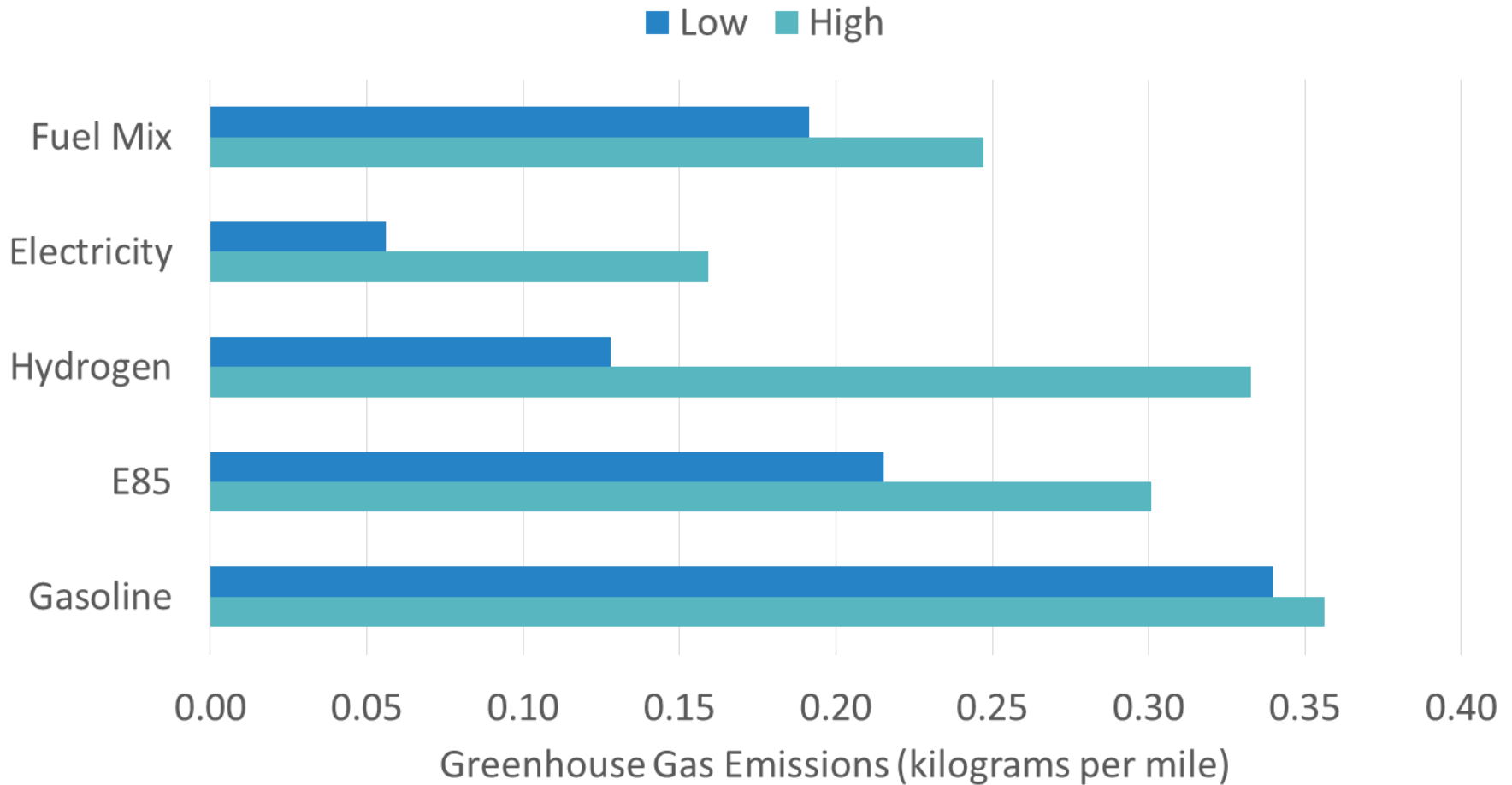


# Environmental Performance

Vehicle Type	Alternative Fuel	Key Factors
<b>Passenger Vehicle</b>	Electricity, Hydrogen	<ul style="list-style-type: none"><li>● Greatest emission reduction potential</li><li>● Requires low-carbon feedstocks</li></ul>
<b>Medium- and Heavy-duty Vehicles</b>	RNG from landfills and dairy farms	<ul style="list-style-type: none"><li>● Greatest emission reduction potential</li><li>● Displaces emissions</li></ul>



# Environmental Performance of Passenger Vehicles





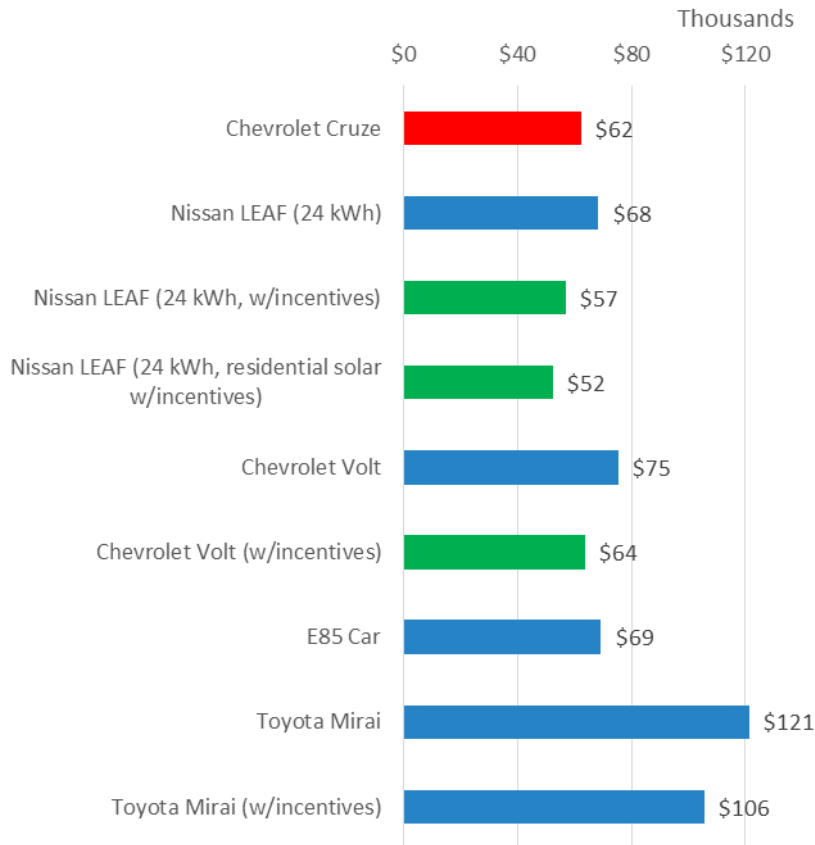
# Cost Effectiveness

Vehicle Type	Alternative Fuel	Key Factors
Passenger Vehicle	Electricity	<ul style="list-style-type: none"><li>• All-electric vehicles have lower abatement costs than social cost of carbon without incentives</li><li>• Residential solar is least cost option with incentives</li></ul>
Delivery Trucks, Tractor-Trailers	Electricity (delivery trucks), Biodiesel (delivery trucks, tractor trailers)	<ul style="list-style-type: none"><li>• Electric delivery trucks cost less than diesel trucks</li><li>• Biodiesel trucks have lower abatement costs than social cost of carbon</li></ul>

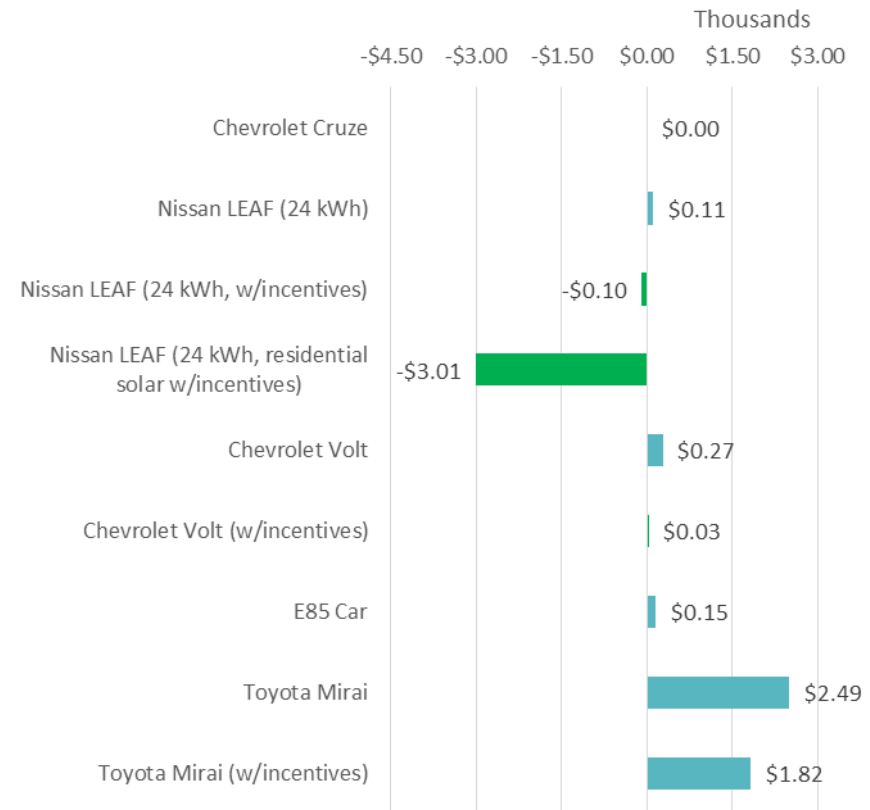


# Passenger Vehicle Discounted Lifetime Cost and Abatement Cost

**Total Discounted Cost**



**Greenhouse Gas Abatement Cost (\$/Metric Ton CO<sub>2</sub>)**







# Local Economic Impact

Vehicle Type	Alternative Fuel	Key Factors
Passenger Vehicle	Electricity	<ul style="list-style-type: none"> <li>• Sizable power generation capacity keep transportation spending in state's economy</li> <li>• Federal funds exist to support plug-in electric vehicles and charging infrastructure</li> <li>• Electric vehicles can achieve a net costs savings over gasoline vehicles</li> </ul>
Medium- and Heavy-duty Vehicles	Biodiesel trucks	<ul style="list-style-type: none"> <li>• Existing capacity to produce biodiesel and federal tax credit make it best option</li> <li>• CNG could be attractive if oil prices recover to levels seen before summer of 2014</li> <li>• Large portion of commercially-generated waste cooking oil is currently being used for transportation fuel (biodiesel) or heating oil.</li> <li>• Potential to use residentially-generated waste cooking oil for biodiesel.</li> </ul>

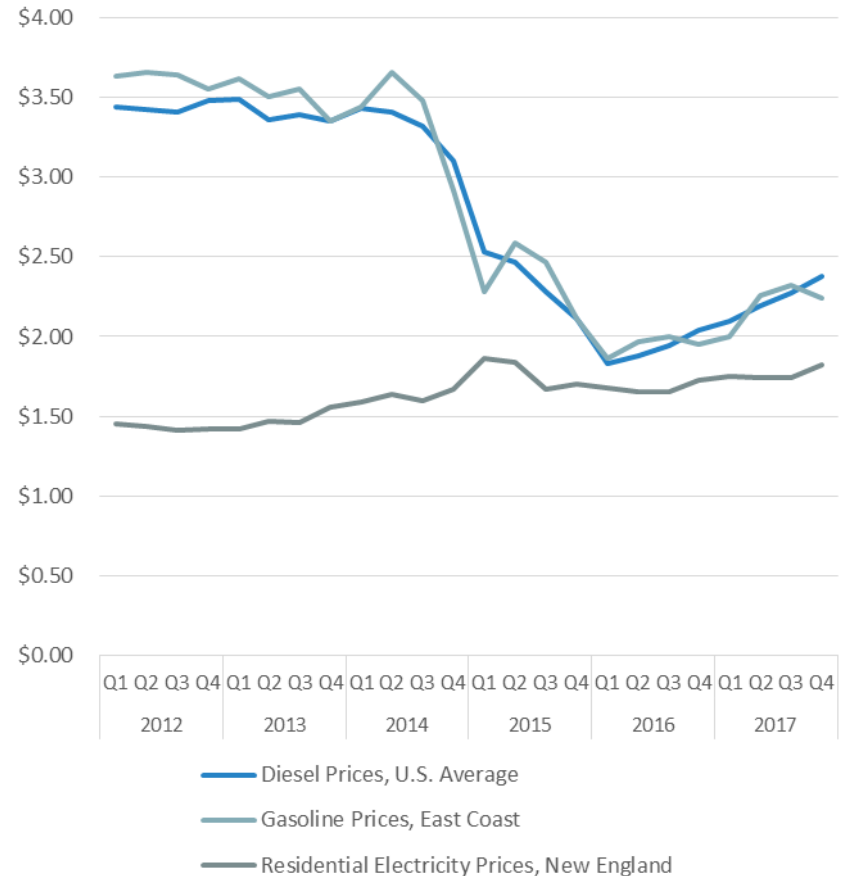


# Study Conclusions

- Electric vehicles are best option for state to meet its goals
  - Automaker investments will introduce variety of EVs in near term
  - Current policy framework in CT supports EV adoption
  - EVs can achieve net cost savings over gasoline vehicles & provide local economic boost

***Stable fuel prices, technological advances, and zero emissions combine to cost-effectively decarbonize transportation***

Near-Term Forecast of Fuel Prices





# Next steps for Green Bank

- Attempt to mirror success of other programs
  - Significant growth in cleantech deployment leading to decreased public investment
- Conduct regional economic potential assessments for EVs and fuel cells
- Explore opportunity of solar and EV integration



Nick Nigro

[nick.nigro@atlaspolicy.com](mailto:nick.nigro@atlaspolicy.com)



# Expected Near-Term Availability in CT

Vehicle Class	Vehicle Type	Biogas or Landfill Gas to RNG	Biodiesel (B100) or E85	Renewable Diesel	Electricity	Propane	CNG	LNG	Hydrogen (Gaseous)
Light-Duty	Passenger Cars	Red	Green	Green	Green	Red	Red	Red	Yellow
	Light Trucks	Yellow	Green	Green	Yellow	Yellow	Yellow	Red	Red
Medium- & Heavy-Duty	Beverage, Dump, Tow, Utility, Refrigerated Van	Green	Green	Green	Red	Green	Green	Yellow	Red
	Box Van, School Bus, Step Van	Green	Green	Green	Yellow	Green	Green	Yellow	Red
	Concrete Mixer, Trash	Green	Green	Green	Red	Green	Green	Green	Red
	Tractor Trailer	Green	Green	Green	Yellow	Green	Green	Green	Red
	Transit Bus	Green	Green	Green	Yellow	Green	Green	Yellow	Red

Green = widely available. Orange = limited availability/demonstrations only. Red = no availability.



# Potential Program Examples

## Incentives

Work with DEEP to make CHEAPR work like RSIP “race to the rooftop” with declining incentives

## Marketing

Launch Solarize EV campaign for EVs in partnership with local auto dealers and manufacturers

Explore special offers, like solar PV and EV charging station

## Automaker Partnerships

Work with GM, BMW, and others to pilot programs (e.g., carbon offsets)

## Employer (Commercial) & Multifamily Engagement

CA has a [charging financing program](#) for small businesses

Financing entity makes a loss reserve payment to participating lenders

Buyer may get rebate after repayment with kicker for multifamily

Board of Directors  
Agenda Item #6a  
Budget and Operations Committee  
FY 2017 Budget and Targets

# Comp Plan and Budget Overview



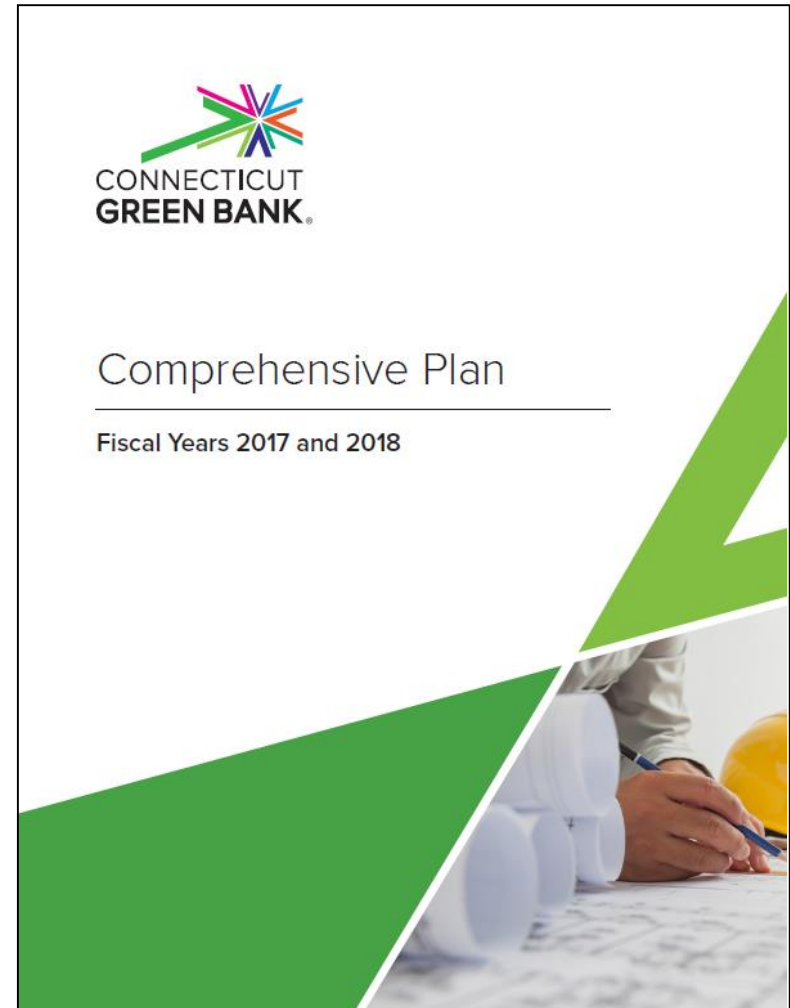
- **Comprehensive Plan** – builds on the progress made to date while setting realistic targets (as opposed to stretch targets) and establishes a framework for continued innovation (i.e., R&D) – BOD to review and approve the Comprehensive Plan on July 22, 2016
- **Budget** – anticipate strong revenues for FY 2017 with increasing sources from interest income (as a result of debt repayments) and REC sales (as a result of RSIP)...while keeping expenses flat year-to-year recognizing fiscal situation of the state
- **Deployment** – deploy no less than 70 MW with over \$325 million in clean energy investment mobilized, of which about \$40 million from the Green Bank and 60% of its investment in loans, with a majority of the remaining in grants that are repaid back over time through the sale of RECs



# Draft Comprehensive Plan FY 2017 and FY 2018



- **Executive Summary** – “big picture” on the role of the CT Green Bank
- **Organizational Overview** – vision, mission, goals, stakeholders, governance, organizational structure, and CAFR
- **Public Policy Overview** – key policies to support the implementation of
- **Evaluation Framework** – more on this later!
- **Financing** – from capitalization to Green Bank Network
- **Marketing** – from brand to Green Bank University
- **Program Sectors** – Infrastructure, Residential, and Commercial, Industrial, and Institutional
- **Research and Development** – understand new market opportunities to become a catalyst for
- **Budgets** – links to FY 2017 budget
- **Key Definitions** – to aid the reader



# Comprehensive Plan Goals



- To attract and deploy **private** capital **investment** to finance the clean energy **policy** goals for Connecticut
- ~~To reduce the reliance on grants, rebates, and other subsidies and move towards innovative low cost financing of clean energy deployment.~~ **To leverage limited public funds to attract multiples of private capital investment while returning and reinvesting public funds in clean energy deployment over time.**
- To develop and implement strategies that bring down the cost of clean energy in order to make it more accessible and affordable to consumers
- To support affordable and healthy buildings in low-to-moderate income and distressed communities by reducing the energy burden and addressing health and safety issues in their homes, businesses and institutions.

# Comprehensive Plan

## FY 2017 Targets



Sector	FY 16 Projects	FY 16 Capital Deployed <sup>1</sup>	FY 16 Clean Energy Deployed (MW)	FY 17 Projects	FY 17 Capital Deployed	FY 17 Clean Energy Deployed (MW)
Infrastructure	6,133	\$198,635,863	47.3	6,378 – 8,501	\$229,800,000 – \$300,302,000	50.1 – 66.2
Residential	1,098	\$42,497,735	6.7	1,093	\$36,599,000	5.4
Commercial, Industrial, & Institutional	44	\$35,241,313	9.2	94	\$56,800,000	14.8
Total*	6,746	\$259,877,345	59.1	7,565 – 9,688	323,199,000 – \$393,701,000	69.9 – 86.0

To support between no less than **7,500 projects** requiring investment of no less than **\$325 million** to deploy at least **70 MW** of clean energy

Expect to begin seeing the players in the residential solar PV market begin to transition from the RSIP to the Class I RPS market – **market transformation!!!**

**REFERENCES**

1. FY 2016 YTD – through Q3 (March 31, 2016)

# Comprehensive Plan

## FY 2017 Investments and Incentives



	FY 17 Budget	FY 16 Budget	FY 17 %	FY 16 %
Loans – CGB Program Loans	\$ 17,799,879	\$ 11,116,000	41%	38%
Loans – CGB Program Loans: Provisions for Loan Losses	\$ 1,969,006	\$ 1,276,930	5%	4%
Loans – CGB Working Capital Loans to Affiliates, CT Solar Lease 3	\$ 6,196,070		14%	0%
<b>Investments - Total</b>	<b>\$ 25,964,955</b>	<b>\$ 12,392,930</b>	<b>60%</b>	<b>42%</b>
Credit Enhancements - Loan Loss Reserves - ARRA Funds	\$ 625,000	\$ 300,000	1%	1%
Credit Enhancements - Loan Loss Reserves - CGB Funds	\$ 759,276	\$ 1,000,000	2%	3%
Credit Enhancements - Interest rate Buydowns - ARRA Funds	\$ 1,306,340	\$ 2,053,682	3%	7%
Credit Enhancements - Interest rate Buydowns - CGB Funds	\$ 100,000	\$ -	0%	0%
<b>Credit Enhancements - Total</b>	<b>\$ 2,465,616</b>	<b>\$ 3,353,682</b>	<b>6%</b>	<b>11%</b>
Incentive - HOPBI/EPBB/PBI Incentives <sup>1</sup>	\$ 12,549,010	\$ 11,320,000	29%	38%
Incentive - Legacy projects	\$ 100,000	\$ 900,000	0%	3%
Incentive - Clean Energy Communities	\$ 1,180,000	\$ 500,000	3%	2%
Incentive - Clean Energy Business Solutions	\$ 1,000,000	\$ 1,000,000	2%	3%
<b>Incentive Total</b>	<b>\$ 14,829,010</b>	<b>\$ 13,720,000</b>	<b>34%</b>	<b>47%</b>
<b>Investments, Credit Enhancements, &amp; Incentives Total</b>	<b>\$ 43,259,581</b>	<b>\$ 29,466,612</b>	<b>100%</b>	<b>100%</b>

**To invest over \$40 million in public funds to mobilize no less than \$325 million in investment in Connecticut’s clean energy economy – \$12.5 million in incentives will come back through SHREC**

### REFERENCES

1. All incentives and program administrative costs for the RSIP will be recovered through the SHREC sales to the EDC’s through the MPA

# Comprehensive Plan

## FY 2017 Revenues



Revenues	Total Operations & Program Budget FY 2017	Total Operations & Program Budget FY 2016	Inc(Dec)	% Inc.
Utility customer assessments	\$26,704,434	\$27,111,100	\$ (406,667)	-2%
RGGI auction proceeds - renewables	\$ 4,105,350	\$ 5,200,000	\$(1,094,650)	-21%
Interest Income, cash received	\$ 1,908,397	\$ 653,100	\$ 1,255,297	192%
Interest Income ,capitalized	\$ 1,223,711	\$ 400,000	\$ 823,711	206%
Grant income (Federal Programs)	\$ 14,632	\$ 120,000	\$ (105,368)	-88%
REC sales, general	\$ 2,007,647	\$ 1,764,100	\$ 243,547	14%
REC Sales, SHREC program	\$ 2,837,514	\$ 296,300	\$ 2,541,214	858%
CPACE Loan closing fees	\$ 858,000	\$ 1,200,000	\$ (342,000)	-29%
Other income	\$ 228,005	\$ 187,500	\$ 40,505	22%
<b>Total Revenues:</b>	<b>\$39,887,689</b>	<b>\$36,932,100</b>	<b>\$ 2,955,589</b>	<b>8%</b>

**Lost revenues from RGGI as a result of General Fund, increase in interest income from organizational investments, and increase in REC (i.e. spot market) and SHREC (i.e., 15-year contracts) sales**

# Comprehensive Plan FY 2017 Expenses



Expenses	Total Operations & Program Budget FY 2017	Total Operations & Program Budget FY 2016	Inc(Dec)	% Inc.
Employee compensation	\$ 5,020,091	\$ 5,063,400	\$ (43,309)	-1%
Employee benefits-contribution to retirement plans (54%)	\$ 2,710,849	\$ 2,632,968	\$ 77,881	3%
Employee benefits- insurance premiums & payroll taxes (24%)	\$ 1,204,822	\$ 1,172,132	\$ 32,690	3%
Temporary employees	\$ 96,000	\$ 76,800	\$ 19,200	25%
Shared CI employees	\$ -	\$ 139,100	\$ (139,100)	-100%
Program development and administration	\$ 4,342,659	\$ 5,410,800	\$(1,068,141)	-20%
Marketing	\$ 3,170,090	\$ 3,061,300	\$ 108,790	4%
EM&V	\$ 525,661	\$ 395,300	\$ 130,361	33%
Consulting & advisory fees	\$ 806,750	\$ 513,000	\$ 293,750	57%
R&D expenditures	\$ 735,000	\$ 410,000	\$ 325,000	79%
Professional fees: legal and accounting	\$ 607,000	\$ 500,000	\$ 107,000	21%
Rent	\$ 370,918	\$ 332,179	\$ 38,739	12%
Office, computer & other expenses	\$ 973,975	\$ 871,521	\$ 102,454	12%
<b>Expenses before Financial Incentives:</b>	<b>\$20,508,815</b>	<b>\$20,578,500</b>	<b>\$ (14,685)</b>	<b>0%</b>

**Overall flat year-to-year on expenses, with significant reductions in program development and administration (-20% or \$1 MM), increases in consulting and advisory (57% or \$300,000), and new proposed budget item (R&D) to open up new markets for clean energy investment**

# Comprehensive Plan

## PDA and Consulting and Advisory



- **Program Development and Administration** – reduction of 20% year-to-year for about \$1 million
  - FY2016 budget included \$275K for OBR/RPACE development and a CHFA Pilot not in 2017's budget
  - There was an additional decrease of \$383K in budgets for inspections due to fewer RSIP projects and lower costs overall
  
- **Consulting and Advisory** – increase of 57% year-to-year for about \$300,000
  - Increase consultant use to focus on increasing the pipeline (C-PACE)
  - Engage external advisors to ready ourselves to issue Green Bonds
  - New advisor engagement for LMI products (CDFI, etc)
  - External advice on data warehousing

# Comprehensive Plan Research and Development



Projects	Purpose	FY 2017 Budget	FY 2016 Budget	Variance Inc.(Dec.)	% Inc.(Dec.)
Green Bond Certification	Carbon Count	\$25,000	\$ -	\$25,000	
Green Bond Launch	Consulting related to Issuance of Green Bonds	\$35,000	\$ -	\$35,000	
CDFI SPV/Tax Letter	Creation of Community Development Financial Institution (CDFI) utilizing Special Purpose Entity (SPE)	\$75,000	\$ -	\$75,000	
C&I Modules (SRS)	C-PACE CDMP Module Development: 1)Customer Feedback Survey, 2) AVERT algorithm, 3) Program Savings Account	\$75,000	\$ -	\$75,000	
Renewable Thermal Technology	Regional Coordination	\$25,000	\$ -	\$25,000	
Renewable Thermal Technology	Yale Research	\$50,000	\$ -	\$50,000	
Utility 2.0	Study on Grid Modernization	\$50,000	\$ -	\$50,000	
Alternative Fuel Vehicles	Studies and Pilot Project	\$50,000	\$ -	\$50,000	
Revenue Development Opportunities	Royalty development	\$250,000	\$ -	\$250,000	
Resi 1-4 and CI	Market studies	\$100,000	\$ -	\$100,000	
FY 16 Budget for Studies		\$ -	\$410,000	(\$410,000)	
<b>Total R&amp;D</b>		<b>\$735,000</b>	<b>\$410,000</b>	<b>\$325,000</b>	<b>79%</b>

To identify opportunities to be a catalyst and open up new markets for clean energy investment in Connecticut's economy



# Comprehensive Plan Employee Staffing Plan



## ▪ **Staff**

- ✓ **Full Time Equivalents** – 47.25 FTE's in FY 2017 (vs. 49.63 FTE's in FY 2016)
  - ✓ **Hours per Year** – 98,280 hours in FY 2017 (vs. 103,220 hours in FY 2016)
  - ✓ **Location** – 36.25 in Rocky Hill and 11.00 in Stamford
- 
- **COLA** – 0% as we are a merit-driven organization
  - **Merit** – proposing up to 3.0% for FY 2016 (up to 6.0% in FY 2015)

# Comprehensive Plan

## Core Partners



Partner	Deptment	FY17 Budget
Archaeological & Historical Services, Inc.	(Residential Sector)	\$42,793
The Cadmus Group	(Infrastructure Sector)	\$75,000
Clean Power Research, LLC	(Infrastructure Sector)	\$430,000
Cortland Capital Markets Services	(CI&I)	\$84,860
EnergySage Inc.	(Infrastructure Sector)	\$36,000
Lamont Financial Services	(Investment)	\$75,000
Locus Energy LLC	(Infrastructure Sector)	\$570,000
METIS, Financial Network, Inc.	(EM&V)	\$300,000
New Ecology	(Residential Sector)	\$260,000
Opinion Dynamics and Dunsky Energy Consulting	(EM&V)	\$50,000
SmartPower Inc.	(Infrastructure Sector – Marketing)	\$175,000
Sustainable Real Estate Solutions, Inc.	(CI&I)	\$974,750
Wegowise	(Residential Sector)	\$62,632
Yale	(R&D)	\$75,000

# Resolution 5



**WHEREAS**, on June 7th, 2016 the Connecticut Green Bank Budget and Operations Committee recommended that the Green Bank Board of Directors approve the Fiscal Year 2017 Budget and Targets; and

**WHEREAS**, on June 7th, 2016 the Connecticut Green Bank Budget and Operations Committee recommended that the Connecticut Green Bank Board of Directors authorize Connecticut Green Bank staff to extend the professional services agreements (PSAs) currently in place or adopt new PSAs with:

- Archaeological & Historical Services, Inc.
- The Cadmus Group, Inc.
- Clean Power Research LLC
- Cortland Capital Markets Services, LLC
- EnergySage, Inc.
- Lamont Financial Services Corporation
- Locus Energy, LLC
- METIS Financial Network, Inc.
- New Ecology Inc.
- Opinion Dynamics Corporation
- SmartPower, Inc.
- Sustainable Real Estate Solutions, Inc.
- WegoWise, Inc
- Yale University

For fiscal year 2017 with the amounts of each PSA not to exceed the applicable approved budget line item.

**NOW**, therefor be it:

**RESOLVED**, that the Connecticut Green Bank Board of Directors hereby approves: (1) the FY 2017 Budget and Targets and, (2) the fourteen PSAs listed above, as both items were recommended by the Connecticut Green Bank Budget and Operations Committee.

# Board of Directors

Agenda Item #6b

Audit, Compliance and Governance Committee

Auditor RFP

# Connecticut Green Bank

## RFP for Professional Audit Services



\*The Green Bank received 3 proposals in response to our RFP for Professional Auditing Services.

\*The following 3 firms submitted proposals:

Blum Shapiro

RSM US LLP

Whittlesey & Hadley, P.C.

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

Bryan Garcia, President & CEO

Bert Hunter, EVP and Chief Investment Officer

Brian Farnen, Chief Legal Officer

Eric Shrago, Director of Operations

George Bellas, VP Finance

Jane Murphy, Controller

# Connecticut Green Bank

## RFP for Professional Audit Services



\*Each proposal was evaluated based on the following criteria:

- Firm Independence
- Firm License to Practice/Peer Review
- Firm Qualifications and Experience
- Similar Engagements
- Fees
- References
- Firm experience with sustainability accounting and reporting

Based on the evaluation team's review of all the proposals, the ACG Committee recommends the firm Blum Shapiro to provide professional audit services to the Green Bank for the fiscal years 2016 to 2018.

# Resolution 6



**WHEREAS**, on May 25, 2016 the Audit, Compliance and Governance Committee recommended to the Board of Directors approval of Blum Shapiro to perform professional audit services for the Connecticut Green Bank (Green Bank) for the fiscal years 2016, 2017 and 2018 and further instructed that staff seek additional clarification and pricing concessions from Blum Shapiro.

**NOW**, therefor be it:

**RESOLVED**, that the Green Bank Board of Directors hereby approves Blum Shapiro to perform professional audit services for the Green Bank for the fiscal years 2016, 2017 and 2018.

# Board of Directors

## Agenda Item #7

### Staff Transaction Recommendations



Board of Directors  
Agenda Item #7ai  
Residential  
Capital 4 Change (ne: CHIF) LIME Loan

# Capital 4 Change Low Income Multifamily Energy (LIME) Loan – Program Reauthorization



## Overview:

Update to April, 2014 Board program approval which provided \$1M of capital contribution and \$300k loan loss reserve for LIME Loan program offered by Capital 4 Change (C4C, ne: CHIF). Program has approved/closed 16 projects for \$4.4M (~1k housing units) with additional \$1.4M worth of projects submitted.

## Staff proposes that:

1. Previously-approved \$1M for LIME capitalization be extended
2. The previously approved \$300K of loss reserves be extended, and an additional \$325K be added for a total of \$625K from ARRA-SEP funds
3. The program terms be updated to reflect market demand

Parameter	Original	Recommended
Maximum Loan Amount	\$750k	\$2M
Maximum Loan Term	12 years	20 years
Loan Fee	1.50%	2.00%
Energy Savings Coverage Ratio	>1.20x	>1.10 for solar-only projects; >1.30 for other projects
Interest Rate	Graduated	3.00%
LLR	\$300k	\$625k

## Rationale:

- C4C plans to draw the available \$1M upon program reauthorization to fund approved projects
- C4C expects to fund \$3-5M worth of new projects in FY17 -> expanded LLR capacity

# Resolution 7



**WHEREAS**, the Connecticut Green Bank (Green Bank) selected the Capital for Change (C4C) under Green Bank’s competitive solicitation process for the Clean Energy Financial Innovation Program and subsequently entered into negotiations with Green Bank that led to the development of the C4C Low Income Multifamily Energy (LIME) Loan Program (“the Program”);

**WHEREAS**, on March 7th, 2014, Green Bank’s Deployment Committee approved funding for the LIME Loan program in an amount of not-to-exceed \$1,000,000 in capital financing, and \$300,000 for a Loan Loss Reserve (Credit Enhancements) through the use of repurposed ARRA-SEP program funds, or ratepayer funds, if necessary; and

**WHEREAS**, at a regular meeting of the Board of Directors (“Board”) held on April 25<sup>th</sup>, 2014, the Board approved the Program;

**WHEREAS**, C4C has developed a pipeline of potential projects for financing under the Program;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the extension of the not-to-exceed \$1,000,000 funding to capitalize and support the Program;

**RESOLVED**, that the \$1,000,000 in funds advanced under the Program shall be supported by the previously approved \$300,000 worth of Credit Enhancements, plus an additional \$325,000 of Credit Enhancements from unused CT Solar Lease II ARRA- SEP funds for a total of \$625,000 of Credit Enhancements;

**RESOLVED**, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the Program on such terms and conditions as are materially consistent with the memorandum submitted to the Green Bank Board on February 28<sup>th</sup>, 2014 and as modified by the June 10, 2016 memorandum to align the loan terms with market project demand for financing; 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 the above-mentioned legal instrument.

Board of Directors  
Agenda Item #7bi  
Commercial and Industrial Sector  
Clean Energy Business Solutions - Conair

# Clean Energy Business Solutions

## Conair



- Founded in 1959 and located in Stamford, Conair is a US-based multinational corporation that sells small appliances as well as personal and health and beauty care products.
- Conair purchased an additional building at 23 Barry Place in Stamford and substantially renovated and retrofitted the facility with assistance of state incentives. Total project cost is \$30M and Conair committed to making the building energy efficient.
- DECD requests **\$1M of CEBS funding** as part of a package that will retain **446 jobs** in CT and create an additional **200 jobs** over five years.
- CEBS grant funding is to be used for **1 new chiller** and **3 new boilers** at its 23 Barry Place facility.

# Resolution 8



**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver a Clean Energy Business Solutions financial assistance award of \$1,000,000, to Conair Corporation; 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 instrument not later than three months from the date of this resolution.

Board of Directors  
Agenda Item #7bii  
Commercial and Industrial Sector  
C-PACE – Canaan

# 136 Sand Road, Canaan Ratepayer Payback



- **\$425,527** to install 86kW solar PV system and roof replacement, HVAC & refrigeration upgrade, and LED retrofit
- Projected savings are **8,423 MMBtu** versus **\$425,527** 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 Canaan as it collects the C-PACE benefit assessment from the property owner.





# 136 Sand Road, Canaan

## Terms and Conditions



- **\$425,527** construction loan at 5% and term loan set at a fixed 5.50% over the 15-year term
- **\$425,527** loan against the property
  - Property valued at [REDACTED]
  - Loan-to-value ratio equals [REDACTED] Lien-to-value ratio equals [REDACTED]
- DSCR > [REDACTED]

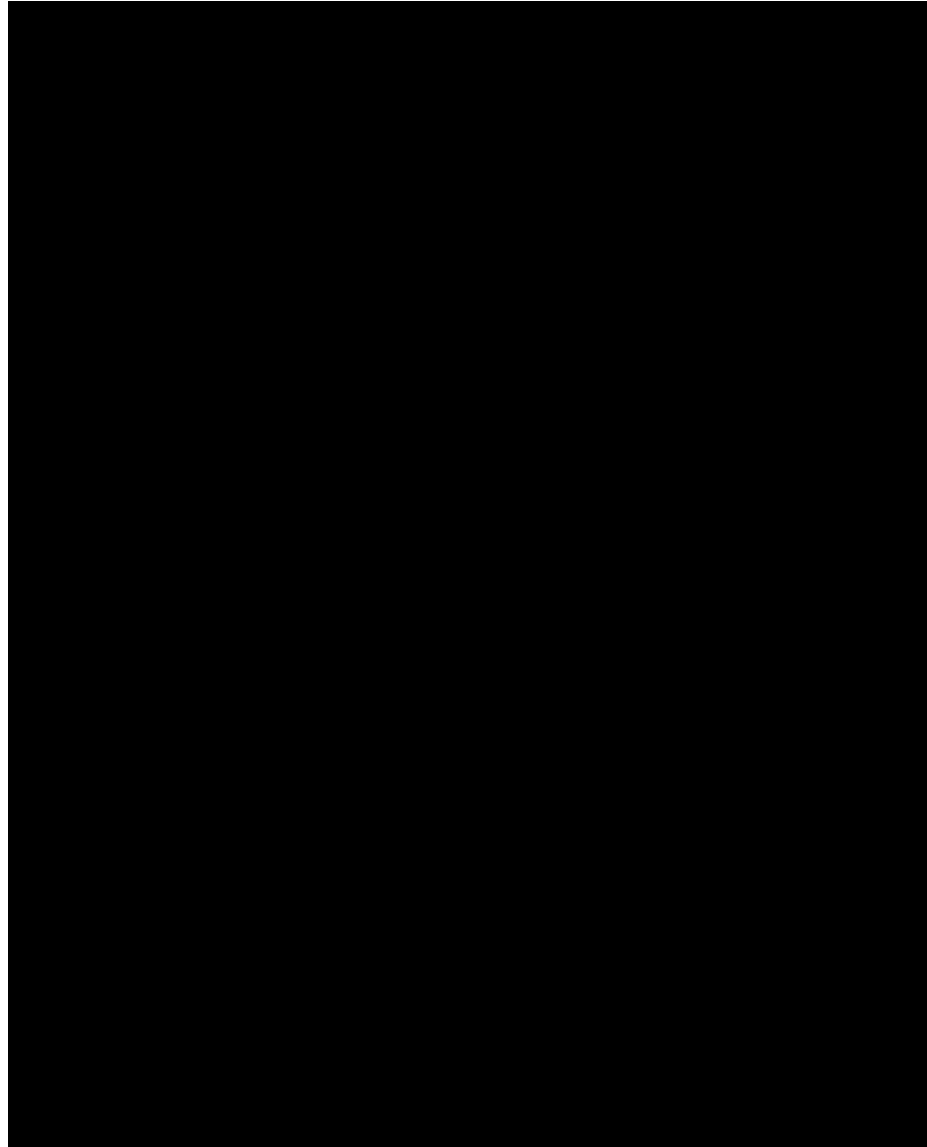
# 136 Sand Road, Canaan

## The Five W's



- **What?** Receive approval for a \$425,527 construction and (potentially) term loan under the C-PACE program to CURE Innovations, LLC. to finance the construction of specified energy upgrade
- **When?** Project to commence 2016
- **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?** David G. Sandefer & Cynthia L. Sandefer, the property owner of 136 Sand Road, Canaan CT
- **Where?** 136 Sand Road, Canaan CT

# 136 Sand Road, Canaan Project Tear Sheet



# 136 Sand Road, Canaan

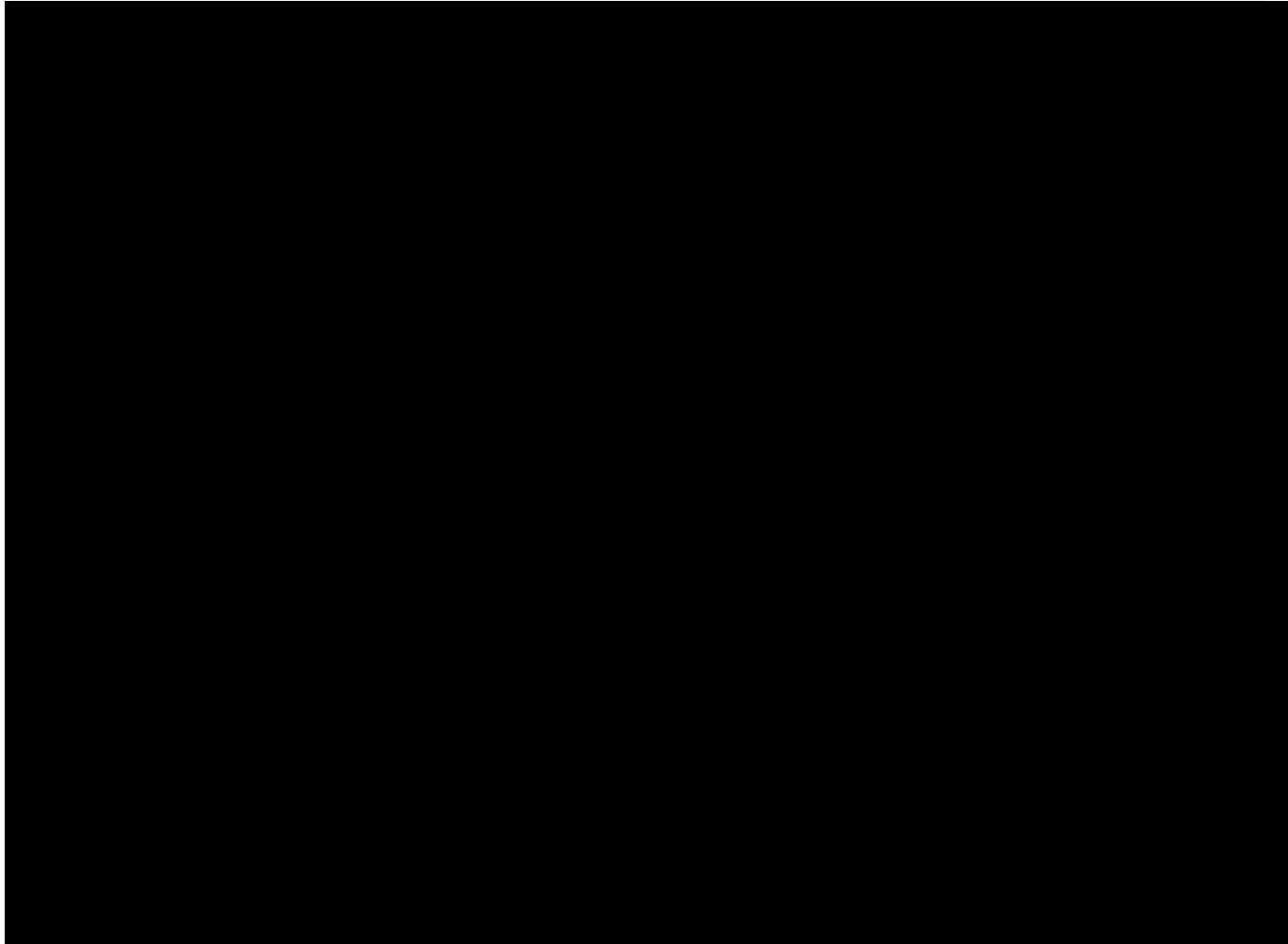
## Anticipated Cash Flow



<b>CGB Pro Forma</b>				
<i>Project Basics</i>		<i>Cash Flows</i>		
		Year	Date	CEFIA \$
Amount Financed	\$425,527		Apr 2016	\$425,527
Construction Period (years)	0.25		Jul 2016	\$5,319
Term (years)	15		1 Jan 2017	\$42,029
Construction Financing Rate	5.00%	2	Jan 2018	\$42,029
Term Financing Rate	5.50%	3	Jan 2019	\$42,029
		4	Jan 2020	\$42,029
Construction Interest Payment (bullet)	\$5,319	5	Jan 2021	\$42,029
Yearly Debt Service Payments (made semi-annually)	\$42,029	6	Jan 2022	\$42,029
		7	Jan 2023	\$42,029
		8	Jan 2024	\$42,029
		9	Jan 2025	\$42,029
		10	Jan 2026	\$42,029
		11	Jan 2016	\$42,029
		12	Jan 2016	\$42,029
		13	Jan 2016	\$42,029
		14	Jan 2016	\$42,029
		15	Jan 2016	\$42,029

# 136 Sand Road, Canaan

## Key Financial Metrics



# Resolution 9



**WHEREAS**, pursuant to Section 16a-40g of the Connecticut General Statutes, as amended, (the “Act”), the Connecticut Green Bank (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 (the “Board”) has approved a \$40,000,000 C-PACE construction and term loan program;

**WHEREAS**, the Green Bank seeks to provide a **\$425,527** construction and (potentially) term loan under the C-PACE program to David G. Sandefer & Cynthia L. Sandefer, the building owners of 136 Sand Rd., Canaan, 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 Act, 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 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 dated June 15, 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 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.

Board of Directors  
Agenda Item #7ci  
Statutory and Infrastructure Sector  
District Heating Project – Bridgeport

# District Heating Project – Bridgeport (Background)



- Project started late 2012 (Green Bank’s Site-Specific Feasibility Study program) for the purpose of a feasibility study regarding the sizing, needs, sources, and basic design of a District Energy system for buildings in downtown Bridgeport → \$89,000 Loan
- Board approved a strategic development loan to NuPower Thermal, LLC in addition to the previously approved feasibility loans in an amount not to exceed \$338,000 (July 2014 – strategic selection)
  - special capabilities of developer (NuPower, LLC) in developing large scale infrastructure projects in Connecticut
  - uniqueness of the project and its potential to achieve significant private and public leverage
  - the strategic importance of reducing heating costs and enhancing the operational costs at a large scale in a distressed municipality, and
  - the multi-phase characteristics of the District Energy project.



# District Heating Project – Bridgeport (Developments)



- CT Legislature awards NuPower Thermal, LLC unregulated utility status as a licensed thermal energy carrier with exclusive license for the City of Bridgeport with access to public rights-of-way (PA 14-94)
- 1<sup>st</sup> phase will include trenching, piping and installation of related thermal interconnection and thermal exchange equipment to furnish thermal energy from waste heat from the UI 2.8 MW gas-fired Fuel Cell (Seaside Park) to University of Bridgeport (“UB”)
- Additional phases will expand network to over forty buildings and facilities (expectation that such partners will include the City of Bridgeport, UB (per above), Webster Bank Arena, People’s United Bank, Housatonic Community College, and CT Judicial Branch)
- Denmark-sourced materials (technology well-established) enabling Project to benefit from support of various Danish partners
  - Consortium of EPC contractors (the “Consortium”) including ABB and Logstor
  - Danish Export Credit Agency (“EKF”).

# District Heating Project – Bridgeport (Benefits/Scope)



## Benefits

- Targeted users typically using oil or gas for heating → reusing heat from UI Fuel Cell, the Thermal Loop would reduce CO2 emissions by 71% (reduction in annual CO2 emissions projected at 9,520 tons in 1<sup>st</sup> phase)
- Such carbon reduction should enable a “Green Bonds” designation when the bonds are being marketed.
- Project will lead to 20+ direct jobs and \$50 MM in economic development.

## Scope

- 1<sup>st</sup> phase capital costs expected to be ~\$12.25 million
- Partial financing via an estimated \$3.85M C&LM Plan Grant (PA 15-5)
- Remaining costs to be financed through the Green Bank’s issuance of tax-exempt private activity bonds, where the Green Bank will act as conduit issuer on behalf of NuPower (project LLC).
- If all phases are developed, net costs estimated at ~\$40,000,000

# District Heating Project – Bridgeport (Private Activity Bonds 1)



- Pursuant to Title 16 of the CGS, Green Bank is authorized to:
  - support financing or other expenditures that promote investment in clean energy sources
  - enter into contracts with private sources to raise capital for such purposes
  - issue negotiable bonds for any corporate purpose
  - pledge all or any part of the revenues from a project or any revenue-producing contract or contracts to secure the payment of the bond
  - secure the bonds by a trust agreement with a corporate trustee; and
  - pledge or assignment of any revenues to be received, any contract or proceeds of any contract, or any other property, revenues, moneys or funds available to the Green Bank

# District Heating Project – Bridgeport (Private Activity Bonds 2)



- Pursuant to Sec 32-141 of the CGS, certain quasis, including Green Bank, CI, CHFA & CHESLA are allocated a portion of CT’s “Private Activity Bond Volume Cap”
- CT Private Activity Bond Volume Cap allocation for 2016:
  - CGB , CHESLA, Municipal, Contingency: \$ 98,749,365
  - Connecticut Innovations: \$ 44,886,075
  - CHFA \$215,453,160
- Local district heating and cooling facilities are a type of exempt facility bond that qualify for tax-exempt private activity bonds under Section 142 of the Internal Revenue Code.
- 70% of the gross capital expenditure for 1<sup>st</sup> phase is expected to qualify as this type of facility.

# District Heating Project – Bridgeport (Private Activity Bonds 3)



## Reason for Reimbursement Resolution

- Under federal tax law, in order to allow the Green Bank to reimburse developer (NuPower) for certain costs NuPower has incurred and will continue to incur on the Project with the proceeds from Green Bank tax-exempt bonds to be issued by the Green Bank in the future, Green Bank Board will need to pass a “reimbursement resolution” in connection with the bonds.
- The bonds that would be issued would be **strictly revenue bonds** with **limited recourse** to the Green Bank for **proceeds actually received** through the various energy sales agreements and other revenues of the Project.

# District Heating Project – Bridgeport (Ranelli Questions - 1)



- Who are partners? How well capitalized? Parent guarantees? Keepwell letters?
- For limited recourse – can we get a very specific language in bond - essentially a prospective release?
- What if UB goes out of business/ bankrupt or is sold and stops payment. How would defaulted bonds effect our rating?
- Has anyone reviewed recent developments in Hartford's steam loop? Adding or losing customers? Effect of DG on loops serving private not affiliated buildings in general?.

# District Heating Project – Bridgeport (Ranelli Questions - 2)



- Would pipes near UB and Wheelabrator need to be tight-fit for sea-level incursion?
- Is developer's LLC exempt from hazardous waste laws when installing pipe (similar to water company protection) because some of those area may contain historic widespread fill with potential for lead, arsenic, metals etc.
- GB needs to make sure that it is protected against any operator/owner liability.
- Why does Green Bank enter into a loan agreement with the LLC/developer/owner of the District Energy assets
- Will GB have rights to surety bond?
- In issuing revenue bonds for projects, have we evaluated the availability of buying or requiring performance insurance?

# Resolution 10



**WHEREAS**, NuPower Thermal Bridgeport LLC, a Connecticut limited liability company (the “Company”), has requested that the Connecticut Green Bank (the “Issuer”), provide assistance in funding the costs of installing and constructing a district thermal loop in downtown Bridgeport, Connecticut, including all piping and other needed equipment, that will serve academic, municipal and commercial buildings through the delivery of hot and chilled water to these buildings (the “Project”) through the issuance of tax-exempt debt in an amount up to \$40,000,000 (the “Bonds”); and

**WHEREAS**, the Internal Revenue Service has promulgated regulations (the “Regulations”) under the Internal Revenue Code of 1986, as amended (the “Code”) that govern the allocation of the proceeds of tax-exempt debt issued to reimburse expenditures made for governmental purposes paid by a borrower of tax-exempt debt, prior to the issuance of such debt; and

**WHEREAS**, such Regulations set forth the circumstances under which allocations of proceeds to reimburse such expenditures shall be treated as an expenditure of proceeds of the Bonds on the date of such allocations; and

**WHEREAS**, generally, in order to satisfy the Regulations and be able to reimburse expenditures (except for certain de minimis expenditures and preliminary costs as defined in the Regulations) with the proceeds of tax-exempt debt, the Company and the Issuer must, among other things, declare not later than sixty (60) days after the date of any such expenditure, a reasonable official intent to so reimburse such expenditures with the proceeds of tax-exempt debt; and

**WHEREAS**, the Company has approved a resolution declaring its official intent to reimburse such expenditures with the proceeds of tax-exempt debt; and

**WHEREAS**, the purpose of this official intent resolution is to provide objective evidence that on the date of this declaration, the Issuer intends to reimburse prior expenditures paid by the Company for the Project, solely from the proceeds of such tax-exempt debt and otherwise without recourse to the Issuer.

**NOW THEREFORE**, be it resolved that:

1. The Issuer reasonably expects to reimburse expenditures made for governmental purposes in connection with the Project and paid by the Company (the “Expenditures”).
2. The Issuer reasonably expects to make such reimbursements of Expenditures, solely from the proceeds of the Bonds and otherwise without recourse to the Issuer, within eighteen (18) months after the date of any such Expenditures or the date the Project is placed in service or abandoned, whichever is later, but in no event more than three (3) years after the Expenditures are paid. The maximum principal amount of the Bonds is not expected to exceed \$40,000,000.
3. This resolution is the Issuer’s declaration of official intent made pursuant to Section 1.150-2 of the Regulations.



Board of Directors  
Agenda Item #7cii  
Statutory and Infrastructure Sector  
Microgrid Project – Bridgeport

# Bridgeport Microgrid Project Overview



- Install (3) 265kW natural gas-fired CHP units to support a microgrid installation for the City of Bridgeport:
  - Bridgeport Town Hall
  - Police Station
  - Senior/Community Center  
(300 Congress Street and 263 Golden Hill Street)
- Selected by Green Bank staff pursuant to RFP under the CHP Pilot Program (Public Act 11-80, Section 103)
- Deployment Committee approved a \$502,860 subordinate loan at 2% interest rate for 20-years (March 3, 2015)
- First Niagara Bank Senior Loan: \$3,800,000
- DEEP awarded a microgrid grant of \$2,975,000 to the City of Bridgeport and the developers (Bridgeport Microgrid LLC)
- Approved by UI for Virtual Net Metering so additional municipal facilities can use the excess generation (cap of \$379,680)

# Modification of CGB Loan Approval



- Original Approval – Green Bank was to make a single advance to Bridgeport MicroGrid, LLC at COD and no earlier than senior debt advances.
- Loan agreement modification – allows Green Bank to make multiple advances during the construction period, prior to COD, provided that

$$\frac{\text{Aggregate CGB Advances}}{\text{Total CGB Loan Facility}} \leq \frac{\text{Aggregate Sr Advances}}{\text{Total Sr Loan Facility}}$$

- Maturity: 20 years from FINAL advance (must not be later than 6/30/17)  
(still monthly amortization on a “mortgage style” basis)
- Modification was necessary to encourage senior lender to advance funds during construction.
- Staff anticipates that the Green Bank subordinated loan would be used for:
  - paying off the last construction payables
  - paying down a portion of First Niagara Bank construction debt
  - funding a \$300,000 escrow account to be used as additional collateral to secure both the senior and CGB loans.
- The pay down of the construction debt by the DEEP grant (\$2,975,000) and the Green Bank funds, will result in the senior loan from First Niagara Bank of \$3,800,000.

# Resolution 11



**WHEREAS**, this proposed microgrid power generation system project (Project) meets the requirements of the statutorily mandated Combined Heat and Power (CHP) Pilot program set forth under Public Act 11-80, Section 103, which is administered by the Connecticut Green Bank (Green Bank);

**WHEREAS**, the Project was selected by Green Bank staff pursuant to a request for proposals under the statutorily mandated CHP Pilot program and approved by the Deployment Committee on March 3, 2016 (the “Original Approval”); and

**WHEREAS**, subsequent to the Original Approval, certain material changes were negotiated between the Project, the senior lender providing additional capital to the Project and Green Bank, namely:

Green Bank is able to make multiple advances during the construction period, i.e., prior to Commercial Operation Date, provided that the Project shall have received advances from the senior lender such that the ratio of the aggregate amount of such senior loan advances to the maximum principal amount permitted to be drawn from the senior lender equals or exceeds the ratio of the aggregate amount of Green Bank advances (including any advance then being requested) to the maximum principal amount of the Green Bank loan and provided further that no advance shall be made later than July 1, 2017.

The maturity date of the Green Bank loan will be 20 years from the earlier of: (a) the date that is twenty (20) years from the date on which the final advance of the Green Bank loan is made; (b) acceleration of maturity upon an event of default or other mandatory prepayments as set forth in the Subordinated Loan agreement; or (c) the date of the consummation and closing of any sale of the Project to a non-affiliated third party. Repayment commences the first month following the final advance with each of the 240 monthly payments being in the form of fully amortizing level payments of principal and interest (mortgage-style basis).

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank to execute and deliver a sub-debt loan in the amount of \$502,860, to be funded from the CHP Pilot program budget, and with terms and conditions consistent with the memorandum and term sheet submitted to the Deployment Committee dated February 23, 2015 and as revised by the memorandum to the Board of Directors dated June 17, 2016; 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.

# Board of Directors

## Agenda Item #7ciii

### Statutory and Infrastructure Sector

### NEHC Hydro Facility - Meriden

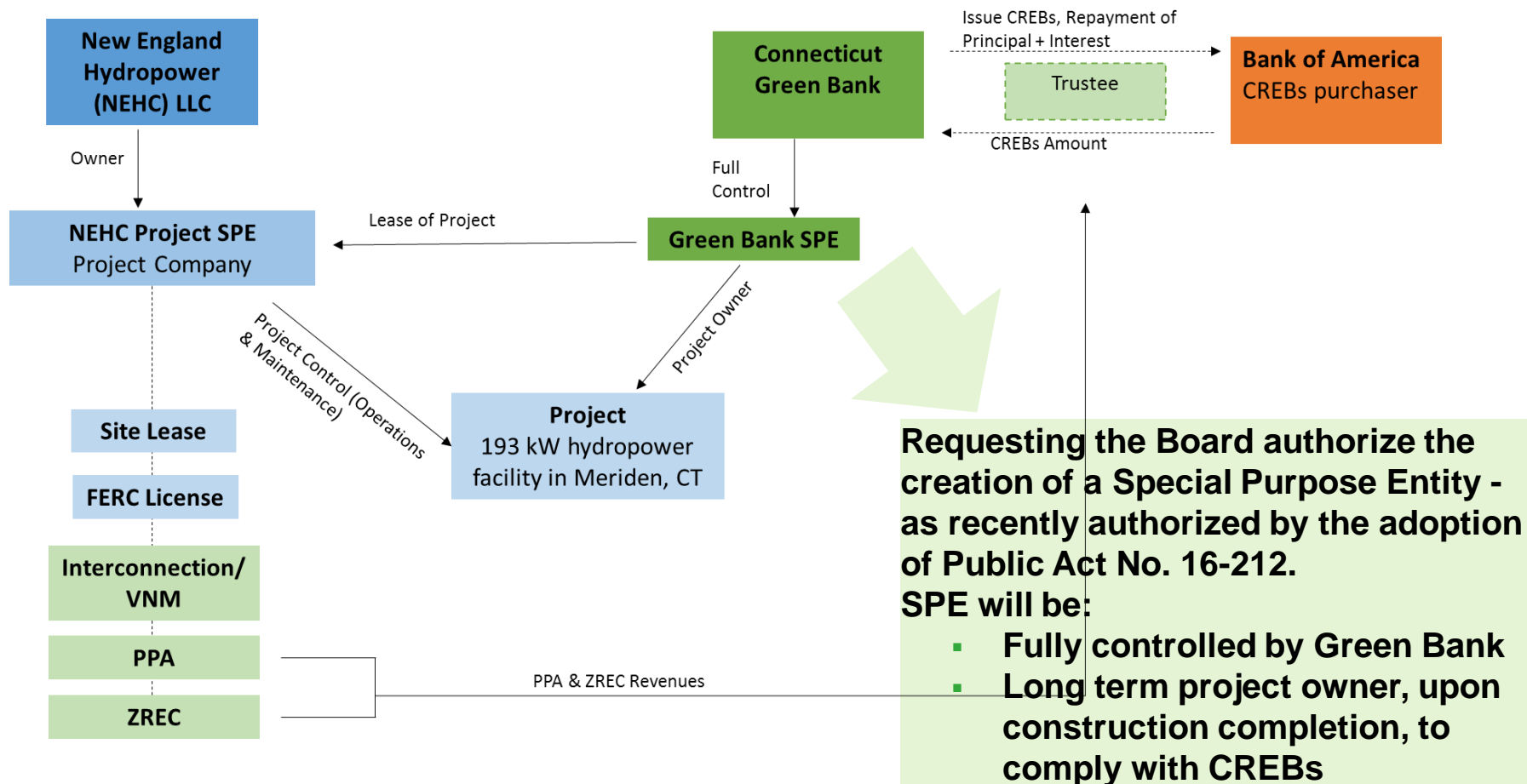
# New England Hydropower: Project Recap



- ▶ Project: 193kW hydroelectric facility in Meriden, CT
- ▶ On February 26, 2016 and April 22, 2016 Board Approved:
  - ▶ Construction finance (NTE \$3.1 Mil) from local bank with Green Bank guaranty.
  - ▶ Increase in working capital guaranty in an amount NTE \$600,000 to New England Hydropower Company (NEHC), under the existing working capital facility partnership with Webster Bank
  - ▶ Term financing based on the following prerequisites requiring further board approval:
    - ▶ Issuance of New Renewable Energy Bonds (CREBs) in an amount NTE \$3.1 million
    - ▶ Securing the issuance utilizing the Special Capital Reserve Fund

# Ownership Structure

## Presented on April 22, 2016



Structure meets CREBs and Federal Energy Regulatory Commission ("FERC") license requirements while limiting Green Bank's risk and liability.

# NEHC Updates

## Proposed Resolutions



- ▶ Authorize Green Bank to establish a wholly owned Special Purpose Entity to own, operate and manage the Project, as required by CREBs



# Resolution 12



**WHEREAS**, in accordance with (1) the statutory mandate of the Connecticut Green Bank (“Green Bank”) to foster the growth, development, and deployment of clean energy sources that serve end-use customers in the State of Connecticut, (2) the State’s Comprehensive Energy Strategy and (3) Green Bank’s Comprehensive Plan for Fiscal Years 2015 and 2016 (the “Comprehensive Plan”), Green Bank continuously aims to drive private capital investment into clean energy projects;

**WHEREAS**, pursuant to the development of a small hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in Meriden (“Project”), on February 26, 2016 the Green Bank Board of Directors (the “Board”) authorized:

construction financing in an amount not to exceed \$3.1 million,

a working capital guaranty in an amount not to exceed \$300,000 to New England Hydropower Company (“NEHC”), the project developer, under the Green Bank’s existing working capital facility partnership with Webster Bank; and,

term financing based on the following

- the issuance of New Clean Renewable Energy Bonds (“CREBs”) in an amount not to exceed \$3,100,000, and
- securing the issuance of CREBs utilizing the Special Capital Reserve Fund (“SCRF”) subject to further Board approval; and

**WHEREAS, Green Bank staff recommends that the Board authorize the creation of a Special Purpose Entity that will be wholly owned by the Green Bank;**

**WHEREAS**, Green Bank staff now recommends that the Board authorize an increase in the working capital guaranty afforded to NEHC in connection to the Project under the Green Bank’s existing working capital facility partnership with Webster Bank; and

**WHEREAS**, Green Bank staff now recommends the Green Bank to issue a guaranty to a third party lender for construction finance for the Project instead of a loan by the Green Bank as originally contemplated by staff and authorized by the Board on February 26, 2016.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank may increase the amount of its working capital guaranty under the Green Bank’s existing working capital facility partnership with Webster Bank, for draws made by NEHC solely in connection with this Project and in an amount not to exceed \$600,000 and may issue a guaranty to a third party lender for construction finance for the Project as more completely described in a memorandum to the Board of Directors dated April 15, 2016 and as revised on April 20, 2016;

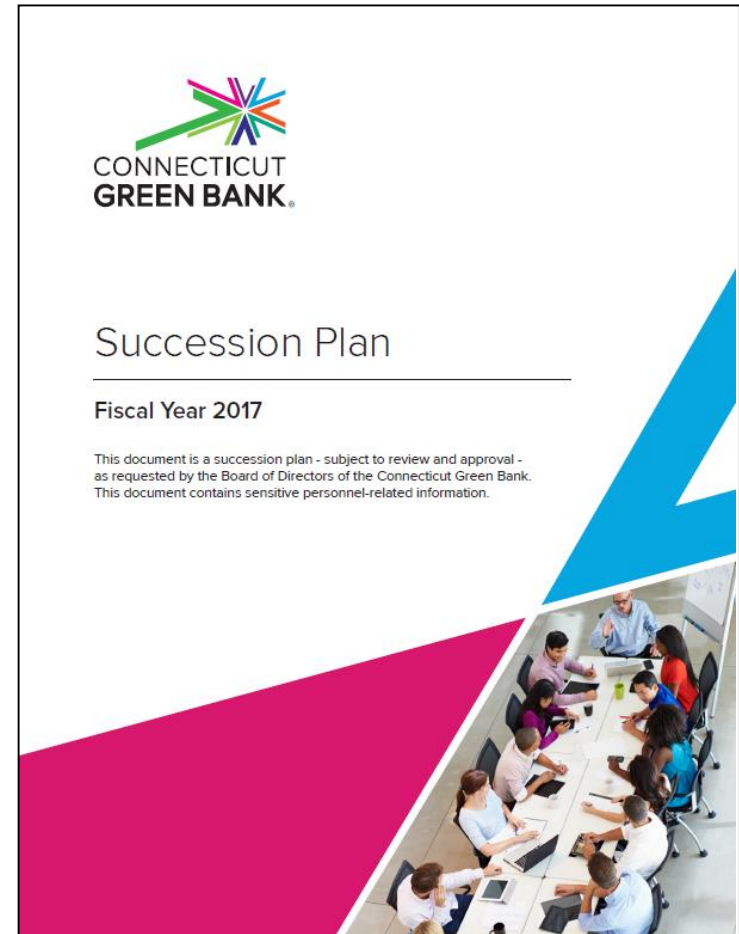
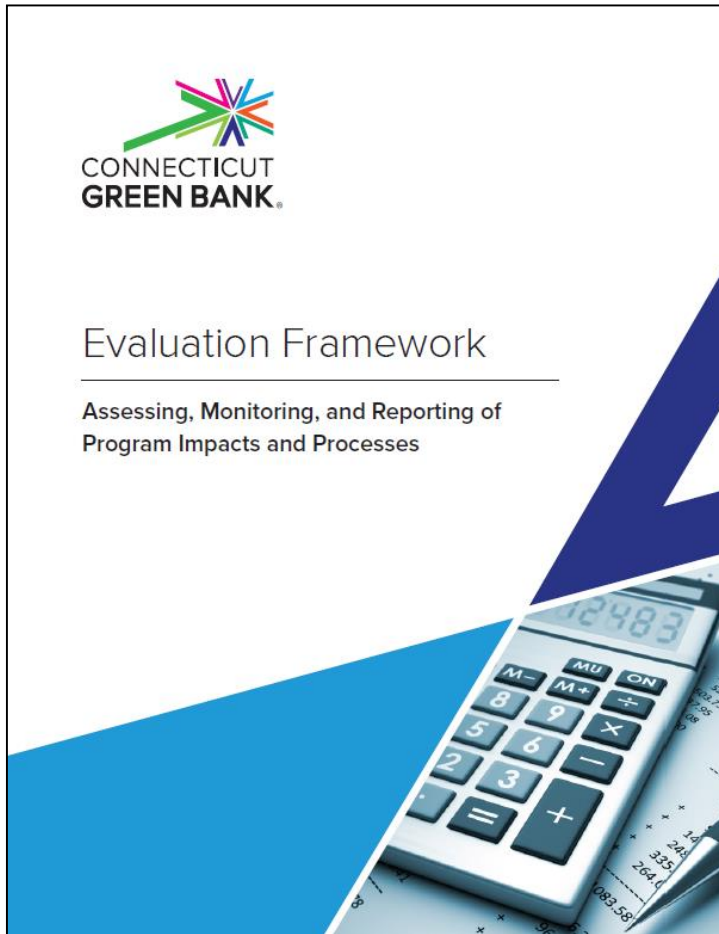
**RESOLVED, that the Green Bank may establish a wholly owned Special Purpose Entity with all the requisite powers to own, operate and manage the Project, as required by CREBs and as described in the memorandum to the Board of Directors dated April 15, 2016 and as revised on June 14, 2016; and**

**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.

# Board of Directors

Agenda Item #8  
Other Business

# Other Business



# Board of Directors

## Agenda Item #9

### Adjourn

Subject to changes and deletions

## **CONNECTICUT GREEN BANK**

### **Board of Directors**

Draft Minutes

Friday, April 22, 2016

A regular meeting of the Board of Directors of the **Connecticut Green Bank (the “Green Bank”)** was held on April 22, 2016 at the office of the Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT, in the Colonel Albert Pope board room.

1. **Call to Order**: Catherine Smith, Chairperson of the Connecticut Green Bank, called the meeting to order at 9:03 a.m. Board members participating: Bettina Bronisz, State Treasurer’s Office; Norma Glover; Patricia Wrice; John Harrity; Rob Klee, Vice Chairperson of the Green Bank and Commissioner of the Department of Energy and Environmental Protection (“DEEP”); Reed Hundt (by phone), Mun Choi (by phone); Tom Flynn (by phone); Catherine Smith, Chairperson of the Green Bank and Commissioner of the Department of Economic and Community Development (“DECD”).

Members absent: Matthew Ranelli and Kevin Walsh

Staff Attending: Bryan Garcia, Bert Hunter, Brian Farnen, George Bellas, Mackey Dykes, Kerry O’Neill (by phone), Craig Connolly, Suzanne Kaswan, John D’Agostino, Joe Buonannata, Jane Murphy, Andrea Janecko, Mariana Trief (by phone), Laura Fidao (by phone), Chris Magalhaes (by phone), Mike Yu (by phone) and Cheryl Samuels.

Others Attending: Jeff Schub, Coalition for Green Capital

2. **Public Comments**

There were no public comments.

3. **Consent Agenda – 5 minutes (Catherine Smith)**

a. **Approval of Meeting Minutes for January 15, 2016\***

**Resolution #1**

**Upon a motion requested by Commissioner Smith, so moved by Patricia Wrice and seconded by John Harrity the board unanimously approved the January 15, 2016 Board of Directors meeting minutes.**

**4. Update from the President – 5 minutes (Bryan Garcia)**

**Sector Progress**– In a memo sent to the board, Mr. Garcia expressed that sector progress was behind on its targets due to current market influences. Mr. Garcia reported that the Residential Solar Investment program has currently reached 50.5 MW of its 90 MW goal. When targets were set, there was an expectation that a solarize effect would occur following the end of the ITC federal tax credit; however due to the extension of the tax credit, there has not been an escalated increase in volume. In addition to the RSIP targets, Mr. Garcia informed the board that the statutory & infrastructure sector has approved several food waste to energy anaerobic digestion projects, however, they are experiencing delays with permitting approvals. Once food waste projects have been closed, the progress to target numbers are expected to increase.

Mr. Garcia remarked on the residential sector Smart-E Loan program, stating that the team currently has several targets across various channels that are experiencing market challenges (i.e., CHIF/HES) and partner competition (i.e., Heating Loan). As a result, Mr. Garcia expressed that he plans to work with Kerry O'Neill to continue refocusing the team's efforts on areas where the Green Bank can make the most impact such as health and safety issues and low income markets.

Commissioner Smith expressed that while aggressive goals are encouraged, the Green Bank should consider tempering targets for the upcoming fiscal year. Commissioner Smith included "targets were set much higher than last year. What you've done is so phenomenal but let's recognize the budget and create targets accordingly."

Mr. Harrity suggested that due to the current decline in energy costs, the Connecticut Green Bank should reemphasize the aspect of climate change. Mr. Hundt added that much is happening in addressing climate change on the international level.

**Budget** – Mr. Garcia provided the board with three months of financial statements. He noted that the CT Green Bank has switched to a cloud-based accounting system called Intacct and can now see a real-time reflection of the budget anytime and anywhere. Mr. Garcia highlighted improvements made to the balance sheet stating that cash is down to 10.5 million "a much different picture than what we were seeing five years ago." Mr. Garcia conveyed that the CT Green Bank will soon be transitioning its board materials to an online platform through Board Effect. Cheryl Samuels is piloting the platform with the B&O Committee and it is expected that other committees and the board will adopt over time.

**5. Board of Directors Strategic Discussions – 30 minutes (Reed Hundt and Jeff Schub – Coalition for Green Capital)**

Mr. Hundt informed the board that the CT Green Bank is a member of the Global Green Bank Network, funded by a charitable foundation for which there will be a global gathering in Tokyo Japan on October 13-14 of this year. This gathering is part of a continued effort to make the Paris promises real. Mr. Hundt stated “we’ve reached the most important multilateral agreement that the world has seen since the late 1940’s. It’s widely understood that finance is critical to achieving these commitments”.

Mr. Hundt informed the board that the rate of investment in Connecticut is around 15% of what actually is necessary to save the world from climate change and replace the carbon platform with a clean platform. “To address climate change, the growth rate has to continue, we need to see better technological solutions and more financing. If clean energy is going to be the way forward than prices will need to drop” added Mr. Hundt.

Mr. Hundt introduced his colleague Jeffrey Schub to speak to the green bank activity across the United States. Mr. Schub thanked Mr. Hundt for the introduction and the Green Bank for the speaking opportunity. Mr. Schub explained that Coalition for Green Capital is working to create green banks around the country – “we are working with 15 states that are developing or have expressed interest in creating a green bank. It’s interesting to see the wide variability within the governments exploring green banks. Maryland passed legislation to create Montgomery Green Bank, created as a non-profit. We are receiving calls every day asking the same question, how did the Connecticut Green Bank do this?”

Mr. Schub added that while motivation for creating a green bank varies across states “we need to work hand-in-hand with Connecticut to capture information which is why we starting working with Bryan and team to create a Green Bank Playbook. Commissioner Smith thanked Mr. Schub for his remarks and asked whether he felt the growth of green banks is increasing at a measureable scale. Mr. Schub explained that the majority of calls were once outgoing and are now all incoming. Ms. Smith commented on the opportunity to adopt new expertise from other states and apply it globally. Conversation ensued regarding new technologies and market opportunity. Ms. Smith thanked Mr. Schub for his presentation and efforts in promoting green banks nationally.

## **6. Connecticut Green Bank Bond Indenture – 15 minutes (Bert Hunter and Bettina Bronisz)**

Mr. Hunter explained that when looking at the draft master indenture, the Green Bank concluded it would be best to move forward with a single project-by-project individual indenture approach rather than a master trust indenture approach. Mr. Hunter added that this process would be more efficient and easier for buyers of the bonds given the dissimilarity of the underlying projects, risks and revenue streams. CT Green Bank had a meeting with the Office of the Treasurer to discuss the draft indenture. Mr. Hunter noted several comments were made but all felt the proposal was too ambitious to bring to the board at this time. The plan is to present at the upcoming June meeting.

**7. Staff Transition Recommendations\* - 45 Minutes**

- a. Residential Sector Programs Transaction Recommendations – 5 minutes (Bert Hunter)
  - i. **CT Solar Loan Sell Down\* - 5 minutes (Bert Hunter)**

Mr. Hunter requested a reauthorization to finance (sell) a portion of the Green Bank's portfolio of residential solar loans. Mr. Hunter explained that the board previously authorized this action but that authorization has since expired and the Green Bank is now looking to close on a transaction with the Reinvestment Fund.

**Upon a requested by Commissioner Smith, so moved by Robert Klee and seconded by John Harrity the board unanimously approved the reauthorization of the CT Solar Loan sell down.**

**Resolution #2**

**WHEREAS**, the Board of Directors ("Board") of the Connecticut Green Bank ("Green Bank") previously authorized the proper Green Bank officers to execute and deliver any contract or other legal instrument necessary to effect the acquisition of a portion of the CT Solar Loan program loan portfolio by one or more senior investors no later than twelve (12) months from August 19, 2014;

**WHEREAS**, a suitable senior investor was not identified within this twelve (12) month period; and

**WHEREAS**, a suitable investor has now been identified and is prepared to finance the remaining portfolio of loans.

**Now**, therefore be it:

**RESOLVED**, that the Board of Directors reauthorizes the proper Green Bank officers to execute and deliver any contract or legal instrument necessary to effect the acquisition or financing of a portion of the CT Solar Loan program loan portfolio substantially in accordance with the terms set forth in the memorandum submitted to the Board on April 15, 2016; 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 the above-mentioned transaction.

- ii. **Solarize SSHP with CHFA\* - 5 minutes (Bert Hunter)**



Mr. Hunter expressed that over the past year Green Bank staff has worked with the Connecticut Housing Finance Authority (CHFA) to help affordable multi-family properties in the state go solar. The board previously approved a program financing solution in October; however, the Green Bank has since engaged in final negotiations with CHFA. The original board authorization was open to interpretation with respect to permitted credit support by Green Bank and its subsidiaries. Mr. Hunter remarked that the Green Bank seeks to clarify the original board authorization to enable CEFIA Solar Services Inc., CEFIA Holdings LLC, and Green Bank to provide credit support to the transaction to enable successful execution of the program in partnership with CHFA.

Mr. Klee asked Mr. Hunter for the total amount of Qualified Energy Conservation Bonds (QECB's) for which Mr. Hunter replied a total of \$3 million (of which this initial transaction will amount to \$1.7 million).

**Upon a motion requested by Commissioner Smith so moved by Ms. Bronisz and seconded by Mr. Klee the board voted unanimously in favor of the proposed authorization.**

### **Resolution #3**

**WHEREAS**, the Board of Directors (the "Board") of the Connecticut Green Bank ("Green Bank") previously authorized a partnership with the Connecticut Housing Finance Authority ("CHFA") to support properties in the State Sponsored Housing Portfolio ("SSHP"), and other properties of similar use and purpose, in going solar; and

**WHEREAS**, Green Bank staff is now requesting clarification with respect to the support that various Green Bank subsidiaries and affiliates can offer to ensure the success of that partnership;

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized, on behalf of the Green Bank and all relevant subsidiaries and affiliates, to execute a loan agreement and ancillary documentation with CHFA with terms and conditions materially consistent with those presented in the memorandum to the Board dated April 15, 2016 and revised April 20, 2016.

**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 Sector Program Transaction Recommendations – 25 minutes (Mackey Dykes and Bert Hunter)**

##### **i. C-PACE Transaction – Groton\* - 15 Minutes (Mackey Dykes)**

Mackey Dykes, Director of Commercial & Industrial Programs informed the board that through C-PACE, the Green Bank seeks to support CURE with financing clean energy improvements that will lower their energy costs. CURE was provided a grant through DECD to fund the building repositioning; however, because the grant is secured with a non-payment mortgage, the loan-to-value amount is outside the usual C-PACE underwriting criteria. Given the magnitude of the investment in the building and the non-payment nature of the DECD mortgage, the finance team feels a loan to cost metric is more appropriate for valuation. With a loan to cost at 72%, the staff feels secure in recommending approval of the loan.

Commissioner Smith questioned whether the loan to value reflects the C-PACE loan as well as the value of the work done to the building. Mr. Dykes replied yes, both are reflected.

Ms. Smith congratulated Mr. Dykes on his first approved C-PACE transaction since transitioning to his new role as Director of Commercial & Industrial Programs.

**Upon a motion made by Ms. Wrice and seconded by Mr. Harrity. The board voted unanimously in favor of supporting the Groton C-PACE project.**

**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 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 **\$741,702** construction and (potentially) term loan under the C-PACE program to CURE Innovations, LLC, the building owner of 93 Shennecossett Road, Groton, 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 April 15, 2016, 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.

**ii) CT Solar Lease II – Expansion of Commercial Facility\* – 10  
Minutes (Bert Hunter)**

Mr. Hunter informed the board that the CT Solar Lease 2 program has exceeded expectations, and staff is now looking to expand the facility in order to finance more commercial scale solar projects for municipalities, nonprofits, and C&I customers around the state. This is a small expansion that will continue to leverage US Bank tax equity and debt provided by First Niagara, with the goal of bridging the gap until a new fund is initiated later this summer. Mr. Hunter requested to extend the facilities with US Bank to the end of the first quarter of 2017 to allow for the deployment of expanded tax equity and debt commitments and also to increase the Green Bank's current sponsor commitment by \$1.2 million.

Mr. Hunter added that there will be a slight edit "as revised by memorandum circulated on April 26".

**Upon a motion made by Ms. Wrice and seconded by Mr. Klee, the board voted unanimously in favor of extending the US Bank tax equity and First Niagara debt facilities associated with SL2 to the end of Q1 2017 and increasing the Green Bank's net sponsor equity commitment by approximately \$1.3M.**

**Resolution #5**

**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 authorizing the creation of the CT Solar Lease 2 program ("Solar Lease 2");

**WHEREAS**, the Green Bank intends to extend the commitment size and duration of the tax equity, credit facilities, and Green Bank participation supporting Solar Lease 2 as set forth in the memorandum submitted to the Board dated April 15, 2016 and revised April 20, 2016;

**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 commitment size and duration of the tax equity, credit facilities, and Green Bank participation supporting Solar Lease 2 consistent with the memorandum submitted to the Board dated April 15, 2016 and revised April 20, 2016, 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 “sponsor equity commitment” for the CT Solar Lease 2 program for the purposes of Board authorization is defined as (a) capital contributions by CEFIA Solar Services Inc. to CT Solar Lease 2 LLC LESS (b) cumulative net income of CEFIA Holdings LLC derived from its role as “Developer” for the CT Solar Lease 2 program;

**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. Statutory & Infrastructure Transaction Recommendations – 10 minutes (Bert Hunter)**

**i. Hydro Project Update and Approval (Meriden)\***

Mr. Hunter updated the board on the 193 kW New England Hydropower project in Meriden. On February 26, 2016 the board approved a working capital guarantee of not-to-exceed \$300,000 under the existing working capital facility with Webster Bank. CREBs regulations limit the Green Bank’s role in construction finance prior to receiving a CREBs allocation. To avoid delays in advance of the closing of a construction financing line with First Niagara, the Green Bank is requesting to increase the working capital line to not-to-exceed \$600,000 through the current partnership with Webster Bank while also seeking authorization to issue a guaranty to a third party lender (i.e., First Niagara) for construction finance.

Ms. Glover asked Mr. Hunter to summarize the risks associated with this project to which Mr. Hunter replied that the revenues are tied to the PPA power output. So, if revenues are lower than projected, this will be covered by the Green Bank. Essentially, the Green Bank will make payments on the bonds regardless of the revenues received from the hydropower facility.

Ms. Bronisz asked Mr. Hunter whether the PPA was fixed or escalated. Mr. Hunter stated that the PPA agreement contains an escalator of 2% per year for 40 years; however, the Green Bank expects the first 20 years of production will pay off the bonds.

*Note: Commissioner Smith excused herself from the meeting and Mr. Klee resumed as Chairman.*

Mr. Klee and Ms. Bronisz stated for the record, that their vote is intended for financing approval only and does not reflect a regulatory endorsement (Mr. Klee) or an endorsement with respect to approval for Special Capital Reserve Fund matters (Ms. Bronisz).

**Upon a motion moved by Ms. Glover and seconded by Mr. Bronisz, the board voted unanimously in favor of increasing working capital to NTE \$600,000 and authorization to issue a third-party lender for construction finance.**

**Resolution #6**

**WHEREAS**, in accordance with (1) the statutory mandate of the Connecticut Green Bank (“Green Bank”) to foster the growth, development, and deployment of clean energy sources that serve end-use customers in the State of Connecticut, (2) the State’s Comprehensive Energy Strategy and (3) Green Bank’s Comprehensive Plan for Fiscal Years 2015 and 2016 (the “Comprehensive Plan”), Green Bank continuously aims to drive private capital investment into clean energy projects;

**WHEREAS**, pursuant to the development of a small hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in Meriden (“Project”), on February 26, 2016 the Green Bank Board of Directors (the “Board”) authorized:

- i) construction financing in an amount not to exceed \$3.1 million,
- ii) a working capital guaranty in an amount not to exceed \$300,000 to New England Hydropower Company (“NEHC”), the project developer, under the Green Bank’s existing working capital facility partnership with Webster Bank; and,
- iii) term financing based on the following
  - a. the issuance of New Clean Renewable Energy Bonds (“CREBs”) in an amount not to exceed \$3,100,000, and
  - b. securing the issuance of CREBs utilizing the Special Capital Reserve Fund (“SCRF”) subject to further Board approval; and

**WHEREAS**, Green Bank staff now recommends that the Board authorize an increase in the working capital guaranty afforded to NEHC in connection to the Project under the Green Bank’s existing working capital facility partnership with Webster Bank.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank may increase the amount of its working capital guaranty under the Green Bank’s existing working capital facility partnership with Webster Bank, for draws made by NEHC solely in connection with this Project and in an amount not to exceed \$600,000 and may issue a guaranty to a third party lender for construction finance for the Project as more completely described in a memorandum to the Board of Directors dated April 15, 2016 and as revised on April 20, 2016;

**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; Ben Healey and Mariana C. Trief, Clean Energy Finance.

**8. Other Business – 15 minutes (Bryan Garcia)**

Mr. Garcia presented an overview of the current budget and legislative activity. Mr. Garcia recognized and thanked Mr. Harrity for his support with community advocates and noted that the budget continues to be a weekly changing landscape. On the legislative side, the budget has been the Green Bank's top priority however the team has also been focused on R-PACE and a bill concerning a technical fix for C-PACE and SHREC administrative powers. Mr. Garcia expressed that the Green Bank has recently experienced some setbacks on R-PACE, but continues to work closely with the Governor's Office. Mr. Garcia thanked the Commissioner for his support and recognized the team for their hard work during this legislative session. Mr. Garcia also recognized the PURA Commissioners for their recent rulings in several documents on SHREC, VNM and others. He specifically acknowledged Commissioner Betkowski, Commissioner Caron, and Chairman House. He also acknowledged Elin Katz and Joe Rosenthal of the Office of Consumer Counsel for their support as well.

**9. Adjournment:** Upon a motion made by Ms. Glover, seconded by Mr. Harrity, the Board voted unanimously in favor of adjourning the April 22, 2016 meeting at 11:01 a.m.

Respectfully Submitted,

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Catherine Smith, Chairperson



# Memo

**To:** Board of Directors of the Connecticut Green Bank – Deployment Committee of the Connecticut Green Bank

**From:** Bryan Garcia (President and CEO)

**Date:** June 17, 2016

**Re:** Approval of Funding Requests below \$300,000 – Update

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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, 4 projects were evaluated and approved for funding in an aggregate amount of approximately \$115,108. If members of the board would be interested in the internal documentation of the review and approval process Green Bank staff and officers go through, then please request it.

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**Project Name:** St. John Episcopal Church

**Amount:** \$15,929,60 +10%

**Comprehensive Plan:** CPACE

**Description**

The property at 734 Fairfield Ave is a non-profit Episcopal Church located in Bridgeport, CT (the “Property”). The Property is owner-occupied by The Society of St. John’s Parish (“St. John’s Episcopal Church”) and was purchased by the current owner in 1872.

The proposed investment is a C-PACE transaction (“C-PACE Project”) under which the Connecticut Green Bank (“Green Bank”) would provide construction financing (at a per annum 5.0% interest rate) and a 15-year term loan commitment (at a per annum 5.5% interest rate), in the amount of **\$159,296** to support the following **energy efficiency measures** in the Property: **new boilers, insulation, LED lighting and distribution fans.**

The Property owner is also pursuing financing through a Power Purchase Agreement (“PPA”) from the **Green Bank’s Solar Lease 2 Fund (“SL2”)** for a **52.38 kW Rooftop Solar PV system** (“SL2 Project”). The PPA will be secured by a CPACE benefit assessment lien on the owner’s property.

The **SIR** for the proposed C-PACE Project over the useful lifetime of measures is **1.03** and the SIR for the SL2 Project is 1.67. The SIR of the combined measures (energy efficiency financed through C-PACE and Solar PV financed through SL2) is 1.27. The average **DSCR** of the C-PACE Project is 1.77 and the DSCR of the combined C-PACE Project and SL2 project is 1.54. With the C-PACE Project the **LiTV for the property** will be **3.3%**; and, as there is no existing mortgage, the **LTV is also 3.3%**; both are well below the underwriting ceilings of 90% LTV and 35% LiTV respectively.

Staff has examined the financials of St. John’s Episcopal Church and found the non-profit to be in good health with a positive EBITDA over the past two years of operations. Though positive, its EBITDA is modest, which is common for non-profit entities. St. John’s Episcopal Church also holds a significant \$1.3 million endowment. The savings generated from the energy efficiency measures and solar project are greater than the CPACE assessment and PPA payment thereby ensuring a DSCR greater than 1 throughout the term of the C-PACE Project and SL2 Project. From a financial perspective, given the DSCR greater than 1 over the financing term, long operating history of St. John’s Episcopal Church, substantial endowment and positive EBITDA, staff has confidence the property owner will have sufficient cash flow to service the C-PACE Benefit Assessment and SL2 PPA Benefit Assessment.

The contractor for the energy efficiency measures will be JK Energy Solutions (“JKS”) a leading provider based out of Watertown, CT that provides energy efficient facility upgrades. The contractor for the Solar PV will be Direct Energy Astrum Solar - a North American retailer founded in 1986 that provides energy and energy services.

**Taking all of these factors into account, staff recommends the C-PACE Project for approval, pursuant to the Project Approval Form for projects under \$300,000.**

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**Project Name:** Sand Road Animal Hospital

**Amount:** \$42,553 +10%

**Comprehensive Plan:** CPACE

**Description**

The property at 136 Sand Road consists of five buildings – an animal clinic, a feed store, a residence, barn, and kennel – across four acres of land in Canaan, CT (the “Property”). The buildings relevant to this C-PACE assessment are the Sand Road Animal Hospital LLC (the “Animal Hospital”) and the Falls Village Feed Store (the “Feed Store”), both of which are owned by Cynthia L. Sandefer (the “Borrower”) who purchased the Property in 1988.

The proposed investment is a C-PACE transaction under which the Connecticut Green Bank (“Green Bank”) would provide construction financing in the amount of **\$425,527**, at a per annum 5.0% interest rate, converting to a 15-year term loan post construction, at an interest rate of 5.5% per annum. The financing will support a **roofing upgrade**, an **86 kW solar**



**photovoltaic** system across the Animal Hospital and Feed Store, in addition to a ground-mounted system, and two carports, along with **energy efficiency measures** including an HVAC air conditioning upgrade, interior LEDs, and a refrigeration upgrade. Upon conversion to a term loan, Green Bank intends to sell down 90% of the loan to Hannon Armstrong and retain 10% of the remaining principal, amounting to \$42,553.

The project's **SIR** over the useful life of measures is **1.20** and is expected to generate total gross savings of \$612,094 over the financing term. The average DSCR is **11.48x**. With this C-PACE loan the **LiTV for the property will be 30.2%** falling below the maximum of 35% for a Full Underwrite; and as there is no existing mortgage, the LTV is 30.2% as well.

Staff has examined the financials of the Borrower and found them to be in good health with a strong positive net operating income over the past two years of operations.

The contractor for the project will be JK Energy Solutions based out of Thomaston, CT.

**Taking all of these factors into account, staff recommends the project for approval, pursuant to the Project Approval Form.**

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<b>Project Name:</b>	<b>Fonte Enterprise, 1431 Bank Street, Waterbury, CT</b>
<b>Amount:</b>	<b>\$50,030 +10%</b>
<b>Comprehensive Plan:</b>	<b>CPACE</b>

**Description**

The property at 1431 Bank Street is a 3,553 square foot mixed use building (the "Property") that was acquired by Fonte Enterprise, LLC ("Fonte" or the "Company") in March, 2015 for the purpose of leasing the existing space to new tenants. The building is 97.8% occupied with tenants as of May 2015.

The proposed investment is a C-PACE transaction under which the Connecticut Green Bank ("Green Bank") would provide construction financing (at a per annum 5.0% interest rate) and a 15-year term loan commitment (at an effective per annum 5.58% interest rate), in the amount of \$50,030 to support oil-to-gas boiler upgrades.

The contractor for the project will be M.J. Fahy & Sons, a leading plumbing and heating contractor in the state of Connecticut.

Given the size of the transaction, staff proposes an expedited underwriting review. With a total investment of \$50,030, the **LiTV for this property would be 34.8%**. In addition, although the property does have an outstanding mortgage, the **LTV is 76.4%**, below the Green Bank guidelines of 80%. **Finally, the AATV (annual assessment-to-value, is at 3.4%**.

Furthermore, from a financial perspective, staff has confidence that the property has sufficient cash flow to service the C-PACE Benefit Assessment. **Using the current rent roll provided by management and applying the conservative assumption of flat lease prices across the 15-year financing term, the average Debt Service Coverage Ratio**

(“DSCR”) for the mortgage and C-PACE Assessment is 3.93x against Net Operating Income (“NOI”) and Energy Savings.

Taking all of these factors into consideration, along with an SIR of 1.23x, staff recommends the project for approval, pursuant to the Project Approval Form for projects under \$300,000.

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**Project Name:** DFC-ERG CT, LLC  
**Amount:** \$10.00 (grant)  
**Comprehensive Plan:** S&I – Grid Tied Loan Program

**Description**

For a nominal \$10 grant, the project meets the statutory requirement under Project 150. Project 150 supports the states initiative to provide up to 150 MW of clean utility scale renewable energy. This project is a 3.4 MW system, a Fuel Cell Energy 2.8 MW Direct Fuel Cell coupled with a 600 kW energy recovery generator, located in Glastonbury at a UIL Holdings Co. natural gas gate station. A gate station takes high-pressure gas coming from the main gas line and reduces the pressure level so it can be distributed to local businesses and consumers. The energy recovery generator recycles energy from the gas pressure letdown process and along with the heat from the fuel cell, creates additional electricity from the energy that would otherwise be wasted.

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**Resolution**

**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 17, 2016 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 17, 2016 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:** ~~Audit, Compliance and Governance Committee~~ Connecticut Green Bank Board of Directors

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

**Date:** ~~May-June 18~~ 10, 2016

**Re:** Proposed revisions to Internal Control Procedures

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

CGB 101 – Purchasing and Accounts Payable

CGB 102 – Consulting and Advisory Services

CGB 103 – Credit Card Policy and Procedures

WHEREAS, that the Audit, Compliance and Governance Committee recommended to the Board of Directors approval of the proposed revisions to Internal Control Procedures CGB101, CGB102 and CGB103.

NOW, therefor be it:

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

~~Second. Discussion. Vote~~

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

### III. Responsibility:

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

### IV. Procedure:

#### A. ORDER PLACEMENT AND APPROVALS

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

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

## B. PROCESSING OF VENDOR INVOICES FOR GOODS AND SERVICES

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

- Finance Assistance up to \$25,000 – requires 2 signatures from Management, one of which must be the President & CEO or the ~~DOOCOO~~ or, in both their absence, the VPF.
  - Finance Assistance (-as defined in A6 above) equal to or above \$25,000 – requires 2 signatures from Management, one of which must be the President & CEO or in his or her absence the VPF.
  - Consulting and Advisory Services – See CEFIA – 102
  - Re-occurring charges – for disbursements that occur on a regular basis (rents, equipment lease payments, etc.) the VPF must approve the invoice. A second signature from a member of ~~M~~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 or in the absence of the VPF, the ~~DOOCOO~~, Chief Investment Officer or Chief Legal Officer in writing. The VPF or such other designee listed above must then submit all such items to the President & CEO upon his/her return to the office and obtain approval from the President & CEO at that time.
3. Payment of invoices –
- a. Accounts Payable will process invoices for payment when all approvals are obtained by requestor.
  - b. Payment of invoices will be made based on vendor terms.
  - c. Check signing:
    - Invoice and all related documents are submitted to Accounts Payable.
    - Check amounts equal to or greater than \$5,000 require 2 signatures
    - The Board of Directors will authorize specific senior level positions to sign checks on behalf of the Company. This authorization will be documented in the Board meeting minutes.
4. Check requests

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

5. Wire/ACH transfers

- a. The processing of wire/ACH disbursements will follow the same process for checks as documented in section 3c. above with the exception that all wires or ACH transactions require that 2 authorized check signors are required to execute the transaction: one to initiate and approve and one to release the transaction.
- b. Financial Assistance – No wire/ACH will be initiated until the VPF has reviewed all appropriate executed legal documents to verify that the disbursement is being made in accordance with the requirements of such documents. .



## Consulting and Advisory Services

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

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

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

### IV. Procedure:

- A. Request for Services - All such services will be requested through the use of the Company’s standard Approval Release Slip (ARS). The ARS will be attached to a draft Professional Service Agreement (PSA) developed and revised from time to time as necessary by the Company’s legal department. Upon the approval of the ARS by staff as outlined below in section B, a PSA will be executed between the Company and the provider of the services requested.
- B. Approval of ARS and execution of PSA:
  1. Approval of ARS: All ARS forms require the following sign offs before the Company’s legal department will process the related PSA: 1) the manager who has budget responsibility for the program seeking the services, 2) the VPF, 3) the ~~DOOCEO~~ and 4) the Chief Legal Officer.

2. Execution of the PSA: The President & CEO will execute all PSA's on behalf of the company. However, see 5 below.
3. ARS requests greater than \$75,000 to \$150,000 must be approved in writing by the President and CEO and Chairperson of the Board prior to execution of PSA under B1 above.
4. ARS requests greater than \$150,000 must follow the RFP requirements in section C prior to execution of PSA under B1 above.
5. Execution of PSA's and approval of ARS requests the absence of the President & CEO – If the President & CEO is unavailable for a period of time to execute PSAs or approve ARS's as required, he/she may delegate his/her authority to approve purchases to the VPF or in the absence of the VPF the DCEO, Chief Investment Officer or Chief Legal Officer in writing. The VPF must then forward all items approved under this section to the President & CEO upon his/her return to the office and obtain approval from the President and CEO at that time.
6. All ARS requests will be reviewed by the DCEO and VPF to ensure that the requested disbursement falls within the appropriate departmental budget for the current fiscal year prior to approval.

C. PSA duration and RFP requirements

1. Duration - The duration of PSAs for consulting or advisory services will generally not exceed one year without -written approval of the President & CEO.
2. - Whenever possible, an RFP is to be completed prior to entering into any contract -in an amount over \$150,000 in any one fiscal year.
3. Contractors with multiple contracts - CGB may engage the same contractor for several different projects or for continuations of a single project during a fiscal year. A PSA which will, if executed, result in cumulative expenditures to the contractor exceeding \$150,000 in any one fiscal year will require, whenever possible, that an RFP be completed prior to the execution of the PSA.

D. Recordkeeping

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

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

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## Credit Card Policy and Procedures

### **I. Purpose:**

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

### **II. Policy/Scope:**

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

### **III. Responsibility:**

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

### **IV. Procedures:**

1. The President and CEO (“CEO”) and the ~~Director of Operations~~VP and Chief Operating Officer (“~~DOO~~COO”) are authorized purchasing agents of the Company. The CEO shall provide the VPF with a list of additional employees who are authorized purchasing agents for the Company. This list will be updated from time to time by the CEO as circumstances warrant. A credit card dollar limit will be approved by the CEO for each authorized purchasing agent.
2. The VPF as administrator of the Company credit card account will approve and submit an application to the credit card issuer requesting that a card be issued (with the authorized dollar limit) to the Company purchasing agent.
3. Once the Company credit card is issued to the authorized purchasing agent, the purchasing agent will be responsible for maintaining adequate documentation supporting

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

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

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

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



# Memo

**To:** Connecticut Green Bank Board of Directors  
**From:** George Bellas (VP Finance and Administration)  
**Date:** June 10, 2016  
**Re:** Proposed CT SL2 LLC audited financial statements issued May 11, 2016

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CT Solar Lease 2 LLC engaged the firm Marcum LLP to audit its financial statements for the year ended 12/31/2015 and to provide an independent auditor's report on such statements.

Marcum issued an unqualified report on May 11, 2016 in which it opined that the financial statements for the years ended December 31, 2015 and 2014 were presented fairly in accordance with accounting principals generally accepted in the United States of America.

Marcum did not report any instances of material weaknesses or deficiencies in the internal accounting control system of CT SL2 to its members.

## Resolution

**WHEREAS**, on May 25, 2016 the Connecticut Green Bank Audit, Compliance and Governance Committee recommended to the Board of Directors approval of the CT SL2 LLC audited financial statements issued on May 11, 2016.

**NOW**, therefor be it:

**RESOLVED**, that the Green Bank Board of Directors hereby approves the proposed CT SL2 LLC audited financial statements issued May 11, 2016.

# Memo

**To:** Connecticut Green Bank Board of Directors  
**From:** George Bellas (VP Finance and Administration)  
**Date:** June 10, 2016  
**Re:** Audit RFP Process

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The Green Bank recently issued an RFP for Professional Audit Services for fiscal years ending June 30<sup>th</sup> 2016 through 2018. Our current audit firm, Marcum LLP, is required to rotate off the audit in compliance with Section 1-127 of the Connecticut General Statutes which prohibits a Quasi- Public Agency from contracting with the same audit firm for a period greater than six consecutive years. We posted the RFP on our website and I sent solicitation letters to 7 national/regional firms in the area. We received responses from the following three firms:

1. RSM US LLP
2. Blum Shapiro
3. Whittlesey & Hadley, P.C.

We formed a working staff group to review the proposals and present a recommended audit firm to the Committee at its meeting on May 25, 2016.

The working staff group comprised the following members;

- Bryan Garcia, President & CEO
- Bert Hunter, EVP and Chief Investment Officer
- Brian Farnen, Chief Legal Officer
- Eric Shrago, Director of Operations
- George Bellas, VP Finance
- Jane Murphy, Controller

The following is a brief statistical summary of each firm I extracted from the publication "2016 Top 100 Firms and Annual Listing of Regional Leaders" published by *Accounting Today*, an industry publication. I have also indicated the local office that will be performing the audit services.

RSM US LLP

1. Revenues: \$1,636.87 million
2. Offices: 82
3. Headquarters: Chicago
4. Office (s) performing CGB audits: New Haven & Stamford (from proposal)
5. Partners: 685
6. Total Professionals: 5,622
7. Total employees: 7,731
8. Total staff local offices: 170 (from proposal)
9. Government services staff: 790 nationally (from proposal)
10. National ranking – 2016 Accounting Today: 5

#### Blum Shapiro

1. Revenues: \$72.7 million
2. Offices: 5
3. Headquarters: West Hartford
4. Offices(s) performing CGB audits: West Hartford (from proposal)
5. Partners: 32
6. Total Professionals: 309
7. Total employees: 410
8. Total staff local offices: 400 regionally (from proposal)
9. Government services staff: 64 regionally (from proposal)
10. National ranking- 2016 Accounting Today: 53
11. Regional ranking -2016 Accounting Today: 1

#### Whittlesey & Hadley, P.C.

1. Revenues: \$22.10 million
2. Offices: 3
3. Headquarters: Hartford
4. Office(s) performing CGB audits: Hartford (from proposal)
5. Partners: 20
6. Total Professionals: 123
7. Total employees: 158
8. Total staff local office(s): 150 (from proposal)
9. Government services staff: 25 (from proposal)
10. Regional ranking-2016 Accounting Today: 6



Each firm's proposal was evaluated based on the following criteria:

- Firm independence
- Firm license to practice/peer review
- Firm qualifications and experience
- Similar engagements
- Fees
- References
- Firm experience with sustainability accounting and reporting

The evaluation team met with the Audit, Compliance and Governance Committee on May 25, 2016 to discuss the proposals and its recommendation to engage the firm of Blum Shapiro to provide audit services for the fiscal years 2016 through 2018. After reviewing the proposals with the evaluation team, the Committee concurred with the evaluation team's recommendation. Blum Shapiro fee for audit services will be \$69,000 for FY2016, \$70,000 for FY2017 and \$71,000 for FY2018.

### **Resolution**

**WHEREAS**, on May 25, 2016 the Audit, Compliance and Governance Committee recommended to the Board of Directors approval of Blum Shapiro to perform professional audit services for the Connecticut Green Bank (Green Bank) for the fiscal years 2016, 2017 and 2018 and further instructed that staff seek additional clarification and pricing concessions from Blum Shapiro.

**NOW**, therefor be it:

**RESOLVED**, that the Green Bank Board of Directors hereby approves Blum Shapiro to perform professional audit services for the Green Bank for the fiscal years 2016, 2017 and 2018.

# Memo

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

**From:** John D'Agostino, Senior Manager, Residential Programs

**CC:** Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO; George Bellas, VP of Admin and Finance; Ben Healey, Director, Clean Energy Finance; Kerry O'Neill, Managing Director, Residential Programs; Kim Stevenson, Associate Director, Multifamily Programs

**Date:** June 10, 2016

**Re:** Revision to Program Requirements and Reauthorization of Capital and Credit Enhancement Facility for Capital 4 Change Low Income Multifamily Energy Loan Program

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## Background

In April 2014, the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") approved the Low Income Multifamily Energy Loan (formerly, the Multifamily Permanent Energy Loan, - the "Program" or "LIME"), under which Capital 4 Change (formerly, the Connecticut Housing Investment Fund - "C4C") in partnership with the Green Bank – provides loans to Connecticut multifamily property owners seeking to finance solar PV systems and energy efficiency upgrades. The Green Bank provided \$1,000,000 in capital financing<sup>1</sup> and \$300,000 of repurposed ARRA-SEP funds for a loan loss reserve to support an initial capital pool of \$3,000,000<sup>2</sup>.

## Success to Date

Overall, the Program has been highly successful, providing financing for \$3.1M in closed financing<sup>3</sup> for solar PV and/or energy efficiency upgrades across 12 projects and 781 units in the affordable multifamily space including, but not limited to, Section 8 housing, senior assisted living and condominium communities, and naturally-occurring affordable properties.

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<sup>1</sup> This allocation was budgeted from the \$5,000,000 multifamily sector allocation approved by the Board of Directors for Fiscal Year 2014. This \$1,000,000 would remain on Green Bank's books but be available to C4C as C4C approved and closed on loans with qualified borrowers, in accordance with approved underwriting standards under the LIME Loan program. To the extent that Green Bank capital is advanced alongside existing LIME Loan funds from the Opportunity Finance Network ("OFN"), it shall be *pari passu* (that is, equal priority). However, in as much as C4C sources other private capital for use under the LIME Loan program, and subject to appropriate intercreditor agreements between Green Bank and these private capital providers, Green Bank funds may assume a subordinate position relative to new senior lenders.

<sup>2</sup> Additional funding sources included: \$1,000,000 intercompany loan from the CT Energy Efficiency Finance Company ("CEEFCo") at 1.00%; \$1,000,000 from the Opportunity Finance Network ("OFN") at 3.00%.

<sup>3</sup> C4C has financed a portion of LIME projects using its own balance sheet

At present, an additional \$2.6M worth of projects has been submitted for C4C approval. LIME financing has also played a critical role in financing the remediation of health and safety measures at these properties that often impede the execution of energy upgrades in the affordable multifamily space.

### Request

C4C has yet to draw upon the Green Bank’s \$1,000,000 capital contribution and expects to do so upon Green Bank approval of amended program requirements that provide funding terms in line with submitted LIME Loan project terms. Green Bank staff request 1) an extension of the \$1,000,000 capital financing; 2) an increase of \$325,000 of loss reserves for a total of \$625,000 of repurposed ARRA-SEP funds for a loan loss reserve facility; and 3) adjustment in program requirements to align loan terms with market project demand for financing.

In its original incarnation, the Low Income Multifamily Energy Loan program requirements specified the following parameters (among others):

- Maximum Loan Amount: \$750,000
- Maximum Loan Term: 12 years
- Loan Fee: 1.50%
- Energy Savings Coverage Ratio: equal to or greater than 1.20x
- Interest Rate: graduated structure

The LIME Loan’s market experience to-date has revealed a demand for larger projects at longer terms than the original program requirements. In addition to reauthorizing the Green Bank’s loan loss reserve and capital commitment, C4C and the Green Bank recommend the adjustment of the above program parameters to the following:

<b>Parameter</b>	<b>Original</b>	<b>Recommended</b>
Maximum Loan Amount	\$750,000	\$2,000,000
Maximum Loan Term	12 years	20 years
Loan Fee	1.50%	2.00%
Energy Savings Coverage Ratio	>1.20x	>1.10 for solar-only projects; >1.30 for other projects
Interest Rate	Graduated	3.00%

## Resolutions

**WHEREAS**, the Connecticut Green Bank (Green Bank) selected the Capital for Change (C4C) under Green Bank's competitive solicitation process for the Clean Energy Financial Innovation Program and subsequently entered into negotiations with Green Bank that led to the development of the C4C Low Income Multifamily Energy (LIME) Loan Program ("the Program");

**WHEREAS**, on March 7th, 2014, Green Bank's Deployment Committee approved funding for the LIME Loan program in an amount of not-to-exceed \$1,000,000 in capital financing, and \$300,000 for a Loan Loss Reserve (Credit Enhancements) through the use of repurposed ARRA-SEP program funds, or ratepayer funds, if necessary; and

**WHEREAS**, at a regular meeting of the Board of Directors ("Board") held on April 25<sup>th</sup>, 2014, the Board approved the Program;

**WHEREAS**, C4C has developed a pipeline of potential projects for financing under the Program;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the extension of the not-to-exceed \$1,000,000 funding to capitalize and support the Program;

**RESOLVED**, that the \$1,000,000 in funds advanced under the Program shall be supported by the previously approved \$300,000 worth of Credit Enhancements, plus an additional \$325,000 of Credit Enhancements from unused CT Solar Lease II ARRA- SEP funds for a total of \$625,000 of Credit Enhancements;

**RESOLVED**, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the Program on such terms and conditions as are materially consistent with the memorandum submitted to the Green Bank Board on February 28<sup>th</sup>, 2014 and as modified by the June 10, 2016 memorandum to align the loan terms with market project demand for financing; 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 the above-mentioned legal instrument.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey, Director of Clean Energy Finance, Kerry O'Neill, Managing Director of Residential Programs, Kim Stevenson, Associate Director of Multifamily Programs, and John D'Agostino, Senior Manager of Multifamily Programs

# Memo

**To:** Connecticut Green Bank Board of Directors  
**From:** Mackey Dykes, Vice President, Commercial, Industrial, and Institutional Programs  
**CC:** Bryan Garcia, President and CEO  
**Date:** June 17, 2016  
**Re:** Clean Energy Business Solution Financial Assistance for Conair

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## Summary

Conair Corporation, founded in 1959 and located in Stamford, is a private US-based multinational corporation which sells small appliances, personal care products, and health and beauty products for both professionals and consumers. Conair purchased an additional building in Stamford at 23 Barry Place. With the assistance of state incentives, the company substantially renovated and retrofitted its new facility. The total project cost for those renovations is more than \$30 million. The project will retain 446 jobs in CT and create an additional 200 jobs over five years. Conair committed to making the building as energy efficient as possible during the renovations. The \$1,000,000 Clean Energy Business Solutions grant is to be used for the purchase and installation of one (1) new chiller and three (3) new boilers at the 23 Barry Place facility.

The Department of Economic and Community Development has requested \$1,000,000 (see Attachment A) in Clean Energy Business Solutions (CEBS) funding for Conair. The CEBS funding will be used for the following energy saving measures in their renovation:

- Replace 3 old boilers with new Lochinvar Model FBN3000 - 92.0% Efficient natural gas fired condensing boilers
- Replace 1 old chiller with new Daikin Model WSC079L - 300 Ton electric screw chiller
- The cost for this equipment upgrade and associated site work is \$1,648,000

## Strategic Plan

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

The Clean Energy Business Solution funding is consistent with the approved Comprehensive Plan and within the FY16 CEBS budget.

#### Ratepayer Payback

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

The 3 natural gas boilers will deliver approximately 163,232 MMBtu in energy savings over their estimated 25-year life and the 1 chiller will deliver approximately 1,819 MMBtu in energy savings over its estimated 18-year life. In total, the upgrades will deliver 165,050 MMBtu in energy savings over their lives. Given that CEBS funding represents 61% of the total project cost, savings of 100,152 MMBtu can be attributed to CEBS support. Attachment B details the project's energy savings.

#### Terms and Conditions

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

The financial assistance will be a grant or forgivable loan and Conair will not repay any of the funding.

#### Capital Expended

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

\$1,000,000 of ratepayer funds for financial assistance.

#### Risk

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

There is no expected payback of the financial assistance.

#### Financial Statements

*How is the project investment accounted for on the balance sheet and profit and loss statements?*

As funds are advanced, there will be a reduction in the "Green Bank Cash and Cash Equivalents Account" (Current Asset on the Balance Sheet)

## RESOLUTION

**RESOLVED**, that the President of the Connecticut Green Bank (the "Green Bank") and any other duly authorized officer of the Green Bank is authorized to execute and deliver a Clean Energy Business Solutions financial assistance award of \$1,000,000, to Conair Corporation; 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 instrument not later than three months from the date of this resolution.

Submitted by: Mackey Dykes, Vice President, Commercial and Industrial Programs



## Clean Energy Business Solutions

**Request Date:** June 8, 2016

**Company Name:** Conair Corporation

**Complete Address:** 23 Barry Place, Stamford, CT 06902

**Contact Name:** Michael Baldino

**Contact Email:** Mike\_Baldino@conair.com

**Contact Phone:** 609-426-1300, X-1280

**Funding Request:** \$ 1,000,000

### **Description of Strategic Value.**

Conair Corporation, founded in 1959 and located in Stamford, is a private US-based multinational corporation which sells small appliances, personal care products, and health and beauty products for both professionals and consumers. Conair purchased an additional building in Stamford, at 23 Barry Place and, with the assistance of state incentives, the company substantially renovated and retrofitted its new facility. The total project cost is \$30,075,654. The project will retain 446 jobs in CT and create an additional 200 jobs over five years. Conair committed to making the building as energy efficient as possible. The \$1,000,000 Clean Energy Business Solutions grant is to be used for the purchase and installation of one (1) new chiller and three (3) new boilers at its 23 Barry Place facility.

### **DECD Support Summary.**

DECD is providing a direct loan up to \$8,000,000 at 2% for ten years. Principal payments will be deferred for the first five years. The company will retain 446 jobs and create an additional 200 jobs within 5 years. The company will also receive up to \$15,000,000 in Urban and Industrial Sites Reinvestment (URA) tax credits and up to \$750,000 in sales tax exemption from Connecticut Innovations.



CEBS - Conair Savings Calculations

Total Project Cost	\$ 1,648,000
CEBS Grant	\$ 1,000,000
CEBS Funding % of Total Project Cost	61%

Calculation References	
Therms to MMBtu Conv Factor	0.1
kWh to MMBtu Conv Factor	0.0034095
Boiler EUL (years)	25
Chiller EUL (years)	18

HEATING	Pre-Upgrade Annual Energy Consumption (therms)	Post-Upgrade Annual Energy Consumption (therms)	Annual Energy Savings (therms)	Pre-Upgrade Annual Operating Cost	Post-Upgrade Annual Operating Cost	Annual Cost Savings
Boilers - Operating Hours	66,814	29,410	37,404	\$ 185,211.16	\$ 81,627.93	\$ 103,583.23
Boilers - Non-Operating Hours	55,022	27,134	27,888	\$ 152,523.14	\$ 75,310.81	\$ 77,212.33
<b>TOTAL</b>	<b>121,837</b>	<b>56,544</b>	<b>65,293</b>	<b>\$ 337,734.30</b>	<b>\$ 156,938.74</b>	<b>\$ 180,795.56</b>

COOLING	Pre-Upgrade Annual Energy Consumption (kWh)	Post-Upgrade Annual Energy Consumption (kWh)	Annual Energy Savings (kWh)	Pre-Upgrade Annual Operating Cost	Post-Upgrade Annual Operating Cost	Annual Cost Savings
Chiller Input (kWh)	60,024	30,392	29,632	\$ 9,003.67	\$ 4,558.83	\$ 4,444.84
<b>TOTAL</b>	<b>60,024</b>	<b>30,392</b>	<b>29,632</b>	<b>\$ 9,003.67</b>	<b>\$ 4,558.83</b>	<b>\$ 4,444.84</b>

HEATING & COOLING	Annual	Lifetime
Heating Total Energy Savings (MMBtu)	6,529.27	163,232
Cooling Total Energy Savings (MMBtu)	101.03	1,819
<b>TOTAL ENERGY SAVINGS (MMBtu)</b>	<b>6,630</b>	<b>165,050</b>
<i>CEBS-funded portion (61%)(MMBtu)</i>	<i>4,023</i>	<i>100,152</i>



Catherine H. Smith  
Commissioner

Department of Economic and  
Community Development

Connecticut  
still revolutionary

June 9, 2016

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

Dear Fellow Board Members:

This letter of support provides background on the Connecticut Green Bank's (Green Bank) proposed investment in clean energy upgrades for Conair, Inc. as part of the Clean Energy Business Solutions (CEBS) program. As you may recall, CEBS is a collaborative program developed by Department of Economic and Community Development (DECD) and what was then CEFIA in 2013 to support companies that are strategically important for job creation and economic development by providing targeted investment to help these companies access cleaner, cheaper, and more reliable sources of energy.

Conair recently renovated and retrofitted a facility at 23 Barry Place in Stamford at a cost of more than \$30 million. The project will retain 446 jobs in Connecticut and create 200 more jobs over five years. The \$1,000,000 investment by the Green Bank being considered at the June 17, 2016 Board meeting will support purchase and installation of a chiller and new boilers. DECD is providing additional support in the form of a low-interest loan.

I am pleased to support this project which is expected to deliver significant energy savings for Conair and help the state achieve its energy goals. While I am unable to attend this board meeting, I want you to know I stand behind this project and encourage the full board to approve it in my absence.

Sincerely,

Catherine Smith  
Commissioner

## 136 Sand Road

<b>C-PACE Project in Canaan, CT Address</b>	136 Sand Road			
<b>Owner</b>	David G. Sandefer & Cynthia L. Sandefer			
<b>Underwriting Type</b>	Full			
<b>Proposed Assessment</b>	\$425,527			
<b>Term (years)</b>	15			
<b>Term Remaining (months)</b>	Pending construction completion			
<b>Annual Interest Rate</b>	5.5%			
<b>Annual C-PACE Assessment</b>	\$42,029			
<b>Savings-to-Investment Ratio (over useful life)</b>	1.20			
<b>Average DSCR</b>	██████████			
<b>Lien-to-Value<sup>(1)</sup></b>	██████████			
<b>Loan-to-Value<sup>(1)</sup></b>	██████████			
<b>Projected Energy Savings (mmBTU)</b>		EE	RE	Total
	Per year	148	259	407
	Over term	2,220	3,881	6,102
<b>Estimated Cost Savings (incl. ZRECs and tax benefits)<sup>(2)</sup></b>	Per year	\$9,445	\$31,361	\$40,806
	Over term	\$141,676	\$470,418	\$612,094
<b>Objective Function</b>	14.34 kBTU / ratepayer dollar at risk			
<b>Location</b>	Canaan, CT (Falls Village)			
<b>Type of Buildings</b>	Specialty Animal Clinic, Feed Store			
<b>Year of Builds</b>	Animal Clinic: 1998 Feed Store: 1993			
<b>Building Size (sf)</b>	Animal Clinic: 4,640 Feed Store: 6,240			
<b>Year Acquired by Owner</b>	1988			
<b>As-Complete Appraised Value</b>	██████████			
<b>Mortgage Lender Consent</b>	██████████			
<b>Proposed Project Description</b>	<ul style="list-style-type: none"> <li>• Roof replacement</li> <li>• RE: 86kW solar PV (ground-mount, animal clinic, feed store, and 2 carports)</li> <li>• EE: HVAC cooling upgrade, interior LED lighting, refrigeration upgrade</li> </ul>			
<b>Est. Date of Construction Completion</b>	Pending closing			
<b>Current Status</b>	Awaiting Approval			
<b>Energy Contractor</b>	██████████			
<b>Notes</b>	██ ██████████ ██			



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

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

**From:** Bert Hunter, EVP & CIO; Chris Magalhaes, Senior Manager, Clean Energy Finance; Laura Fidaio, Senior Manager, Clean Energy Finance

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

**Date:** June 17, 2016

**Re:** Bridgeport District Energy – Private Activity Bonds  
Inducement Resolution

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## Purpose

The purpose of this memo is to request that the Connecticut Green Bank (“Green Bank”) Board of Directors pass resolutions in connection with the proposed issuance by the Green Bank of tax exempt private activity bonds for the Bridgeport District Energy Facility (the “Project”) being developed in stages by NuPower Thermal Bridgeport LLC (“NuPower”). Under federal tax law, in order to allow the Green Bank to reimburse NuPower, for certain costs NuPower has incurred and will continue to incur on the Project, with the proceeds from Green Bank tax-exempt bonds to be issued by the Green Bank in the future, the Green Bank will need to pass what is often referred to as a “reimbursement resolution” in connection with the bonds. The bonds that would be issued would be strictly revenue bonds with recourse to the Green Bank for repayment limited to proceeds actually received through the various energy sales agreements and other revenues to be derived by the Project.

## Background

Green Bank involvement with the Project started in late 2012 when NuPower Thermal, LLC, the parent company to NuPower, submitted an application for financial assistance under Green Bank’s Site-Specific Feasibility Study program for the purpose of verifying the technical and economic feasibility of installing certain clean energy generating equipment. Staff approved a feasibility loan for the Project in the amount of \$50,000 on February 13, 2013, which was expanded to \$89,000 on October 9, 2013 and is fully drawn and outstanding. As a result of that funding which was supplemented by funding from other potential stakeholders, NuPower Thermal, LLC successfully completed a feasibility study regarding the sizing, needs, sources, and basic design of an energy system to produce hot water and chilled water at a central plant utilizing waste heat for delivery through pipes to individual buildings for space heating, domestic hot water heating and air conditioning (a “District Energy” system).

Given this progress and the desire of the Green Bank to maintain its support and commitment to the success of the Project, staff recommended and the Board approved in July 2014 a strategic development loan to NuPower

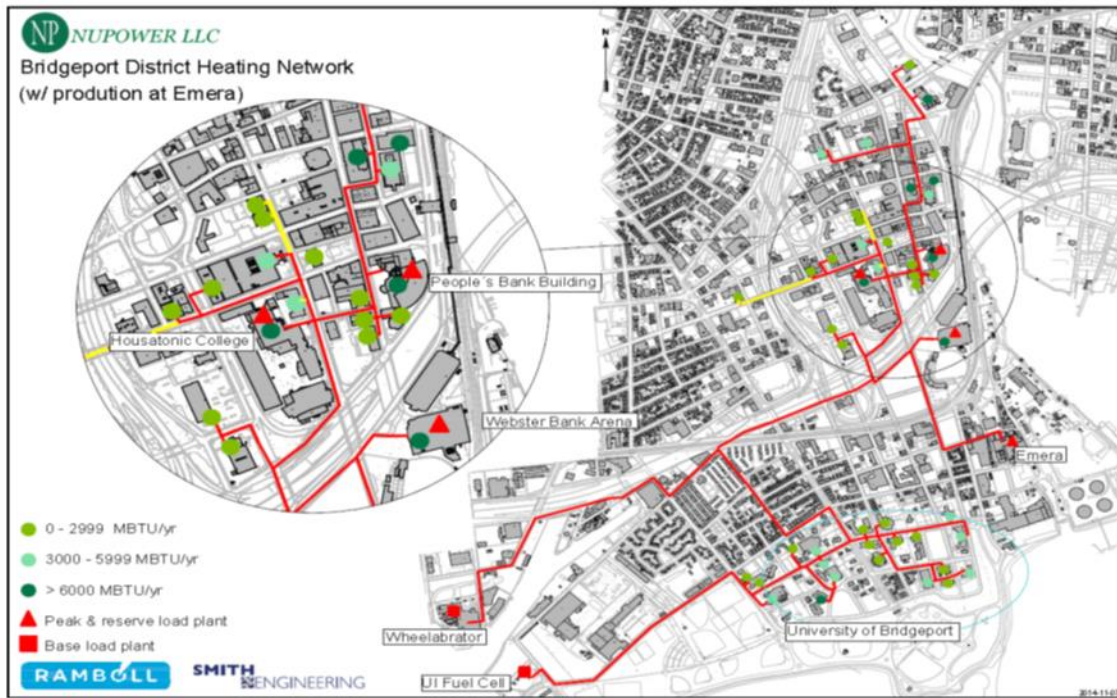
Thermal, LLC in addition to the previously approved feasibility loans in an amount not to exceed \$338,000 for the development of the Project, given the special capabilities of its parent company, NuPower, LLC, in developing large scale infrastructure projects in the State of Connecticut, the uniqueness of the project itself and its potential to achieve significant private and public leverage, the strategic importance of reducing heating costs and enhancing the operational costs at a large scale in a distressed municipality, and the multi-phase characteristics of the District Energy project. At the present time, \$66,205 of the strategic development loan to NuPower Thermal, LLC is outstanding.

Since that time, there have been several positive developments:

- Pursuant to Section 21 of Public Act 14-94 of the Connecticut State Legislature, NuPower Thermal, LLC and any designated subsidiary, is awarded unregulated utility status as a licensed thermal energy (heating and cooling) carrier, and granted an exclusive license for the City of Bridgeport, Connecticut with access to public rights-of-way. Given the award, NuPower intends to design, install, own, operate, and maintain a district energy thermal loop, along with associated interconnection and heat exchange equipment, in the City of Bridgeport, capable of distributing thermal energy by means of hot and cold water from select energy sources to commercial, academic, and municipal customers (the “Thermal Loop”).
- The Thermal Loop will be constructed in multiple phases meant to align strategic thermal energy suppliers with acquired customers. The first phase of the Project will include trenching and laying piping and installation of related thermal interconnection and exchange equipment in order to furnish thermal energy, in the form of waste heat from the United Illuminating 2.8 MW gas-fired Fuel Cell (“UI Fuel Cell”) located in the Seaside Park area of Bridgeport, to the University of Bridgeport (“UB”).
- Ultimately, the Project will be expanded to heat over forty buildings and facilities with the expectation that such partners will include the City of Bridgeport, UB (noted above), the Webster Bank Arena, People’s United Bank, Housatonic Community College, and the State of Connecticut Judicial Branch.
- NuPower will use low-temperature district thermal technology and materials, proven via multiple installations in Europe and recent expansions into the United States. The technology carries significant advantages over the traditional steam loops commonly found throughout major cities in the northeast, mid-Atlantic and mid-west/upper mid-west, including being relatively safer than higher pressure steam piping and requiring only shallow trenches in which to be buried. Also, as the materials will be sourced from Denmark (where the technology is widespread), the Project will benefit from the support of various Danish partners willing to lend technical and financial support towards project completion, including a consortium of EPC contractors (the “Consortium”) and the Danish Export Credit Agency (“EKF”). The Consortium is comprised of the Danish government Clean Cluster and internationally known companies, ABB and Logstor.
- There are clear environmental and economic benefits. Customers will be paying less and helping the environment. Typically, organizations use fossil fuels for heating, whereas going forward reusing heat from the UI Fuel Cell and other thermal resources, the Thermal Loop would reduce CO2 emissions by 71%

(reduction in annual CO2 emissions projected at 9,520 tons in first phase). Such carbon reduction should enable a “Green Bonds” designation when the bonds are being marketed.

- The project will lead to 20+ direct jobs and \$50 MM in economic development.
- The general layout of the proposed thermal district networks are shown below for the heating system.



### Request for Resolutions of Inducement

This first phase of the Thermal Loop is expected to gross up to \$12.25 million in total capital costs, and is anticipated to be partially financed by an estimated \$3.85 million grant given in accordance with the 2016-2018 Connecticut Electric and Natural Gas Conservation & Load Management Plan, as an incentive for the anticipated reduction in customer natural gas use, pursuant to Public Act 15-5 of the Connecticut State Legislature. The remaining costs of the Thermal Loop are expected to be financed through the Green Bank’s issuance of tax-exempt private activity bonds, where the Green Bank will act as conduit issuer on behalf of NuPower. **The Green Bank will have no incremental financial exposure in this arrangement. The buyers of the bonds will look solely to Project revenues for repayment.** Should the Project advance as anticipated, the bonds will be fully backed by monthly service and capacity payments from UB, contracted out for a minimum of 20 years, and it is also anticipated that additional customers will be acquired once the initial phase of the Thermal Loop is installed and operating, delivering additional cash flow coverage to the bondholders. However, no bonds will be issued unless and until all aspects of the Project for the initial phase are complete, including, but not limited to, energy service agreements with end users (such as UB), thermal supply agreement(s), complete EPC contracts for design and construction of the Project, threshold regulatory approvals, permits, etc.



The Thermal Loop is designed to help customers reduce energy costs, partially offset energy-related capital and maintenance expenditures, and lower infrastructure-related operating costs; and will also increase energy resiliency in the City of Bridgeport. Subsequent phases of the Thermal Loop will consist of additional thermal energy suppliers, customers, and piping networks and installations, with an expected additional capital cost of up to approximately \$18 – \$28 million, *for a maximum anticipated bond issuance of \$40 million.*

Local district heating and cooling facilities are a type of exempt facility bond that qualify for tax-exempt private activity bonds under Section 142 of the Internal Revenue Code. The Project is expected to qualify as this type of facility. Specifically, the Project’s piping network and associated controls are expected to be eligible, and are expected to compose approximately 70% of the gross capital expenditure for the first phase of the Project – matching the projected costs expected to be financed with bonds. If the Green Bank secures an allocation of private activity volume cap from the CT Office of Policy and Management, the Green Bank would serve as the conduit issuer for tax-exempt private activity bonds and would lend all bond proceeds directly to NuPower upon issuance, with the proceeds from that loan (i.e., debt service on the loan to NuPower) being the revenues the buyers of the bonds will look to for repayment (backed, in turn, by revenues from the contracts with end use customers).

As noted above, in order to allow the Green Bank to reimburse NuPower, for certain costs NuPower has incurred and will continue to incur on the Project, with the proceeds from Green Bank tax-exempt bonds to be issued by the Green Bank in the future, the Green Bank must approve a “reimbursement resolution” to indicate its intent to reimburse NuPower for those costs if and when such bonds are approved and issued. While this resolution does not commit the Green Bank to approve the Project or issue the bonds, which, as stated, would be secured solely from the revenues to be derived by the Project and otherwise without recourse to the Green Bank, the resolution does reflect the Green Bank’s reasonable expectation that it intends to issue bonds and reimburse NuPower for such costs.

## Resolutions

**WHEREAS**, NuPower Thermal Bridgeport LLC, a Connecticut limited liability company (the “Company”), has requested that the Connecticut Green Bank (the “Issuer”), provide assistance in funding the costs of installing and constructing a district thermal loop in downtown Bridgeport, Connecticut, including all piping and other needed equipment, that will serve academic, municipal and commercial buildings through the delivery of hot and chilled water to these buildings (the “Project”) through the issuance of tax-exempt debt in an amount up to \$40,000,000 (the “Bonds”); and

**WHEREAS**, the Internal Revenue Service has promulgated regulations (the “Regulations”) under the Internal Revenue Code of 1986, as amended (the “Code”) that govern the allocation of the proceeds of tax-exempt debt issued to reimburse expenditures made for governmental purposes paid by a borrower of tax-exempt debt, prior to the issuance of such debt; and

**WHEREAS**, such Regulations set forth the circumstances under which allocations of proceeds to reimburse such expenditures shall be treated as an expenditure of proceeds of the Bonds on the date of such allocations; and

**WHEREAS**, generally, in order to satisfy the Regulations and be able to reimburse expenditures (except for certain de minimis expenditures and preliminary costs as defined in the Regulations) with the proceeds of tax-exempt debt, the Company and the Issuer must, among other things, declare not later than sixty (60) days after the date of any such expenditure, a reasonable official intent to so reimburse such expenditures with the proceeds of tax-exempt debt; and

**WHEREAS**, the Company has approved a resolution declaring its official intent to reimburse such expenditures with the proceeds of tax-exempt debt; and

**WHEREAS**, the purpose of this official intent resolution is to provide objective evidence that on the date of this declaration, the Issuer intends to reimburse prior expenditures paid by the Company for the Project, solely from the proceeds of such tax-exempt debt and otherwise without recourse to the Issuer.

**NOW THEREFORE**, be it resolved that:

1. The Issuer reasonably expects to reimburse expenditures made for governmental purposes in connection with the Project and paid by the Company (the “Expenditures”).
2. The Issuer reasonably expects to make such reimbursements of Expenditures, solely from the proceeds of the Bonds and otherwise without recourse to the Issuer, within eighteen (18) months after the date of any such Expenditures or the date the Project is placed in service or abandoned, whichever is later, but in no event more than three (3) years after the Expenditures are paid. The maximum principal amount of the Bonds is not expected to exceed \$40,000,000.
3. This resolution is the Issuer’s declaration of official intent made pursuant to Section 1.150-2 of the Regulations.

Submitted by: Bert Hunter, EVP and CIO; Chris Magalhaes, Senior Manager of Clean Energy Finance; Laura Fido, Senior Manager of Clean Energy Finance



## Project Memo

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

**From:** Dale Hedman, Director, Statutory & Infrastructure Programs and Rick Ross, Associate Director, Statutory & Infrastructure Programs

**CC:** Bryan Garcia, President and CEO, Bert Hunter, EVP & CIO, Mackey Dykes, VP, Commercial and Industrial Programs, Brian Farnen, General Counsel & CLO, and Eric Shrago, Chief Operating Officer

**Date:** June 17, 2016

**Re:** Bridgeport MicroGrid Project Loan Advancement Modification from Deployment Committee Approval

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### Project Summary

The City of Bridgeport is working with Bridgeport MicroGrid LLC to develop a microgrid that will provide islanding capability, electricity and thermal energy services to Bridgeport Town Hall and two adjacent buildings: a police station at 300 Congress Street and a Community/Senior Center located at 263 Golden Hill Street in Bridgeport (the "Project").

The Project consists of three 265 kW natural gas Combined Heat & Power (CHP) units, for a total of 795kW of capacity. The average load of the proposed microgrid is estimated to be 300kW with a peak load of 700kW. Existing diesel generators located at the Police Headquarters will be used as redundant generation capacity for the microgrid. The microgrid distribution infrastructure will remain sized, designed and installed to handle 1.8MW of generation for future expansion, to enable additional capacity for other facilities to take advantage of the microgrid.

The City of Bridgeport intends to enter into a 20-year Energy Service Agreement (ESA) with Bridgeport MicroGrid LLC for the electricity and thermal energy produced by the system.

Bridgeport MicroGrid, LLC has requested a subordinated loan for the Project from the Green Bank in the amount of \$502,860, at a 2% interest rate for 20 years. The outstanding principal and interest amount will be payable monthly commencing on the first payment date of the Subordinated Loan.

Funding for the Project is part of the Green Bank's CHP incentive pilot program, the Green Bank is using the \$450/kW incentive to buy down the interest rate on the Green Bank's

subordinate loan to 2%. DEEP will be providing a \$2,975,000 grant as part of the microgrid funding support for the Project.

### Modification of Approval

The Project was selected by Green Bank staff pursuant to a request for proposals under the statutorily mandated Combined Heat and Power (CHP) Pilot program set forth under Public Act 11-80 and approved by the Green Bank Deployment Committee on March 3, 2016 (the "Original Approval"). This memorandum revises the Original Approval in the following ways:

- Pursuant to the Original Approval, Green Bank was to make an advance to Bridgeport MicroGrid, LLC in the form of a single payment in the full principal amount of the Subordinated Loan at Commercial Operation Date (COD) and no earlier than Senior Debt advances. The loan agreement as drafted now provides that the Green Bank is able to make multiple advances during the construction period, i.e., prior to COD, provided that Bridgeport MicroGrid, LLC received advances from the Senior Lender under the Senior Loan Agreement such that the ratio of the aggregate amount of such advances to the maximum principal amount permitted to be drawn under the Senior Loan Agreement equals or exceeds the ratio of the aggregate amount of Green Bank advances (including any advance then being requested) to the maximum principal amount of the Subordinated Loan. This modification was necessary to encourage the senior lender to advance funds during construction.
- Pursuant to the Original Approval, the maturity date was to be coterminous with the Senior Loan facility, not to exceed twenty (20) years from the date of the advance of the loan and repayment was to have been in the form of fully amortizing level payments of principal and interest (mortgage-style basis). The loan agreement as drafted now provides a maturity that will be 20 years from the earlier of: (a) the date that is twenty (20) years from the date on which the final advance of the Subordinated Loan is made (which in no event shall any advance be made later than July 1, 2017); (b) acceleration of maturity upon an event of default or other mandatory prepayments as set forth in the Subordinated Loan agreement; or (c) the date of the consummation and closing of any sale of the Project to a non-affiliated third party. Repayment commences the first month following the final advance with each of the 240 monthly payments being in the form of fully amortizing level payments of principal and interest (mortgage-style basis). This modification is a conforming change that results from the initial modification noted above in order to maintain the Green Bank's exposure on a proportionately equivalent basis to that of the senior lender.
- While there is no strict requirement for the direction of actual funds under the Subordinated Loan, staff anticipates that the Green Bank Subordinated Loan would be used for paying off the last construction payables, paying down a portion of First Niagara Bank construction debt (provided the ratios noted above hold) and also for funding a \$300,000 escrow account to be used as additional collateral to secure both the senior loan and subordinated loan. The pay down of the construction debt by the DEEP grant (\$2,975,000) and the Green Bank funds, will result in the senior loan from First Niagara Bank of \$3,800,000.



### **Construction Schedule Plan:**

Commence Construction: July 2016  
Advancement on CGB Loan: November 2016  
Commercial Operation Date: February 2017

### **Resolution**

**WHEREAS**, this proposed microgrid power generation system project (Project) meets the requirements of the statutorily mandated Combined Heat and Power (CHP) Pilot program set forth under Public Act 11-80, Section 103, which is administered by the Connecticut Green Bank (Green Bank);

**WHEREAS**, the Project was selected by Green Bank staff pursuant to a request for proposals under the statutorily mandated CHP Pilot program and approved by the Deployment Committee on March 3, 2016 (the "Original Approval"); and

**WHEREAS**, subsequent to the Original Approval, certain material changes were negotiated between the Project, the senior lender providing additional capital to the Project and Green Bank, namely:

1. Green Bank is able to make multiple advances during the construction period, i.e., prior to Commercial Operation Date, provided that the Project shall have received advances from the senior lender such that the ratio of the aggregate amount of such senior loan advances to the maximum principal amount permitted to be drawn from the senior lender equals or exceeds the ratio of the aggregate amount of Green Bank advances (including any advance then being requested) to the maximum principal amount of the Green Bank loan and provided further that no advance shall be made later than July 1, 2017.
2. The maturity date of the Green Bank loan will be 20 years from the earlier of:  
(a) the date that is twenty (20) years from the date on which the final advance of the Green Bank loan is made; (b) acceleration of maturity upon an event of default or other mandatory prepayments as set forth in the Subordinated Loan agreement; or (c) the date of the consummation and closing of any sale of the Project to a non-affiliated third party. Repayment commences the first month following the final advance with each of the 240 monthly payments being in the form of fully amortizing level payments of principal and interest (mortgage-style basis).

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank to execute and deliver a sub-debt loan in the amount of \$502,860, to be funded from the CHP Pilot program budget, and with terms and conditions consistent with the memorandum and term sheet submitted to the

Deployment Committee dated February 23, 2015 and as revised by the memorandum to the Board of Directors dated June 17, 2016; 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.

Appendix 1:

**Connecticut Green Bank – Bridgeport MicroGrid, LLC Facilities  
Summary of Terms and Conditions for Proposed**

**Subordinated Term Loan Facility**

**(material changes as drafted in the loan agreement documentation  
noted below in tracked changes)**

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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 a microgrid facility to be located in Bridgeport, CT (the “Project”) and to be owned by Bridgeport MicroGrid, LLC (“Bridgeport” or “Borrower”).

This 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 Term Sheet 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.

This Term Sheet is delivered to the Borrower 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 Term Sheet and Conditions are subject to all necessary Green Bank approvals, including its board of directors.

This Term Sheet will expire on June 30, 2016.

- Borrower:** A Special Purpose Entity (Bridgeport MicroGrid, LLC) that will own and operate 795 kWAC microgrid energy project located in Bridgeport, Connecticut (the “**Project**”).
- Guarantors:** [TO BE IDENTIFIED] (“**Guarantors**”) and any additional guarantors as required by the Green Bank.
- Senior Lender(s)** First Niagara Bank

**Senior Loan** \$4,380,000 with First Niagara Bank, of which, \$1,997,140 will be used to fund the Combined Heat and Power (CHP) portion of the Project.

**Sole Purpose:** To provide permanent subordinate debt financing for the proposed Project.

**Lender:** The Green Bank and any participating lenders on the Closing of the Credit Facilities (collectively, the "**Lenders**").

**Credit Facility:** Not to exceed \$502,860 Secured Subordinated Term Loan (the "**Subordinated Loan**"). The Subordinated Loan amount may be lower if the interest rate on a senior loan facility is greater than Six Percent (6.00%) per annum or if the minimum proforma debt service coverage ratio ("DSCR") is not maintained based on projected Project economics agreed between Lender, Borrower and Senior Lender (defined later) as a condition to the Advances, at the Lenders' sole discretion.

**Maturity:** Maturity coterminous with the Senior Loan facility, not to exceed twenty (20) years from the date of the advance of the loan and fully amortizing level payments of principal and interest (mortgage-style basis).

**Advances:** ~~Negotiated single payment in the full principal amount of the Subordinated Loan will be made at Commercial Operation Date (COD) and no earlier than Senior Debt advances.~~ Green Bank is able to make multiple advances during the construction period, i.e., prior to Commercial Operation Date, provided that Bridgeport MicroGrid, LLC shall have received advances from the Senior Lender under the Senior Loan Agreement such that the ratio of the aggregate amount of such advances to the maximum principal amount permitted to be drawn under the Senior Loan Agreement equals or exceeds the ratio of the aggregate amount of Green Bank advances (including any advance then being requested) to the maximum principal amount of the Subordinated Loan.

**Repayment and payment:** Commencing monthly on the first day of the first month following the month during which the final advance of the loan is made (which shall

be no later than June 30 2017)COD and on the first day of each succeeding month, Borrower shall repay the Loan on a fully amortizing mortgage-style basis (level payments of principal and interest) in 240 monthly payments.

**Pre-payment Penalty:** No Pre-payment Penalty.

**Interest Rates and Fees:** Two Percent (2.00%) per Annum.

**Calculation of Interest and Fees:** All calculations in respect of interest shall be made on the basis of actual number of days elapsed in a 360 day year.

**Collateral:** The loans will be secured at all times by a continuing subordinated priority lien on and security interest (the “**Security Interest**”) 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;

(vi) all Proceeds of each of the foregoing and all accessions to, and replacements for, each of the foregoing (the "**Collateral**"); and

(vii) any additional security interest taken by the Senior Lender(s) in the Project not referenced or included above except the Green Bank shall take a subordinated second position.

Where appropriate, such Security Interest will be subordinate only to Senior Lender(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 in an amount not to exceed \$ \$4,380,000.

Negative Pledge: The Borrower will not assign any accounts or other Collateral to any person or entity other than to the Lender, the Senior Lender, or other Lenders as agreed (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 mutually 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 post-closing senior debt or pari passu debt with Lenders not accounted for in the Intercreditor Agreement.

100% of the net proceeds of any post-closing equity issuance 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 material recovery event not 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.

[Acceleration in the event of default \(as to be set forth in the loan documentation\)](#)

**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 senior debt and equity funding commitments by Senior Lender and Equity Investor (and/or 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, if applicable.

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.

Successfully securing a position in the Virtual Net Metering queue as established by the Public Utility Regulatory Authority.

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

No material litigation.

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 reviewed 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 Lender, (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** 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

**Offer to Lend Funds, Approvals, Etc.:**

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:**

The 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), (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, (c) and the outside counsel attorney fees of the Lender for preparing and drafting the Loan Documents

**Yield Protection:**

The Company shall pay the Lender(s) such additional amounts as will compensate the Lenders in the event applicable law, or changes in law, subjects the Lenders to reserve requirements, capital requirements, taxes (except for taxes on the overall net income of the Lenders), or other charges which increase the cost or reduce the yield to the Lender(s) above the applicable cost or yield in effect on the closing date under customary yield protection provisions.

**Signed on behalf of the Connecticut Green Bank by:**

**Signature** \_\_\_\_\_

**Name: Bryan T. Garcia**

**Title: President and CEO**

**Date:**

**Signed on behalf of Bridgeport MicroGrid, LLC by:**

**Signature** \_\_\_\_\_

**Name: Franklin Todd Renz**

**Title: Member**

**Date:**



# Memo

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

**From:** Mariana C. Trief, Manager, Clean Energy Finance

**CC:** Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO; Ben Healey, Director, Clean Energy Finance

**Date:** April 15, 2016 (REVISED ~~April 20~~June 14, 2016)

**Re:** Project Update for 193kW Hydroelectric Facility in Meriden, CT

[Revised Pursuant to the Adoption of Public Act No. 16-212 \(See Highlighted\)](#)  
[\(which allows the Green Bank to establish stand-alone Special Purpose Vehicles\)](#)

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## Background and Purpose

On February 26, 2016 staff brought forward to the Connecticut Green Bank (“Green Bank”) Board of Directors (the “Board”) a proposal (see Exhibit A) for the Green Bank to provide both construction financing and term financing through the issuance of New Clean Renewable Energy Bonds (“CREBs”) which would also require the Green Bank to subsequently own a 193kW hydroelectric facility in Meriden, CT (the “Project”). The Board approved the proposal and authorized:

- i) construction financing in an amount not to exceed \$3.1 million,
- ii) a working capital guaranty in an amount not to exceed \$300,000 to New England Hydropower Company (“NEHC”), the project developer, under the Green Bank’s existing working capital facility partnership with Webster Bank; and,
- iii) term financing based on the following prerequisites:
  - a. issuing CREBs in an amount not to exceed \$3,100,000; and,
  - b. securing the issuance utilizing the Special Capital Reserve Fund (“SCRF”) subject to further Board approval.

Since the Board’s approval, staff has continued to advance towards the issuance of CREBs and, in parallel, the developer has continued to make progress on the Project. The purpose of this memo is to share with the Board details about the progress that has been achieved to date on both of these fronts and request authorization for an increase in the working capital amount that the Green Bank may guaranty.

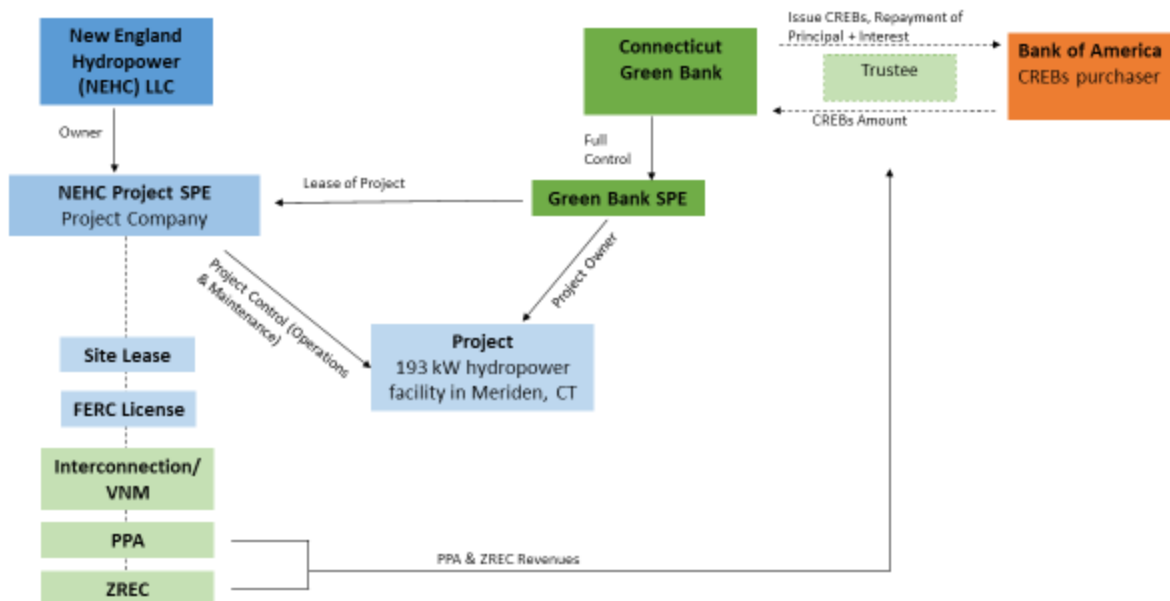
### *Ownership Structure*

Green Bank staff has been working with outside counsel Shipman & Goodwin (CREBs bonding and project finance counsel) and Day Pitney (hydro regulatory counsel) to polish the structure presented to the Board and ensure it meets requirements imposed by both the CREBs financing structure and the Federal Energy Regulatory Commission (“FERC”) license for the hydropower facility, while at the

same time limiting the Green Bank's potential liability. The structure is presented as a figure below, and the main items are described hereafter:

- NEHC will establish a Project entity: Hanover Pond Hydro LLC ("Project Company"), wholly owned by NEHC, which will bear the Project's development and construction risks.
- **The Green Bank, as recently authorized by the adoption of Public Act No. 16-212 will form a Special Purpose Entity ("Green Bank SPE") fully controlled by the Green Bank that upon the Project's construction completion will purchase the Project assets (assembled equipment, powerhouse, rights to Renewable Energy Credits ("RECs") generated by the facility etc.) from NEHC's Project Company through funds derived from the issuance of CREBs. As required by CREBs, the Green Bank SPE will retain ownership of the Project assets throughout the CREBs term.**
- The Green Bank SPE will lease the Project back to NEHC's Project Company, granting NEHC full control over the Project as required by the FERC license. NEHC's Project Company will be responsible for the operation of the Project and for any issues that arise (including environmental and any catastrophic events) and indemnify the Green Bank if any issues arise. NEHC's obligations under the lease will be secured by a security interest against all assets of the lessee (which would include the Power Purchase Agreement with the City of Meriden ("PPA"), the 15-year Zero Emission Renewable Energy Credits ("ZREC") Contract, interconnection agreements, licenses, etc.) and the proceeds thereof and a guaranty by NEHC secured by a pledge of the NEHC's ownership interest in the lessee (the NEHC Project Company). As part of that collateral package, the Green Bank would also require the Project Company to cause the City of Meriden to direct all of the PPA revenues and Eversource to direct all of the ZREC revenues to the trustee for the CREBs (or alternatively an account pledged to the CREBs trustee).
- The PPA, ZREC, FERC license and Site Lease with the City of Meriden will remain at the NEHC Project Company, thereby limiting the Green Bank's liability as it relates to those agreements. In the event of default by the NEHC Project Company, agreements will be assigned to the Green Bank SPE or to another entity selected by the Green Bank.

## Hydropower Facility Structure



### CREBs Update

Below are the main updates and progress on the CREBs financing.

**Bond Indenture:** A *draft* bond indenture has been prepared by Shipman & Goodwin and is presented to the Board as Exhibit B. The indenture has already been shared with the Office of the Treasurer and preliminary comments have been discussed. A final draft based on comments from the Office of the Treasurer and on final negotiation with Banc of America Public Capital Corp (“Bank of America”) along with an opinion of self-sufficiency will be presented to the Board, for approval before execution.

**CREBs Allocation:** Under the CREBs program, qualified issuers need to apply, on a rolling basis, for volume-cap application. Once granted a volume-cap allocation, applicants have 180 days from the date of the allocation letter to issue the proposed bonds. If they are not issued during that time, they will be treated as forfeited and revert to the IRS for reallocation. The Green Bank’s CREBs application for the Project is substantially complete and ready for submission; however, staff has purposefully not submitted the application yet, as it needs to be timed so that CREBs can be issued after the Project has completed construction and within the 180 days after the allocation.

**Bank of America Diligence:** Bank of America has continued its diligence on the Project and technology. Diligence meetings with NEHC, the developer, and an engineer from a global water and natural resources firm that had previously performed extensive diligence work on the Project and the Archimedes Screw Generator (“ASG”) technology have all been positive to date.

### Construction Finance and Working Capital

Rather than having the Green Bank provide the construction finance for the project, as had originally been conceived and approved by the Board, the Green Bank has engaged two local banks that have shown an interest in providing construction finance with a Green Bank guaranty. Staff is confident that this is a better path than having the Green Bank provide the construction finance directly for the following reasons: i) it supports private sector participation and improves local banks’ familiarity with small hydro projects; and, ii) it limits the Green Bank’s involvement with the Project prior to CREBs

allocation, thereby avoiding potential CREBs reimbursement issues. It is in the interest of the Green Bank to issue CREBs once the Project is operational to avoid bond repayment obligations during construction but before revenue is being generated by the Project.

NEHC and the Green Bank are negotiating final guaranty requirements, terms, and timing with the two potential local banks that have shown interest in providing construction finance. In this regard, staff requests a modification to the approval granted in resolutions passed at a special meeting of the Board held on February 26, 2016 to specifically permit the Green Bank to issue the guaranty for construction finance instead of a loan by the Green Bank as originally contemplated by staff and approved by the Board. In the meanwhile, staff is requesting an increase in an amount not to exceed \$600,000 (total) in the working capital guaranty to NEHC under the Green Bank's existing working capital facility partnership with Webster Bank, in order to avoid delays in the Project's construction schedule as NEHC simultaneously works to close the construction finance loan from one of the two local banks. An increase to NEHC in the working capital line from Webster will allow them to make payments to long lead-time suppliers without having to wait for the construction finance loan to close. This will enable the construction to take place as scheduled, without delays, during the low-flow summer season, so that the Project can meet interconnection deadlines. As part of this effort to keep everything moving forward in advance of closing on final construction financing, the Green Bank will also provide a guaranty to Spaans Babcock (the ASG equipment supplier) upon the execution of that contract (since the Green Bank will be the eventual owner of the ASG under CREBs regardless), which – in addition to keeping the Project on schedule – will ensure better payment terms as well as a retention payment to be released at the end of the equipment's warranty period.

### *Construction Update*

NEHC has requested a change in the Project's general contractor to Bancroft Contracting Company ("Bancroft") because the Project's size is a better fit for Bancroft's hydropower business. Bancroft is a general contracting company founded in 1977 and headquartered in western Maine. It has annual revenues greater than \$25 million, of which around 40% are in the hydro space. Bancroft's bonding capacity exceeds \$50 million, well beyond the budget and scope of this project.

Bancroft has extensive experience, with over 30 projects in the hydro space completed since 2000. Notable clients include Brookfield Renewables, NextEra Energy, Green Mountain Power, First Light Power and ENEL (a list of notable projects and pictures is presented in Exhibit C). These projects have ranged from under \$100,000 to \$4.7M, with the majority being in the \$1.5M-\$3.0M range. Overall, Bancroft has demonstrated extensive hydro experience in the northeast, and the Project is well within their capabilities, as confirmed by staff diligence.

On the equipment side, the contract for the purchase of the ASG, the hydro generating equipment to be used in the Project, has been reviewed by the Green Bank and is close to being executed. Given the manufacturing lead time for the ASG, the equipment purchase agreement needs to be executed before the end of the month, and NEHC needs to provide the deposit, with funding from the extended working capital request above, to avoid installation delays.

### **Conclusion**

The Project is continuing to progress, and staff expects construction to begin and advance so that the Project's virtual net metering deadline is met without any issues or delays. Staff will continue to update the Board as milestones are completed, and will come back to the Board with a final bond indenture for Board approval when appropriate.

## Resolutions

**WHEREAS**, in accordance with (1) the statutory mandate of the Connecticut Green Bank (“Green Bank”) to foster the growth, development, and deployment of clean energy sources that serve end-use customers in the State of Connecticut, (2) the State’s Comprehensive Energy Strategy and (3) Green Bank’s Comprehensive Plan for Fiscal Years 2015 and 2016 (the “Comprehensive Plan”), Green Bank continuously aims to drive private capital investment into clean energy projects;

**WHEREAS**, pursuant to the development of a small hydroelectric facility at the Hanover Pond Dam on the Quinnipiac River in Meriden (“Project”), on February 26, 2016 the Green Bank Board of Directors (the “Board”) authorized:

- i) construction financing in an amount not to exceed \$3.1 million,
- ii) a working capital guaranty in an amount not to exceed \$300,000 to New England Hydropower Company (“NEHC”), the project developer, under the Green Bank’s existing working capital facility partnership with Webster Bank; and,
- iii) term financing based on the following
  - a. the issuance of New Clean Renewable Energy Bonds (“CREBs”) in an amount not to exceed \$3,100,000, and
  - b. securing the issuance of CREBs utilizing the Special Capital Reserve Fund (“SCRF”) subject to further Board approval; and

**WHEREAS**, Green Bank staff recommends that the Board authorize the creation of a Special Purpose Entity that will be wholly owned by the Green Bank;

**WHEREAS**, Green Bank staff now recommends that the Board authorize an increase in the working capital guaranty afforded to NEHC in connection to the Project under the Green Bank’s existing working capital facility partnership with Webster Bank; and

**WHEREAS**, Green Bank staff now recommends the Green Bank to issue a guaranty to a third party lender for construction finance for the Project instead of a loan by the Green Bank as originally contemplated by staff and authorized by the Board on February 26, 2016.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank may increase the amount of its working capital guaranty under the Green Bank’s existing working capital facility partnership with Webster Bank, for draws made by NEHC solely in connection with this Project and in an amount not to exceed \$600,000 and may issue a guaranty to a third party lender for construction finance for the Project as more completely described in a memorandum to the Board of Directors dated April 15, 2016 and as revised on April 20, 2016;

**RESOLVED**, that the Green Bank may establish a wholly owned Special Purpose Entity with all the requisite powers to own, operate and manage the Project, as required by CREBs and as described in the memorandum to the Board of Directors dated April 15, 2016 and as revised on June 14, 2016; 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; Ben Healey and Mariana C. Trief, Clean Energy Finance.