

Board of Directors

Lonnie Reed Chair	Hank Webster Vice Chair Connecticut Department of Energy and Environmental Protection (DEEP)
Matthew Ranelli Secretary Partner Shipman & Goodwin	Bettina Bronisz State Treasurers Office State of Connecticut
Thomas Flynn Managing Member Coral Drive Partners	Robert Hotaling Deputy Director DECD
Adrienne Farrar Houel President and CEO Greater Bridgeport Community Enterprises, Inc.	Dominick Grant Director of Investments Dirt Capital Partners
John Harrity Chair CT Roundtable on Climate and Jobs	Brenda Watson CEO Operation Fuel
Joanne Wozniak-Brown Office of Policy and Management (OPM)	TBD

July 14, 2023

Dear Connecticut Green Bank Board of Directors:

We have a regular meeting of the Board of Directors scheduled for **Friday, July 21, from 9:00-11:00 a.m.**

Please take note that this will be an online meeting.

For the agenda, we have the following:

- **Consent Agenda** – we have several items on the consent agenda, including:
 - Meeting Minutes for April 21, 2023
 - **Incentive Programs – Progress to Targets for FY23**
 - **Financing Programs – Progress to Targets for FY23**
 - **Investments – Progress to Targets for FY23**
 - Board of Directors and Committee Reports for FY23

In addition to the items requiring resolution, there are also the following documents, including:

- Under \$500,000 and No More in Aggregate than \$1,000,000 – there are no transactions
- Under \$100,000 and No More in Aggregate than \$500,000 – there are no transactions
- Overview of Requests for Approvals for PSAs Over \$75,000 for FY23 per Operating Procedures
- Overview of 2023 Legislative Session
- **Comprehensive Plan Recommendations and Updates** – redline revisions to the Comprehensive Plan for FY24
- **Financing Program Updates and Recommendations** – if time allows, an FY23 progress to targets update, and several transaction recommendations, including:
 - Six (6) C-PACE transactions for projects greater than \$500,000, including the following projects:
 - **East Lyme** – 172 kW solar PV project, including roof replacement, totaling \$564,311
 - **Bridgeport** – two (2) projects, including a 563 kW and 398 kW solar PV projects, including roof replacements, totaling \$1.1 MM and \$1.3 MM, respectively [Note – subject to change]
 - **Danbury** – 730 kW solar PV project, including roof replacement, totaling \$1.7 MM [Note – subject to change]

- **Stamford** – 215 kW solar PV project totaling \$568,546
- **New Britain** – 227 kW solar PV, including roof replacement, totaling \$680,572
- **Incentive Programs Updates and Recommendations** – if time allows, an FY23 progress to targets update, and several transaction recommendations, including:
 - **Staff Approvals** – two (2) non-residential Energy Storage Solutions projects totaling 2.0 MW and estimated \$625,000 in upfront incentives
 - **Board Approvals** – four (4) under \$500,000 and two (2) above \$500,000 non-residential Energy Storage Solutions projects totaling 6.3 MW and estimated \$1.246 MM in upfront incentives, and 42.9 MW and estimated \$4.4 MM in upfront incentives, respectively.
 -
- **Investment Updates and Recommendations** – if time allows, an FY23 progress to targets update, and several transaction recommendations, including:
 - **Skyview Ventures** – modification of existing relationship to allow for new structures resulting from IRA
 - **Smart-E Loan** – modification to not to exceed rates resulting from increasing federal interest rates
- **Environmental Infrastructure Updates** – if time allows, an FY23 progress to targets update, and a transaction, including:
 - ***Sustainable CT – continuation of our community-level support for Sustainable CT***
- **Other Business** – if there is time, , then:
 - Greenhouse Gas Reduction Fund Update
 - Other Business

Please note, those items **underlined, italicized, and highlighted** above, are materials coming by the close of business on Tuesday, July 18, 2023.

Have a great weekend.

Sincerely,



Bryan Garcia
President and CEO



AGENDA

Board of Directors of the
Connecticut Green Bank
75 Charter Oak Avenue
Hartford, CT 06106

Friday, July 21, 2023
9:00 a.m.– 11:00 a.m.

Dial (646) 749-3122
Access Code: 583-737-517

Staff Invited: Sergio Carrillo, Mackey Dykes, Brian Farnen, Bryan Garcia, Bert Hunter, Jane Murphy, and Eric Shrago

1. Call to Order
2. Public Comments – 5 minutes
3. Consent Agenda – 5 minutes
4. Comprehensive Plan Recommendations and Updates – 10 minutes
5. Financing Programs Updates and Recommendations – 40 minutes
 - a. FY 2023 Report Out – Financing Programs
 - b. C-PACE Transaction – East Lyme
 - c. C-PACE Transaction – Bridgeport
 - d. C-PACE Transaction – Bridgeport
 - e. C-PACE Transaction – Danbury
 - f. C-PACE Transaction – Stamford
 - g. C-PACE Transaction – New Britain
6. Incentive Programs Updates and Recommendations – 20 minutes
 - a. FY 2023 Report Out – Incentive Programs
 - b. ESS Transaction – ESS-00309 – Suffield
 - c. ESS Transaction – ESS-00376 – Meriden
 - d. ESS Transaction – ESS-00377 – Meriden
 - e. ESS Transaction – ESS-00522 – Thompson
 - f. ESS Transaction – ESS-00525 – Milford
 - g. ESS Transaction – ESS-00637 - Newington
7. Investment Programs Updates and Recommendations – 20 minutes

- a. FY 2023 Report Out – Investments
 - b. SkyView Ventures – Transaction Modification
 - c. Smart-E Loan – Interest Rate Change
8. Environmental Infrastructure Programs Updates and Recommendations – 15 minutes
- a. FY 2023 Report Out – Environmental Infrastructure Programs
 - b. Sustainable CT
9. Other Business – 5 minutes
- a. Greenhouse Gas Reduction Fund – Federal Engagement
 - b. Other Business
10. Adjourn

Join the meeting online at
<https://meet.goto.com/583737517>
Or call in using your telephone:
Dial (646) 749-3122
Access Code: 583-737-517

***Next Regular Meeting: Friday, October 20, 2023 from 9:00-11:00 a.m.
Colonel Albert Pope Room at the
Connecticut Green Bank, 75 Charter Oak Avenue, Hartford***



RESOLUTIONS

Board of Directors of the
Connecticut Green Bank
75 Charter Oak Avenue
Hartford, CT 06106

Friday, July 21, 2023
9:00 a.m.– 11:00 a.m.

Dial (646) 749-3122
Access Code: 583-737-517

Staff Invited: Sergio Carrillo, Mackey Dykes, Brian Farnen, Bryan Garcia, Bert Hunter, Jane Murphy, and Eric Shrago

1. Call to Order
2. Public Comments – 5 minutes
3. Consent Agenda – 5 minutes

Resolution # 1

Motion to approve the meeting minutes of the Board of Directors for June 23, 2023

Resolution # 2

WHEREAS, in July of 2011, the Connecticut General Assembly passed Public Act 11-80 (the Act), "AN ACT CONCERNING THE ESTABLISHMENT OF THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION AND PLANNING FOR CONNECTICUT'S ENERGY FUTURE," which created the Connecticut Green Bank (the "Green Bank") to develop programs to finance and otherwise support clean energy investment per the definition of clean energy in Connecticut General Statutes Section 16-245n(a);

WHEREAS, in July 2021, Governor Ned Lamont signed "An Act Concerning Climate Change Adaptation" into law, which expanded the scope of the Green Bank beyond "clean energy" to include "environmental infrastructure;"

WHEREAS, environmental infrastructure is defined to include Water, Waste and Recycling, Climate Adaptation and Resiliency, Agriculture, Land Conservation, Parks and Recreation, and Environmental Markets (ex. Carbon Offsets and Ecosystem Services);

WHEREAS, the Board of Directors of the Connecticut Green Bank approved a Comprehensive Plan for FY 2023 including approving annual budgets and targets for FY 2023.

NOW, therefore be it:

RESOLVED, that Board has reviewed and approved the Program Performance towards Targets for FY 2023 memos dated July 21, 2023, which provide an overview of the performance of the Incentive Programs, Financing Programs, and Investments with respect to their FY 2023 targets.

Resolution #3

WHEREAS, in July of 2011, the Connecticut General Assembly passed Public Act 11-80 (the Act), “AN ACT CONCERNING THE ESTABLISHMENT OF THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION AND PLANNING FOR CONNECTICUT’S ENERGY FUTURE,” which created the Connecticut Green Bank (the “Green Bank”) and vests the power in a Board of Directors comprised of twelve voting and one non-voting member; and

WHEREAS, the structure of the Board of Directors is governed by the bylaws of the Connecticut Green Bank, including, but not limited to, its powers, meetings, committees, and other matters.

NOW, therefore be it:

RESOLVED, that Board has reviewed and approved the Overview of Compliance Reporting and the Board of Directors and Committees for FY 2023 memo dated July 14, 2023 prepared by staff, which provides a summary report of the FY 2023 governance of the Board of Directors and its Committees of the Connecticut Green Bank.

4. Comprehensive Plan Recommendations and Updates – 10 minutes

Resolution # 4

WHEREAS, per Connecticut General Statutes 16-245n, the Green Bank must (a) develop a comprehensive plan to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand clean energy and deployment of clean energy sources that serve end use customers in this state, and (b) develop a comprehensive plan to foster the growth, development, commercialization and, where applicable, preservation of environmental infrastructure and related enterprises.

NOW, therefore be it:

RESOLVED, that Board has reviewed and approved the revisions to the Comprehensive Plan presented to the Board on July 21, 2023.

5. Financing Programs Updates and Recommendations – 40 minutes

- a. FY 2023 Report Out – Financing Programs
- b. C-PACE Transaction – East Lyme

Resolution # 5

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the “Statute”), 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 **\$564,311** construction and (potentially) term loan under the C-PACE program to Ledge Light Capital LLC, the building owner of 36 Industrial Park Road, East Lyme, 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

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated July 14, 2023, 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 Statute, 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. C-PACE Transaction – Bridgeport

Resolution # 6

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the "Statute"), the Connecticut Green Bank (Green Bank) is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

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

WHEREAS, the Green Bank seeks to provide a **\$1,111,001** construction and (potentially) term loan under the C-PACE program to WR CT Avenue, LLC, the building owner of 1069 Connecticut Avenue, Bridgeport, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than

one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated July 18, 2023, 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 Statute, 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.

d. C-PACE Transaction – Bridgeport

Resolution # 7

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the “Statute”), 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 **\$2,041,992** construction and (potentially) term loan under the C-PACE program to WR CT Avenue, LLC, the building owner of 1085 Connecticut Avenue, Bridgeport, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State’s Comprehensive Energy Strategy and the Green Bank’s Strategic Plan; and

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated July 18, 2023, 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 Statute, 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.

e. C-PACE Transaction – Danbury

Resolution # 8

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the “Statute”), 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 **\$2,424,500** construction and (potentially) term loan under the C-PACE program to 36 Kenosia Avenue Realty LLC, the building owner of 36 Kenosia Avenue, Danbury, 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

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated July 18, 2023, 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 Statute, 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.

f. C-PACE Transaction – Stamford

Resolution # 9

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the “Statute”), 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 **\$568,546** construction and (potentially) term loan under the C-PACE program to Benjamin Properties LLC, the building owner of 397 West Avenue, Stamford, 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

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated July 14, 2023, 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 Statute, 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.

g. C-PACE Transaction – New Britain

Resolution # 10

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the "Statute"), 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 **\$680,572** construction and (potentially) term loan under the C-PACE program to E.R. Hitchcock Co Inc., the building owner of 191 John Downey Drive, New Britain, 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

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated July 14, 2023, 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 Statute, 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.

6. Incentive Programs Updates and Recommendations – 20 minutes

- a. FY 2023 Report Out – Incentive Programs
- b. ESS Transaction – ESS-00309 – Suffield
- c. ESS Transaction – ESS-00376 – Meriden
- d. ESS Transaction – ESS-00377 – Meriden
- e. ESS Transaction – ESS-00522 – Thompson
- f. ESS Transaction – ESS-00525 – Milford
- g. ESS Transaction – ESS-00637 – Newington

Resolution # 11

WHEREAS, in its June 24, 2022 meeting the Connecticut Green Bank Board of Directors (Board) approved the implementation of an Upfront Incentive Project Approval procedures (“Procedures”) for non-residential projects under the Energy Storage Solutions Program (Program) with an estimated upfront incentive payment greater than \$500,000 and procedures for less than \$500,000;

WHEREAS, as part of the approved Procedures, Green Bank staff shall present Program projects via the consent agenda utilizing a standard form Tear Sheet process described in the memorandum to the Board dated June 24, 2022;

WHEREAS, in its December 9, 2022 meeting the Board approved updated Procedures to better align with the Program process;

WHEREAS, Green Bank Staff reviewed funding requests for projects with incentives below \$500,000, and approved them via Project Approval Forms for a total amount of \$625,000 and intends to issue Reservation of Fund letters upon Board of Directors review and authorization.

NOW, therefore be it:

RESOLVED, that the Board hereby approves the estimated upfront incentives sought by three(3) non-residential projects above \$500,000 totaling \$5,779,813 consistent with the approved Procedures;

RESOLVED, that the Board hereby approves the estimated upfront incentives sought by three (3) non-residential projects individually under \$500,000, totaling \$1,057,500 consistent with the approved Procedures; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver any and all documents and regulatory filings as they shall deem

necessary and desirable to effect the above-mentioned incentives consistent with the Procedures.

7. Investment Programs Updates and Recommendations – 10 minutes
 - a. FY 2023 Report Out – Investments
 - b. SkyView Ventures – Transaction Modification

Resolution # 12

WHEREAS, the Connecticut Green Bank (“Green Bank”) Board of Directors approved at its meeting held on March 25, 2020 a senior secured loan facility (“Original Term Loan”) transaction with a Skyview Ventures special purpose vehicle (“Skyview”) in an amount not to exceed \$2.3M as a Strategic Selection and Award pursuant to the Green Bank Operating Procedures Section XII given the special capabilities, uniqueness, strategic importance, urgency and timeliness, and multi-phase characteristics of the Original Term Loan transaction. The Original Term Loan was first expanded to \$3.5M, then to \$7M and then to \$10M with a provision for funding commercial solar project construction activities (the “Existing Loan”), as approved by the Board at its meetings on April 24 and October 23, 2020, December 17, 2021, and April 21, 2023 respectively;

WHEREAS, Skyview has drawn \$6.6M of the Existing Loan commitment as of June 30, 2023 and now seeks a new ways to monetize the federal investment tax credit (“ITC”), meaning that a new special purpose vehicle (“New SPV”) will be established for the purpose of owning any solar projects it develops in the future;

WHEREAS, given the rate of utilization of the Existing Loan by Skyview for longer term financing of commercial solar projects, and the opportunity to provide construction financing for Skyview’s pipeline, following diligence of Green Bank staff, Green Bank staff proposes providing financing to the new SPV that Skyview will establish to monetize the ITC and staff requests Board approval.

NOW, therefore be it:

RESOLVED, that the Board approves staff’s request to modify the Existing Loan transaction consistent with the memorandum to the Board dated July 14, 2023 (“Board Memo”), to provide financing to New SPV;

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of the Existing Loan transaction on such terms and conditions as are materially consistent with the Board Memo; 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.

- c. Smart-E Loan – Interest Rate Change

Resolution #13

WHEREAS, the Deployment Committee of the Board of Directors (the “Board”) of the Green Bank (then known as the “Clean Energy Finance and Investment Authority”) on November 30, 2012 approved the establishment of the Smart-E Loan product (then called “CT HELPs”, the “Smart-E Program”);

WHEREAS, since approval by the Deployment Committee, the Smart-E Loan program has been expanded by the Board in partnership with Connecticut community banks and credit unions (the “Program Lenders”);

WHEREAS, as a condition to participation in the Smart-E Program, Program Lenders enter into a financing program agreement (the “Program Agreement”) with the Green Bank concerning terms, conditions, roles and responsibilities of the Program Lenders and the Green Bank;

WHEREAS, one of the terms in the Program Agreement is the establishment of “not to exceed” loan rates (“Program Loan Interest Rates”), whereby the Program Lenders agree to not exceed the interest rates established pursuant to the Program Agreement for Smart-E Loans they provide for their customers;

WHEREAS, the Program Agreement establishes that such Program Loan Interest Rates can be changed by the Board of Directors of the Green Bank;

WHEREAS, after many years of low and stable interest rates, the Federal Reserve Board of the United States has materially increased interest rates for federal funds and instituted other restrictive monetary policies which have resulted in substantial increases in interest rates for loans to households and businesses as well as interest rates on deposits by which Program Lenders obtain funding for their loans, including Smart-E Loans;

WHEREAS, without an increase in Program Loan Interest Rates, Program Lenders have advised the Green Bank they will need to withdraw from the Smart-E Program or otherwise suspend or curtail their participation in the Smart-E Program;

WHEREAS, such withdrawal, suspension or curtailment would be detrimental to the Smart-E Program goals to make available funding for households seeking to undertake clean energy investments for their homes;

WHEREAS, after considerable discussion with Program Lenders, Green Bank staff has determined that it is appropriate to recommend to the Board for approval modification of the Program Loan Interest Rates as set forth in a memorandum to the Board dated July 14, 2023;

NOW, therefor be it:

RESOLVED, that the Board approves the recommendation by the staff to increase Smart-E Loan Program Loan Interest Rates as set forth in a memorandum to the Board dated July 14, 2023 (the “Board Memo”);

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of the Smart-E Loan Program Loan Interest Rates materially consistent with the Board Memo; 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.

8. Environmental Infrastructure Programs Updates and Recommendations – 15 minutes

- a. FY 2023 Report Out – Environmental Infrastructure Programs
- b. Sustainable CT

Resolution #14

WHEREAS, the Comprehensive Plan and FY 2024 budget identify Sustainable CT as a partner of the Connecticut Green Bank (“Green Bank”), including an allocation of \$150,000 from the FY 2024 Marketing budget;

WHEREAS, Connecticut Green Bank (“Green Bank”) staff has submitted to the Green Bank Board of Directors (the “Board”) a proposal for Green Bank to enter into a grant agreement with Sustainable CT for \$150,000 for programmatic purposes in order to increase our impact by applying the green bank model through Sustainable CT’s programs as explained in a memorandum to the Board dated July 18, 2023;

WHEREAS, Sustainable CT satisfies all criteria of the Strategic Selection and Award process of Green Bank operating procedures, namely: (1) special capabilities, (2) uniqueness, (3) strategic selection, (4) multiphase, follow-on investment and (5) urgency and timeliness;

WHEREAS, Green Bank staff recommends that the Board approve a grant between the Green Bank and Sustainable CT, generally in accordance with memorandum summarizing the grant to the Board in a memorandum dated July 18, 2023; and

WHEREAS, Green Bank would benefit from Sustainable CT’s public awareness and engagement program to increase participation in and development of Green Bank’s incentive and financing programs, especially those in development for environmental infrastructure. Through the partnership, Green Bank and Sustainable CT are driving investment in projects in communities throughout the state.

NOW, therefore be it:

RESOLVED, that the Board approves Green Bank staff to enter into a grant agreement with Sustainable CT as a strategic selection;

RESOLVED, that the President, Chief Investment Officer and General Counsel of Green Bank, and any other duly authorized officer of Green Bank, is authorized to execute and deliver on behalf of Green Bank any of the definitive agreements related to the Sustainable CT grant agreement and any other agreement, contract, legal instrument or document as he or she shall deem necessary or appropriate and in the interests of Green Bank and the ratepayers in order to carry out the intent and accomplish the purpose of the foregoing resolutions; and

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

9. Other Business – 5 minutes

- a. Greenhouse Gas Reduction Fund – Federal Engagement
- b. Other Business

10. Adjourn

Join the meeting online at
<https://meet.goto.com/583737517>
Or call in using your telephone:
Dial (646) 749-3122
Access Code: 583-737-517

***Next Regular Meeting: Friday, October 20, 2023 from 9:00-11:00 a.m.
Colonel Albert Pope Room at the
Connecticut Green Bank, 75 Charter Oak Avenue, Hartford***

ANNOUNCEMENTS

- **Mute Microphone** – in order to prevent background noise that disturbs the meeting, if you aren't talking, please mute your microphone or phone.
- **Chat Box** – if you aren't being heard, please use the chat box to raise your hand and ask a question.
- **Recording Meeting** – we continue to record and post the board meetings.
- **State Your Name** – for those talking, please state your name for the record.



CONNECTICUT
GREEN BANK SM

Board of Directors Meeting

July 21, 2023

Online Meeting

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 #3



1. **Meeting Minutes** – approve meeting minutes of June 23, 2023
2. **Incentive and Financing Programs, and Investments FY23** – report out on estimated progress to targets
3. **Board of Directors Committee Reports FY23** – report out for the Annual Comprehensive Financial Review
 - **Under \$500,000 and No More than \$1,000,000** – no transactions
 - **Under \$100,000 and No More than \$500,000** – no transactions
 - **PSA Requests for Approvals FY23** – report out on PSAs over \$75,000 per Operating Procedures
 - **Progress to Targets FY23** – overall report out, including J40
 - **Legislative Session 2023** – report outs on key session items

Board of Directors

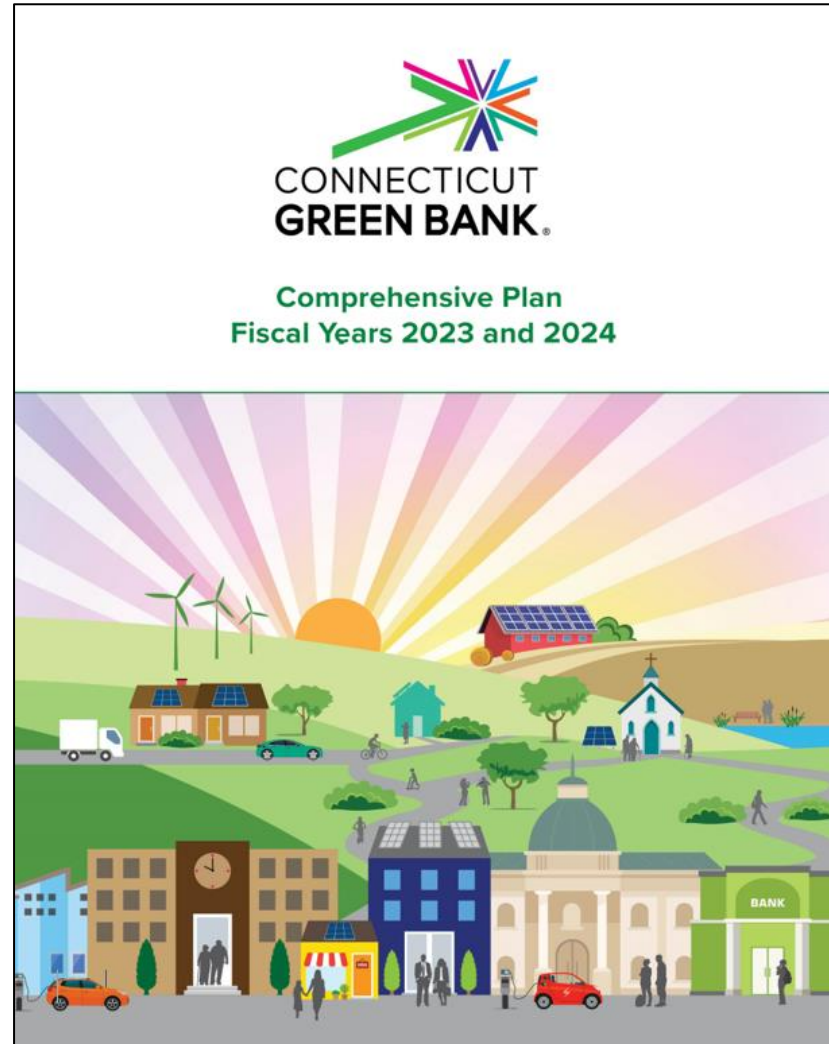
Agenda Item #4

Comprehensive Plan Recommendations and Updates

Comprehensive Plan

FY24 Revisions

- **Basic Edits** – TOC, footnotes, acronyms, links
- **Introduction** – updated to reflect urgency of the climate crisis and incorporate recent developments
- **Legislative Updates** – “clean energy” definition change and RSIP final report
- **Program Updates** – FY24 targets and budget, new measures (i.e., Smart-E Loan), and priority areas of focus (e.g., affordable housing)
- **Emerging Opportunities** – DOE-LPO-State Energy Financing Institutions, EPA’s Greenhouse Gas Reduction Fund, new areas of research (e.g., AI)
- **Other Items** – building continuous knowledge and understanding of community engagement (e.g., Communities LEAP, Sustainable CT)



Environmental Infrastructure

FY24 Program Updates



- **Strategic Assessment of Market Readiness** – opportunities across sectors and resources to launch new programs and markets
- **Build Team** – identify critical positions and/or contractual support to implement programs based on strategic assessment
- **Continuing Engagement** – begin “waste and recycling” primer, and continuing community engagement
- **Explore Advisory Committee** – within bylaws, ensure interagency coordination, and stakeholder engagement
- **Raising Resources** – identify, seek, and receive federal (e.g., GGRF) and foundation (e.g., PRI) funding, including Green Liberty Bonds
- **Launching Products** – Smart-E Loan (i.e., resilience and water) and C-PACE (i.e., resilience)
- **Continue Research and Development** – identify opportunities for earned revenues from environmental markets

Resolution #4



NOW, therefore be it:

RESOLVED, that Board has reviewed and approved the revisions to the Comprehensive Plan presented to the Board on July 21, 2023.

Board of Directors
Financing Programs Updates and Recommendations
Agenda Item #5a
FY23 Report Out – Financing Programs

Welcome Aboard

Senior Manager – Underwriting



Priyank Bhakta

Senior Manager
Underwriting
Investments Team

FY23 Report Out - PPA



Channel	PROJECTS			CAPITAL DEPLOYED			CAPACITY		
	Closed	Target	% to Target	Closed	Target	% to Target	Closed	Target	% to Target
<i>State</i>	9	5	180%	\$18,272,549	\$8,330,000	219%	8.4	4.9	171%
<i>Muni (Funded through IPC)</i>	5	0		\$1,735,760	\$0		0.6	0.0	
<i>MultiFamily</i>	0	6		\$0	\$1,380,000		0.0	0.6	
<i>Developers (Funded through IPC)</i>	1	4	25%	\$904,190	\$1,300,000	70%	0.2	0.6	33%
<i>Debt to 3rd Parties</i>	4	4	100%	\$1,848,950	\$2,700,000	68%	1.3	1.5	87%
Total	19	19	100%	\$22,761,449.00	\$13,710,000	166%	10.5	7.6	138%

FY23 Report Out - CPACE



	PROJECTS			CAPITAL DEPLOYED		
	Closed	Target	% to Target	Closed	Target	% to Target
CGB Funded	11	15	73%	\$7,182,639	\$7,000,000	103%
Private Lenders	4	8	50%	\$13,464,768	\$24,000,000	56%
Total	15	23	65%	\$20,647,407	\$31,000,000	67%

FY23 Report Out



Product Progress to Targets

Product/Program	Projects			Capital Deployed			Capacity (MW)		
	Closed	Target	% to Target	Closed	Target	% to Target	Closed	Target	% to Target
Commercial Lease	18	19	95%	\$21,857,259	\$13,710,000	159%	10.6	7.6	139%
CPACE	15	23	65%	\$20,647,407	\$31,000,000	67%	2.0	0.0	0%
SBEA	810	839	97%	\$15,383,737	\$18,600,000	83%	0.0	0.0	0%
Multi-Family Health and Safety	0	1	0%	\$0	\$892,500	0%	0.0	0.0	0%
Multi-Family Term	3	6	50%	\$4,392,500	\$1,380,000	318%	0.0	0.6	0%
Total Financing Programs	846	882	96%	\$62,280,903	\$64,202,500	97%	12.6	7.6	165%

Vulnerable Community Capital Deployment

Product/Program	Capital Deployed			
	Not Vulnerable	Vulnerable	Total	% Vulnerable
Commercial Lease	\$11,433,151	\$10,424,108	\$21,857,259	48%
CPACE	\$10,638,169	\$10,009,238	\$20,647,407	48%
Multi-Family Health and Safety				
Multi-Family Term		\$4,392,500	\$4,392,500	100%
Total Financing Programs	\$22,071,320	\$24,825,846	\$46,897,166	53%

Board of Directors
Financing Programs Updates and Recommendations
Agenda Item #5b
C-PACE Transaction – East Lyme

36 Industrial Park Rd, East Lyme



Ratepayer Payback

- **\$564,311** for a 172kW Solar PV System and roof replacement
- Projected savings are 16,369 **MMBtu** versus **\$564,311** 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) repayment of the C-PACE benefit assessment by the property owner.

36 Industrial Park Rd, East Lyme



Terms and Conditions

- **\$564,311** construction loan at 5% and term loan set at a fixed 5.75% over the 20-year term
- **\$564,311** loan against the property
 - ❑ Property valued at [REDACTED]
 - ❑ Loan-to-value ratio equals [REDACTED] & Lien-to-value ratio equals [REDACTED]
 - ❑ DSCR > [REDACTED]x

36 Industrial Park Rd, East Lyme CONNECTICUT GREEN BANK

Five W's

- **What?** Receive approval for a \$564,311 construction and term loans under the C-PACE program to Ledge Light Capital LLC to finance the construction of specified energy upgrades.
- **When?** Project to commence 2023.
- **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?** Ledge Light Capital LLC, the property owner of 36 Industrial Park Rd, East Lyme, CT.
- **Where?** 36 Industrial Park Rd, East Lyme, CT 06357

36 Industrial Park Rd, East Lyme

Project Tear Sheet



Address	36 Industrial Park Road, Niantic, CT 06357	
Owner	Ledge Light Capital LLC	
Proposed Assessment	\$564,311	
Term (years)	20	
Term Remaining (months)	Pending construction completion	
Annual Interest Rate	5.75%	
Annual C-PACE Assessment	\$48,158	
Savings-to-Investment Ratio	1.01	
Average DSCR over Term	[REDACTED]	
Lien-to-Value	[REDACTED]	
Loan-to-Value	[REDACTED]	
Projected Energy Savings (mmBTU)	Year 1	695
	Over 25 Year EUL	16,369
Estimated Cost Savings (incl. ZREC/Tariff and tax benefits)	Year 1 ¹	\$245,767
	Over 25 Year EUL	\$985,470
Objective Function	34.47 kBTU / ratepayer dollar at risk	
Location	Niantic, CT	
Type of Building	Industrial	
Year of Build	1975	
Building Size (sf)	19,932	
Year Acquired by Owner	2016	
As-Complete Appraised Value ²	[REDACTED]	
Mortgage Outstanding	[REDACTED]	
Mortgage Lender Consent	[REDACTED]	
Proposed Project Description	172 kW Solar PV and Roof Improvements	
Est. Date of Construction Completion	Pending closing	
Current Status	Awaiting Board of Directors Approval	
Energy Contractor	[REDACTED]	

36 Industrial Park Rd, East Lyme

Key Financial Metrics



Table 1. Financial Metrics over EUL	
Savings to Investment Ratio (SIR)	1.01
Project cost	\$548,108
Amount financed	\$548,108
Gross total cost savings over EUL	\$985,470
Total PACE + O&M payments over EUL	\$976,235
% financed	100%
Owner equity contribution	\$0
Interest rate	5.750%
Finance term, years	20

Table 2. Savings Summary	
Effective useful life – EUL (years)	25
Gross project cost	\$548,108
Closing cost	\$16,203
Financed amount (including closing costs)	\$548,108
First year electric energy generation (kWh/yr)	203,600
First year electric energy generation (MMBtu/yr)	695
Total electric generation over EUL (MMBtu)	16,369
First year revenue from generation (\$/yr)	\$40,917
EUL revenue from generation (\$)	\$780,620
Federal ITC	\$128,432
MACRS for solar	\$76,417

Resolution #5



NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated July 14, 2023, 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 Statute, 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
Financing Programs Updates and Recommendations
Agenda Item #5c
C-PACE Transaction – Bridgeport

1069 CT Avenue, Bridgeport

Ratepayer Payback



- **\$1,111,001** for a 334kW DC Solar PV and roof improvements.
- Projected savings are 33,016 **MMBtu** versus **\$1,111,001** 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) repayment of the C-PACE benefit assessment by the property owner.

1069 CT Avenue, Bridgeport

Terms and Conditions



- **\$1,111,001** construction loan at 5% and term loan set at a fixed 5.50% over the 15-year term
- **\$1,111,001** loan against the property
 - Property valued at [REDACTED]
 - Loan-to-value ratio equals [REDACTED] & Lien-to-value ratio equals [REDACTED]
- DSCR > [REDACTED]

1069 CT Avenue, Bridgeport



The Five W's

- **What?** Receive approval for a \$1,111,001 construction and term loans under the C-PACE program to WR CT Avenue, LLC to finance the construction of specified energy upgrades.
- **When?** Project to commence 2023.
- **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?** WR CT Avenue, LLC, the property owner of 1069 Connecticut Avenue, Bridgeport, CT .
- **Where?** 1069 Connecticut Avenue, Bridgeport, CT 06896

1069 CT Avenue, Bridgeport

Project Tear Sheet



Address	1069 Connecticut Avenue, Bridgeport, CT 06896	
Owner	WR CT Avenue, LLC	
Proposed Assessment	\$1,111,001	
Term (years)	15	
Term Remaining (months)	Pending construction completion	
Annual Interest Rate	5.50%	
Annual C-PACE Assessment	\$109,732	
Savings-to-Investment Ratio	1.08	
Average DSCR over Term	[REDACTED]	
Lien-to-Value	[REDACTED]	
Loan-to-Value	[REDACTED]	
Projected Energy Savings (mmBTU)	Year 1	1,402
	Over 20 Year EUL	33,016
Estimated Cost Savings (incl. ZREC/Tariff and tax benefits)	Year 1	\$971,049
	Over 20 Year EUL	\$1,779,228
Objective Function	33.65 kBtu / ratepayer dollar at risk	
Location	Bridgeport, CT	
Type of Building	Office / warehouse	
Year of Build	1939	
Building Size (sf)	106,726	
Year Acquired by Owner	2007	
As-Complete Appraised Value¹	[REDACTED]	
Mortgage Outstanding	[REDACTED]	
Mortgage Lender Consent	Pending	
Proposed Project Description	Solar PV and Roof Improvements	
Est. Date of Construction Completion	Pending closing	
Current Status	Awaiting Board of Directors Approval	
Energy Contractor	[REDACTED]	

1069 CT Avenue, Bridgeport

Key Financial Metrics



Table 1. Financial Metrics over EUL	
Savings to Investment Ratio (SIR)	1.08
Project cost	\$1,081,864
Amount financed	\$1,111,001
Gross total cost savings over EUL	\$1,779,228
Total PACE + O&M payments over EUL	\$1,645,985
% financed	100%
Owner equity contribution	\$0
Interest rate	5.500%
Finance term, years	15

Table 2. Savings Summary	
Effective useful life – EUL (years)	30
Gross project cost	\$1,081,864
Closing cost	\$29,137
Financed amount (including closing costs)	\$1,111,001
First year electric energy generation (kWh/yr)	410,665
First year electric energy generation (MMBtu/yr)	1,402
Total electric generation over EUL (MMBtu)	33,016
First year revenue from generation (\$/yr)	\$65,706
EUL revenue from generation (\$)	\$1,253,540
Federal ITC	\$309,228
MACRS for solar	\$216,460

Resolution #6



NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Green Bank Board of Directors (the “Board”) dated July 18, 2023, 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 Statute, 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
Financing Programs Updates and Recommendations
Agenda Item #5d
C-PACE Transaction – Bridgeport

1085 CT Avenue, Bridgeport

Ratepayer Payback



- **\$2,041,992** for a 563 kW solar array and roof improvements.
- Projected savings are 57,500 **MMBtu** versus **\$2,041,992** 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) repayment of the C-PACE benefit assessment by the property owner.

1085 CT Avenue, Bridgeport

Terms and Conditions



- **\$2,041,992** construction loan at 5% and term loan set at a fixed 5.50% over the 15-year term
- **\$2,041,992** loan against the property
 - Property valued at [REDACTED]
 - Loan-to-value ratio equals [REDACTED] & Lien-to-value ratio equals [REDACTED]
- DSCR > [REDACTED]

1085 CT Avenue, Bridgeport



The Five W's

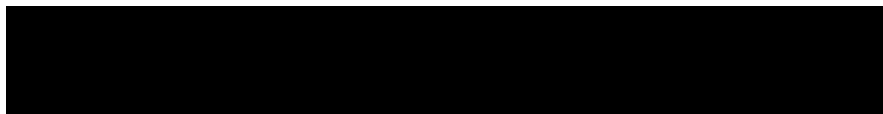
- **What?** Receive approval for a \$2,041,992 construction and term loans under the C-PACE program to WR CT Avenue, LLC to finance the construction of specified energy upgrades.
- **When?** Project to commence 2023.
- **Why?** Allow Green Bank to finance this C-PACE transaction, continue to build momentum 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?** WR CT Avenue, LLC, the property owner of 1085 Connecticut Avenue, Bridgeport, CT.
- **Where?** 1085 Connecticut Avenue, Bridgeport, CT 06896

1085 CT Avenue, Bridgeport

Project Tear Sheet



Address	1085 Connecticut Avenue, Bridgeport, CT 06896	
Owner	WR CT Avenue, LLC	
Proposed Assessment	\$2,041,992	
Term (years)	15	
Term Remaining (months)	Pending construction completion	
Annual Interest Rate	5.50%	
Annual C-PACE Assessment	\$186,538 ¹	
Savings-to-Investment Ratio	1.01	
Average DSCR over Term	[REDACTED]	
Lien-to-Value	[REDACTED]	
Loan-to-Value	[REDACTED]	
Projected Energy Savings (mmBTU)	Year 1	2,441
	Over 25 Year EUL	57,500
Estimated Cost Savings (incl. ZREC/Tariff and tax benefits)	Year 1	\$986,753
	Over 25 Year EUL	\$3,055,475
Objective Function	33.5 kBTU / ratepayer dollar at risk	
Location	Bridgeport, CT	
Type of Building	Office	
Year of Build	1946	
Building Size (sf)	97,899	
Year Acquired by Owner	2007	
As-Complete Appraised Value²	[REDACTED]	
Mortgage Outstanding	[REDACTED]	
Mortgage Lender Consent	Pending	
Proposed Project Description	563 KW Solar PV and Roof Improvements	
Est. Date of Construction Completion	Pending closing	
Current Status	Awaiting Board of Directors Approval	
Energy Contractor	[REDACTED]	



1085 CT Avenue, Bridgeport

Key Financial Metrics



Table 1. Financial Metrics over EUL	
Savings to Investment Ratio (SIR)	1.01
Project cost	\$2,236,922
Amount financed	\$2,041,992
Gross total cost savings over EUL	\$3,055,475
Total PACE + O&M payments over EUL	\$3,025,278
% financed	88%
Owner equity contribution	\$242,322
Interest rate	5.500%
Finance term, years	15

Table 2. Savings Summary	
Effective useful life – EUL (years)	30
Gross project cost	\$2,236,922
Closing cost	\$47,392
Financed amount (including closing costs)	\$2,041,992
First year electric energy generation (kWh/yr)	715,211
First year electric energy generation (MMBtu/yr)	2,441
Total electric generation over EUL (MMBtu)	57,500
First year revenue from generation (\$/yr)	\$114,434
EUL revenue from generation (\$)	\$2,183,156
Federal ITC	\$513,129
MACRS for solar	\$359,190

1085 CT Avenue, Bridgeport

Sculpted Amortization and SIR (no roof)



- This transaction requires a **sculpted amortization schedule** to ensure DSCR exceeds [REDACTED] over the term
- Low SIR (1.01) due to roof replacement work (cost = **\$954,100**)
- Excluding cost of roof replacement and still using a sculpted amortization, SIR is **1.72**

Resolution #7



NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Green Bank Board of Directors (the “Board”) dated July 18, 2023, 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 Statute, 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
Financing Programs Updates and Recommendations
Agenda Item #5e
C-PACE Transaction – Danbury

36 Kenosia Avenue, Danbury

Ratepayer Payback



- **\$2,424,500** for 730kW solar array and roof improvements.
- Projected savings are 71,370 **MMBtu** versus **\$2,424,500** 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) repayment of the C-PACE benefit assessment by the property owner.

36 Kenosia Avenue, Danbury

Terms and Conditions



- **\$2,424,500** construction loan at 5% and term loan set at a fixed 5.50% over the 15-year term
- **\$2,424,500** loan against the property
 - ❑ Property valued at [REDACTED]
 - ❑ Loan-to-value ratio equals [REDACTED] & Lien-to-value ratio equals [REDACTED]
 - ❑ DSCR > [REDACTED]

36 Kenosia Avenue, Danbury



The Five W's

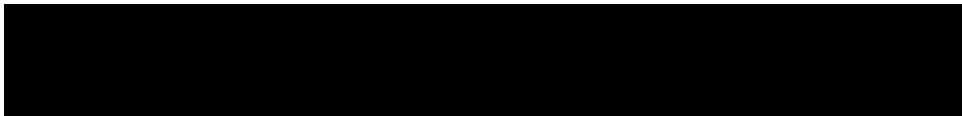
- **What?** Receive approval for a \$2,424,500 construction and term loans under the C-PACE program to 36 Kenosia Avenue Realty LLC to finance the construction of specified energy upgrades.
- **When?** Project to commence 2023.
- **Why?** Allow Green Bank to finance this C-PACE transaction, continue 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?** 36 Kenosia Avenue Realty LLC, the property owner of 36 Kenosia Avenue, Danbury, CT
- **Where?** 36 Kenosia Avenue, Danbury, CT 06896

36 Kenosia Avenue, Danbury

Project Tear Sheet



Address	36 Kenosia Avenue, Danbury, CT 06896	
Owner	36 Kenosia Avenue Realty LLC	
Proposed Assessment	\$2,424,500	
Term (years)	15	
Term Remaining (months)	Pending construction completion	
Annual Interest Rate	5.50%	
Annual C-PACE Assessment	\$145,424 ¹	
Savings-to-Investment Ratio	1.01	
Average DSCR over Term	[REDACTED]	
Lien-to-Value	[REDACTED]	
Loan-to-Value	[REDACTED]	
Projected Energy Savings (mmBTU)	Year 1	3,030
	Over 20 Year EUL	71,370
Estimated Cost Savings (incl. ZREC/Tariff and tax benefits)	Year 1	\$1,318,818
	Over 20 Year EUL	\$3,628,554
Objective Function	33.97 kBTU / ratepayer dollar at risk	
Location	Danbury, CT	
Type of Building	Industrial/warehouse	
Year of Build	1973	
Building Size (sf)	50,338	
Year Acquired by Owner	2002	
As-Complete Appraised Value²	[REDACTED]	
Mortgage Outstanding	[REDACTED]	
Mortgage Lender Consent	[REDACTED]	
Proposed Project Description	730.41 kW solar PV and roof improvements	
Est. Date of Construction Completion	Pending closing	
Current Status	Awaiting Board of Directors approval	
Energy Contractor	[REDACTED]	



36 Kenosia Avenue, Danbury

Key Financial Metrics



Table 1. Financial Metrics over EUL	
Savings to Investment Ratio (SIR)	1.01
Project cost	\$2,369,608
Amount financed	\$2,424,500
Gross total cost savings over EUL	\$3,628,554
Total PACE + O&M payments over EUL	\$3,591,976
% financed	100%
Owner equity contribution	\$0
Interest rate	5.500%
Finance term, years	15

Table 2. Savings Summary	
Effective useful life – EUL (years)	30
Gross project cost	\$2,369,608
Closing cost	\$54,892
Financed amount (including closing costs)	\$2,424,500
First year electric energy generation (kWh/yr)	887,720
First year electric energy generation (MMBtu/yr)	3,030
Total electric generation over EUL (MMBtu)	71,370
First year revenue from generation (\$/yr)	\$124,281
EUL revenue from generation (\$)	\$2,371,017
Federal ITC	\$631,399
MACRS for solar	\$626,138

36 Kenosia Avenue, Danbury



Sculpted Amortization and SIR (no roof)

- This transaction requires a **sculpted amortization schedule** to ensure average DSCR exceeds [REDACTED] over the term
- Low SIR (1.01) due to roof replacement work (cost = **\$264,944**)
- Excluding cost of roof replacement, and still using a sculpted amortization schedule, SIR is **1.27**

Resolution #8



NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Green Bank Board of Directors (the “Board”) dated July 18, 2023, 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 Statute, 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
Financing Programs Updates and Recommendations
Agenda Item #5f
C-PACE Transaction – Stamford

397 West Avenue, Stamford

Ratepayer Payback



- **\$568,546** for a 215.3 kW(DC) Solar PV System.
- Projected savings are **21,244 MMBtu** versus **\$568,546** 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) repayment of the C-PACE benefit assessment by the property owner.

397 West Avenue, Stamford

Terms and Conditions



- **\$568,546** construction loan at 5% and term loan set at a fixed 5.75% over the 20-year term
- **\$568,546** loan against the property
 - ❑ Property valued at \$6,800,000
 - ❑ Loan-to-value ratio equals [REDACTED] & Lien-to-value ratio equals [REDACTED]
 - ❑ DSCR > [REDACTED]

397 West Avenue, Stamford



The Five W's

- **What?** Receive approval for a \$568,546 construction and term loans under the C-PACE program to Benjamin Properties LLC to finance the construction of specified energy upgrades.
- **When?** Project to commence 2023.
- **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?** Benjamin Properties LLC, owner of 397 West Avenue, Stamford, CT
- **Where?** 397 West Avenue, Stamford, CT 06902

397 West Avenue, Stamford

Project Tear Sheet



Address	397 West Avenue, Stamford, Fairfield County, CT 06902	
Owner	Benjamin Properties LLC	
Proposed Assessment	\$568,546	
Term (years)	20	
Term Remaining (months)	Pending construction completion	
Annual Interest Rate	5.75%	
Annual C-PACE Assessment	\$48,204	
Savings-to-Investment Ratio	1.39	
Average DSCR over Term	[REDACTED]	
Lien-to-Value	[REDACTED]	
Loan-to-Value	[REDACTED]	
Projected Energy Savings (mmBTU)	Year 1	902
	Over 25 Year EUL	21,244
Estimated Cost Savings (incl. ZRECs and tax benefits)	Year 1 ¹	\$383,067
	Over 25 Year EUL	\$1,343,071
Objective Function	37.4 kBTU / ratepayer dollar at risk	
Location	Stamford, CT	
Type of Building	Industrial	
Year of Build	1996	
Building Size (sf)	32,773 sf	
Year Acquired by Owner	1996	
As-Complete Appraised Value²	[REDACTED]	
Mortgage Outstanding	[REDACTED]	
Mortgage Lender Consent	[REDACTED]	
Proposed Project Description	Rooftop solar PV (215.3kW)	
Est. Date of Construction Completion	Pending closing	
Current Status	Awaiting Board of Directors Approval	
Energy Contractor	[REDACTED]	

397 West Avenue, Stamford

Key Financial Metrics



Table 1. Financial Metrics over EUL	
Savings to Investment Ratio (SIR)	1.39
Project cost	\$552,240
Amount financed	\$568,546
Gross total cost savings over EUL	\$1,343,071
Total PACE + O&M payments over EUL	\$964,085
% financed	100%
Owner equity contribution	\$0
Interest rate	5.750%
Finance term, years	20

Table 2. Savings Summary	
Effective useful life – EUL (years)	30
Gross project cost	\$552,240
Closing cost	\$16,306
Financed amount (including closing costs)	\$568,546
First year electric energy generation (kWh/yr)	264,237
First year electric energy generation (MMBtu/yr)	902
Total electric generation over EUL (MMBtu)	21,244
First year revenue from generation (\$/yr)	\$53,104
EUL revenue from generation (\$)	\$1,013,107
Federal ITC	\$165,672
MACRS for solar	\$164,291

Resolution #9



NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated July 14, 2023, 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 Statute, 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
Financing Programs Updates and Recommendations
Agenda Item #5g
C-PACE Transaction – New Britain

191 John Downey Dr, New Britain

Ratepayer Payback



- **\$680,572** for a 227 kW (DC) Solar PV System and roof improvements.
- Projected savings are **21,613 MMBtu** versus **\$ 680,572** 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) repayment of the C-PACE benefit assessment by the property owner.

191 John Downey Dr, New Britain

Terms and Conditions



- **\$680,572** construction loan at 5% and term loan set at a fixed 5.50% over the 15-year term
- **\$680,572** loan against the property
 - ❑ Property valued at [REDACTED]
 - ❑ Loan-to-value ratio equals [REDACTED] & Lien-to-value ratio equals [REDACTED]
 - ❑ DSCR > [REDACTED]x

191 John Downey Dr, New Britain CONNECTICUT GREEN BANK

The Five W's

- **What?** Receive approval for a \$680,572 construction and term loans under the C-PACE program to E. R. Hitchcock Co Inc. to finance the construction of specified energy upgrades.
- **When?** Project to commence 2023.
- **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?** E. R. Hitchcock Company Co Inc., the owner of 191 John Downey Dr, New Britain, CT
- **Where?** 191 John Downey Dr, New Britain, CT 06051


191 John Downey Dr, New Britain

Project Tear Sheet



Address	191 John Downey Drive, New Britain, CT 06051	
Owner	E.R. Hitchcock Co Inc.	
Proposed Assessment	\$680,572	
Term (years)	15	
Term Remaining (months)	Pending construction completion	
Annual Interest Rate	5.50%	
Annual C-PACE Assessment	\$67,557	
Savings-to-Investment Ratio	2.02	
Average DSCR over Term	[REDACTED]	
Lien-to-Value	[REDACTED]	
Loan-to-Value	[REDACTED]	
Projected Energy Savings (mmBTU)	Year 1	918
	Over 25 Year EUL	21,613
Estimated Cost Savings (incl. ZREC/Tariff and tax benefits)	Year 1 ²	\$311,882
	Over 25 Year EUL	\$2,049,549
Objective Function	31.76 kBTU / ratepayer dollar at risk	
Location	New Britain, CT	
Type of Building	Industrial	
Year of Build	1967	
Building Size (sf)	21,550	
Year Acquired by Owner	1967	
As-Complete Appraised Value³	[REDACTED]	
Mortgage Outstanding	[REDACTED]	
Mortgage Lender Consent	n/a	
Proposed Project Description	227 kW Solar PV and Roof Improvements	
Est. Date of Construction Completion	Pending closing	
Current Status	Awaiting Board of Directors Approval	
Energy Contractor	[REDACTED]	

191 John Downey Dr, New Britain



Key Financial Metrics

Table 1. Financial Metrics over EUL	
Savings to Investment Ratio (SIR)	2.03
Project cost	\$661,534
Amount financed	\$680,572
Gross total cost savings over EUL	\$2,049,549
Total PACE + O&M payments over EUL	\$1,008,290
% financed	100%
Owner equity contribution	\$0
Interest rate	5.500%
Finance term, years	15

Table 2. Savings Summary	
Effective useful life – EUL (years)	30
Gross project cost	\$661,534
Closing cost	\$19,038
Financed amount (including closing costs)	\$680,572
First year electric energy generation (kWh/yr)	268,829
First year electric energy generation (MMBtu/yr)	918
Total electric generation over EUL (MMBtu)	21,613
Netting tariff REC revenue (total over 20 years) (\$)	\$275,103
Netting tariff electric revenue (total over 20 years)	\$1,537,632
Total revenue from generation (total over 20 years)	\$1,812,735
Federal ITC	\$148,473
MACRS for solar	\$88,341

Resolution #10



NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated July 14, 2023, 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 Statute, 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
Incentive Programs Updates and Recommendations
Agenda Item #6a
FY23 Report Out – Incentive Programs

FY2023 Report Out

Incentive Programs



Product/Program	Projects			Capital Deployed			Capacity (MW)		
	Closed	Target	% to Target	Closed	Target	% to Target	Closed	Target	% to Target
ESS – Commercial	30	30	100%	\$71,317,884	\$67,500,000	106%	49.6	45.0	110%
ESS – Residential	329	350	94%	\$6,909,794	\$14,875,000	46%	1.4	4.7	30%
Smart-E ³	1,249	960	130%	\$23,402,165	\$14,994,623	156%	0.5	0.2	252%
Total Incentive Programs	1,608	1,340	120%	\$101,629,843	\$97,369,623	104%	51.4	49.9	103%

Product/Program	Capital Deployed			
	Not Vulnerable	Vulnerable	Total	% Vulnerable
ESS – Commercial	\$43,939,530	\$27,378,354	\$71,317,884	38%
ESS – Residential	\$4,420,190	\$2,489,604	\$6,909,794	36%
Smart-E	\$18,051,511	\$10,127,310	\$28,178,822	36%
Total Incentive Programs	\$66,411,231	\$39,995,268	\$106,406,499	38%

Board of Directors

Incentive Programs Updates and Recommendations

Agenda Item #6b

ESS Transactions – ESS-00309(Suffield),
00376(Meriden), 00377(Meriden), 00522(Thompson),
00525(Milford), 00637(Newington)

ESS-00309 - Suffield



Company / Customer Name: Linde Industrial Gases (Praxair)

- 1 U Car St., Suffield, CT 06078

Company's Operation: Produces industrial gases for various branches of industry, commerce, science and research

Contractor: CPower

System Size: 17,985 (kW). 35,970 (kWh)

Total Cost: \$15,287,252.00

Expected Upfront Incentive: \$4,496,250

Expected 10-Year Performance Incentive: \$11,919,226

Benefit / Cost ratios:



RIM – Ratepayer Impact Measure	1.07
PCT – Participant Cost Test	1.21
PACT – Program Administrator Cost Test	1.14
SCT – Societal Cost Test	0.83
TRC – Total Resource Cost Test	0.84

ESS-00376 - Meriden



Company / Customer Name: Ragozzino Foods, Inc.

- 71 Chamberlain Hwy., Meriden, CT 06451

Company's Operation: Food packaging and labeling

Contractor: CPower

System Size: 2,480 (kW). 4,816 (kWh)

Total Cost: \$2,046,000.00

Expected Upfront Incentive: \$500,000.00

Expected 10-Year Performance Incentive:
\$1,595,857



Benefit / Cost ratios:

RIM – Ratepayer Impact Measure	1.07
PCT – Participant Cost Test	1.06
PACT – Program Administrator Cost Test	1.14
SCT – Societal Cost Test	0.71
TRC – Total Resource Cost Test	0.72

ESS-00377 - Meriden



Company / Customer Name: Ragozzino Foods, Inc.

- 10 Ames Ave., Meriden, CT 06451

Company's Operation: Food packaging and labeling

Contractor: CPower

System Size: 964 (kW). 1,928 (kWh)

Total Cost: \$819,400.00

Expected Upfront Incentive: \$241,000.00

Expected 10-Year Performance Incentive:
\$638,873

Benefit / Cost ratios:



RIM – Ratepayer Impact Measure	1.07
PCT – Participant Cost Test	1.21
PACT – Program Administrator Cost Test	1.14
SCT – Societal Cost Test	0.83
TRC – Total Resource Cost Test	0.84

ESS-00522 - Thompson



- Company / Customer Name: Numa Tools
 - 646 Thompson Rd., Thompson CT, 06277
- Company's Operation: Designs and sells rock drilling equipment.
- Contractor: CPower / Endurant Energy
- System Size: 964 (kW). 1,928 (kWh)
- Total Cost: \$819,400
- Expected Upfront Incentive: \$334,750
- Expected 10-Year Performance Incentive: \$638,873



Benefit / Cost ratios:

RIM – Ratepayer Impact Measure	0.97
PCT – Participant Cost Test	1.27
PACT – Program Administrator Cost Test	1.05
SCT – Societal Cost Test	0.83
TRC – Total Resource Cost Test	0.84

ESS-00525 - Milford

Company / Customer Name: Colonial Coatings

- 66 Erna Ave., Milford CT, 06461

Company's Operation: Provides coating services to the aerospace industry.

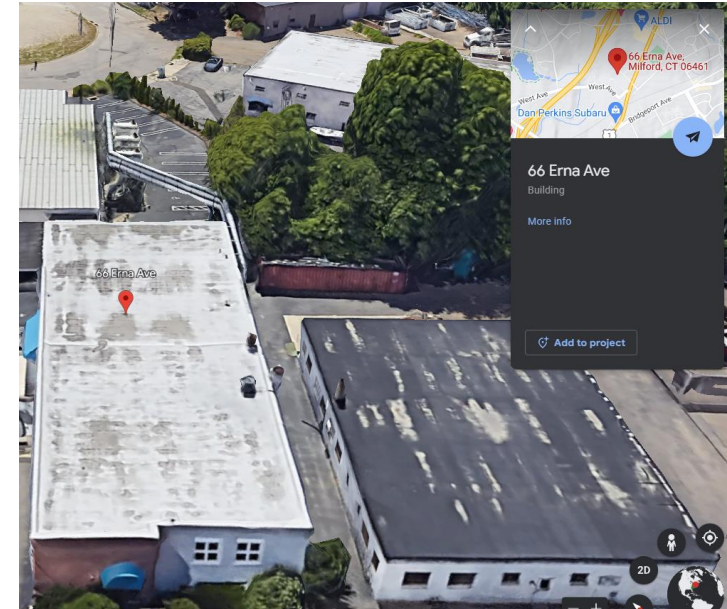
Contractor: CPower / Endurant Energy

System Size: 1,927 (kW). 3,854 (kWh)

Total Cost: \$1,637,952

Expected Upfront Incentive: \$481,750

Expected 10-Year Performance Incentive:
\$1,277,084



Benefit / Cost ratios:

RIM – Ratepayer Impact Measure	0.83
PCT – Participant Cost Test	1.20
PACT – Program Administrator Cost Test	0.86
SCT – Societal Cost Test	0.67
TRC – Total Resource Cost Test	0.67

ESS-00637 - Newington

Company / Customer Name: PCX
Newington

- 300 Fenn Rd., Newington CT, 06111

Company's Operation: PCX Newington is a supplier of mechanical systems to aerospace OEMs.

Contractor: CPower

System Size: 2,325 (kW). 6,975 (kWh)

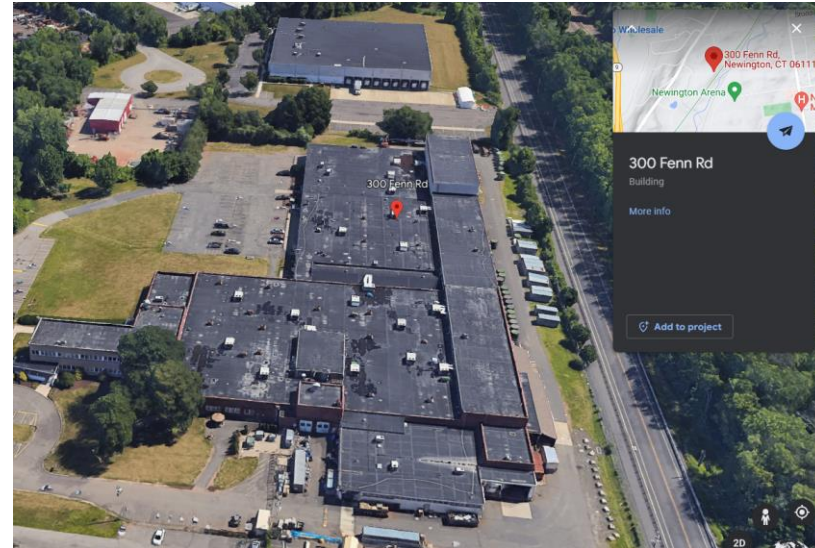
Total Cost: \$2,964,376

Expected Upfront Incentive: \$783,652.50

Expected 10-Year Performance Incentive:
\$2,311,276

Benefit / Cost ratios:

RIM – Ratepayer Impact Measure	2.28
PCT – Participant Cost Test	1.09
PACT – Program Administrator Cost Test	2.94
SCT – Societal Cost Test	2.25
TRC – Total Resource Cost Test	2.25



Resolution #11



NOW, therefore be it:

RESOLVED, that the Board hereby approves the estimated upfront incentives sought by three (3) non-residential projects above \$500,000 totaling \$5,779,813 consistent with the approved Procedures;

RESOLVED, that the Board hereby approves the estimated upfront incentives sought by three (3) non-residential projects individually under \$500,000, totaling \$1,057,500 consistent with the approved Procedures; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver any and all documents and regulatory filings as they shall deem necessary and desirable to effect the above-mentioned incentives consistent with the Procedures.

Board of Directors
Investment Program Updates and Recommendations
Agenda Item #7a
FY23 Report Out – Investments

Investments Progress to Targets



Program	Description	Activity Type	Budget			Actual						
			Rate	Term	Principal	Rate	Term	Principal	Total Investment Income	PV of Interest Income		
CPACE	JCI Associates LLC	Standard CPACE Loan	4%	10	\$ 7,000,000	5.0%	14.5	\$ 59,732				
	Mod Associates LLC					5.3%	19.5	\$ 470,978				
	Mill Meadow Development, LLC					4.5%	4.5	\$ 71,173				
	Unicorn Project LLC					5.8%	19.5	\$ 595,435				
	Aron 100 Sanford Street, LLC					5.3%	19.5	\$ 167,561				
	Mystic Business Park LLC					5.3%	19.5	\$ 514,999				
	Mystic Business Park II LLC					5.3%	19.5	\$ 372,473				
	Enko Realty LLC					5.5%	14.5	\$ 727,878				
	Car-Sue Realty LLC					5.8%	19.5	\$ 1,687,886			\$ 2,981,525	\$ 2,019,488
Capital Solutions/Strategic Investments	PosiGen CT LI Storage	Facility to support Posigen Expansion into Solar	4%	10	\$ 8,200,000	3.2%	9.9	\$ 6,000,000				
	C4C Co-Investment w Amalgamated	Support for Capital for Change for Smart-E				4.0%	2.9	\$ 10,000,000				
	PosiGen 1st and 2nd lien	Support for Posigen's continued solar deployment in CT				8.0%	2.9	\$ 2,902,592				
	Debt Facility at Bradley International Airport	Loan to the Airport Authority for Energy Efficiency				7.0%	1.9	\$ 2,500,000				
	Budderfly 2nd Round	Second line of credit for Budderfly				4.0%	5.9	\$ 5,000,000				
	PosiGen Tax Equity Bridge	Support for Posigen's continued solar deployment in CT				9.0%	0.9	\$ 6,000,000				
	C4C Lime Extension	1 year extension to support Capital for Change's multifamily energy lending				3.3%	1.1	\$ 6,500,000				
	FuelCell Energy Master Refinancing Facility	Refinancing for Bridgeport Fuel Cell				2.7%	6.9	\$ 10,000,000			\$ 5,263,193	\$ 4,167,586
	Total New Commitments										\$ 15,200,000	4.6%

Program	FY23 Budget	FY23 Actual
SBEA	\$ 3,720,000	\$ 3,115,310
Capital Solutions/Strategic Investments	\$ 8,200,000	\$ 18,870,663
LMI Programs (Posigen)	\$ 4,600,000	\$ 18,291,635
CPACE	\$ 7,000,000	\$ 2,659,283
PPA Dev	\$ 4,000,000	\$ 4,054,191
PPA Dev (State)	\$ 8,330,000	\$ -
Multifamily	\$ 1,580,000	\$ -
Total	\$ 37,430,000	46,991,081.81

Board of Directors
Investment Program Updates and Recommendations
Agenda Item #7b
Skyview Ventures

Skyview Loan Facility

Request to lend to new special purpose vehicle



- **Current arrangement** – CGB has advanced \$6.6M to a Skyview SPV to finance 41 commercial solar projects in CT (5.1 MW)
- **What is changing and why** – Skyview seeks to monetize federal investment tax credits (“ITC”) in new ways since the passing of the Inflation Reduction Act.
 - New methods of ITC monetization require new lending structure whereby CGB lends to newly established SPV
- **What is NOT changing** –
 - Loan facility size (\$10 M)
 - Diligence process
 - Debt service coverage ratio requires for projects
 - Parent level guaranty from Skyview Ventures

Resolution #12



NOW, therefore be it:

RESOLVED, that the Board approves staff’s request to modify the Existing Loan transaction consistent with the memorandum to the Board dated July 14, 2023 (“Board Memo”), to provide financing to New SPV;

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of the Existing Loan transaction on such terms and conditions as are materially consistent with the Board Memo; 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
Investment Program Updates and Recommendations
Agenda Item #7c
Smart-E Loan – Interest Rate Change

Smart-E Loan Program

Single Family Unsecured Loan (approved Nov 2013)



smart-e loan



<p>Market Segment</p>	<p>Residential Single Family (Credit Enhancement – IRB, LLR)</p>
<p>Product Summary</p>	<p>Partnership with thirteen (13) local community banks and credit union to provide easy access to affordable financing for comprehensive clean energy measures, including H&S. 5-20-year terms at rates ranging from 4.49-6.99% for \$500-\$50,000 of borrowing.</p>
<p>Support Needed</p>	<ul style="list-style-type: none"> Provide 2nd Loan Loss Reserve (LLR) up to 7.5% of losses Class A and 15.0% of losses Class B
<p>CT Results</p>	<p>6,316 projects for \$116.3 MM investment, 10.7 MW solar PV, over 85% projects have EE</p>

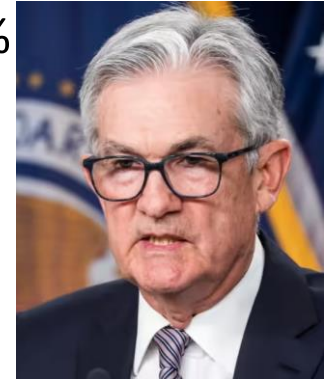


REFERENCES

Annual Comprehensive Financial Report FY 2022

Context for Modifying Loan Rates

- FRB raises interest rates from 0% to a target range of 5-5.25% over 14 months – the highest level since June 2006 and Sept 2007 (started Mar 2022)
- Smart-E “not-to-exceed” rates have been held steady since inception



Term	Current Smart-E Rate
5 Years	4.49%
7 Years	4.99%
10 Years	5.99%
12 Years	6.99%
15 Years	6.99%
20 Years	6.99%

30Y Mortgages: 7% - 7.25%

5-6Y Car Loans: 6% - 7.50%

Context for Modifying Loan Rates (2)



- Bank & Credit Union cost of funds have been increasing – but not uniform
 - Depends on several factors
 - Mix of Deposits (demand – time – CDs)
 - Loan to Deposits ratio
 - Business mix (C&I vs Consumer)
- Recent “road show” revealed 1-2 lenders “of concern” with “net interest margin” under particular stress (one lender advised “program suspension”)
- Staff considered several options – prefers a “targeted approach” to deal with lenders having acute margin issues
- Conceptualized a “linked deposits” approach – placing deposits with certain lenders at a “concessional rate” for a defined period (during high interest stress) – *Approved by Deployment Committee May 2023*
- ***Recently – additional lenders have voiced increasing concerns about their ability to continue as an “active” participant in the Program without an adjustment in loan rates to reflect higher market interest rates***
- Staff want to avoid several of our best lenders withdrawing from the Program or suspending new loan activity

Proposal to Modify Loan Rates



Term	Current Smart-E Rate	Proposed Smart-E Rate
5 Years	4.49%	5.99% (+1.50%)
7 Years	4.99%	5.99% (+1.00%)
10 Years	5.99%	6.99% (+1.00%)
12 Years	6.99%	7.49% (+0.50%)
15 Years	6.99%	7.49% (+0.50%)
20 Years	6.99%	7.49% (+0.50%)

30Y Mortgages: 7% - 7.25%

5-6Y Car Loans: 6% - 7.50%

Resolution #13



NOW, therefor be it:

RESOLVED, that the Board approves the recommendation by the staff to increase Smart-E Loan Program Loan Interest Rates as set forth in a memorandum to the Board dated July 14, 2023 (the “Board Memo”);

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of the Smart-E Loan Program Loan Interest Rates materially consistent with the Board Memo; 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
Environmental Infrastructure Program Updates and
Recommendations
Agenda Item #8a
FY23 Report Out

Environmental Infrastructure

FY23 Report Out



FY22 Re-Cap

- **Governance** – revised various documents (e.g., ROP, Bylaws, OP) to be consistent with PA 21-115
- **Bond Potential** – assessed potential for 50-year bond
- **Developing Products** – begin to explore product-line expansion beyond “clean energy” to include “environmental infrastructure” (i.e., Smart-E Loan and C-PACE)
- **Stakeholder Engagement** – outreach to various stakeholders including completion of primers (i.e., agriculture, land conservation, and parks and recreation)
- **Strategic Retreat** – developed FY23 Comprehensive Plan inclusion of “Environmental Infrastructure”

FY23 Progress

- **Building the Team** – hire Manager of Community Engagement (Ashley Stewart) and Director (Leigh Whelpton)
- **Continuing Engagement** – completion of guide (i.e., Environmental Markets) and primer (i.e., Water)
- **Raising Resources** – working with Insurance Department, received \$230K grant for CST and HMD in affordable housing, and engaging on EPA’s GGFR (now includes NBS)
- **Launching New Products** – BOD approved new Smart-E Loan measures
- **Conducting Research and Development** – working with TPL and Hartford community on Park Score, which will connect to public health

Board of Directors
Environmental Infrastructure Program Updates and
Recommendations
Agenda Item #8b
Sustainable CT

Sustainable CT Grant

Community Engagement



CGB Comprehensive Plan:

Sustainable CT and Green Bank partnership focuses on:

- **Community-level engagement** that is inclusive, diverse and "knitted";
- **Driving investment** in environmental projects led by communities;
- Creating a structure that harnesses all types of **capital for impact**;
- Developing a business model that **covers the cost of the program**; and
- Creating a **measurable impact** for municipalities and communities

Sustainable CT

- Launched in 2017 at annual CCM convention
- 131 of 169 CT towns registered and 61 towns certified
- 12 areas of voluntary action areas, includes CGB programs
- 9 towns earned Climate Leaders designation (launched in 2022)



Sustainable CT Grant

Impact

Key outcomes:

- 54 towns received municipal solar site reviews, 18 closed projects, 4.2MW solar
- 4 town hosted business webinars for C-PACE program, 5 towns doing active outreach
- Ongoing support for Fellows – since 2018, 77 Fellows providing 30,000+ hours direct support to communities, pipeline to CT green workforce



WOODBRIDGE, CT

Massaro Community Farm Learning Garden Solar Pavilion



HARTFORD, CT

"We Outside" Back To School Block Party in Harmony Garden



MANCHESTER, CT

Support Manchester Cycling Without Age!



Meet the 2023 Sustainable CT Fellows

Sustainable CT Grant

Increasing CGB Impact



\$150,000 Grant

- \$30,000 matching grant for Sustainable CT Fellows Program
- \$30,000 matching grants for projects through crowdfunding platform
- \$90,000 organizational support

Leveraging existing partnership to further align programs

- **Awareness:** as more towns become registered in the SCT program, they learn how CGB programs enable them to take action on sustainability projects with organizational support in accessing resources
- **Community - level Engagement**
 - CGB program funnel to munis: integrate CGB programs in new SCT Climate Leaders and Gold certification
 - Engage distressed communities: leverage SCT connections, align with Justice 40 goals
 - Environmental Infrastructure and resilience: get town input to guide program development
 - C-PACE, Solar PPA, Energy Storage: support outreach to target towns to achieve program goals

Sustainable CT Grant

Strategic Selection



- **Special Capabilities:** Sustainable CT has exceptional experience and expertise in municipal and community engagement and ability to further the CGB model
- **Uniqueness:** unique opportunity to leverage momentum and heightened awareness of Green Bank resources to further drive program activity and new program development
- **Strategic Importance:** CGB renewed emphasis on community engagement and public awareness is put into action through SCT program's broad reach
- **Multiphase; Follow-on Investment:** grant bolsters SCT capabilities to support municipalities' participation in CGB incentive and investment programs
- **Urgency and Timeliness:** timely renewal of grant support allows community support and engagement in our programs to continue uninterrupted

Resolution #14



NOW, therefore be it:

RESOLVED, that the Board approves Green Bank staff to enter into a grant agreement with Sustainable CT as a strategic selection;

RESOLVED, that the President, Chief Investment Officer and General Counsel of Green Bank, and any other duly authorized officer of Green Bank, is authorized to execute and deliver on behalf of Green Bank any of the definitive agreements related to the Sustainable CT grant agreement and any other agreement, contract, legal instrument or document as he or she shall deem necessary or appropriate and in the interests of Green Bank and the ratepayers in order to carry out the intent and accomplish the purpose of the foregoing resolutions; and

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

Board of Directors

Agenda Item #9a

Other Business

Greenhouse Gas Reduction Fund – Federal
Engagement

Greenhouse Gas Reduction Fund CONNECTICUT GREEN BANK

\$27 Billion ↓ GHGs + ↑ Benefit LIDACs + ↑ Private \$

- **Solar for All** – \$7 billion competition that will provide up to 60 grants to states, tribes, municipalities and nonprofits to expand the number of low-income and disadvantaged communities for investment in residential and community solar
- **Clean Communities Investment Accelerator** – \$6 billion competition that will fund 2-7 hub nonprofits with the plans and capabilities to rapidly build the clean financing capacity of specific networks of public, quasi-public, and nonprofit community lenders to ensure that households, small businesses, schools, and community institutions in low-income and disadvantaged communities have access to financing
- **National Clean Investment Fund** – \$14 billion competition that will fund 2-3 national nonprofits that will partner with private capital providers to deliver financing at scale to businesses, communities, community lenders, and others

Let the Games Begin!

Greenhouse Gas Reduction Fund



Board of Directors
Agenda Item #9b
Other Business

Board of Directors

Agenda Item #10

Adjourn



**BOARD OF DIRECTORS OF THE
CONNECTICUT GREEN BANK**

Regular Meeting Minutes

Friday, June 23, 2023
9:00 a.m. – 11:00 a.m.

A regular meeting of the Board of Directors of the **Connecticut Green Bank** (the “Green Bank”) was held on June 23, 2023.

Board Members Present: Bettina Bronisz, Thomas Flynn, Dominick Grant, Robert Hotaling, Adrienne Houël, Lonnie Reed, Brenda Watson, Hank Webster, Joanna Wozniak-Brown

Board Members Absent: John Harrity, Matthew Ranelli

Staff Attending: Emily Basham, David Beech, Priyank Bhakta, Joe Buonannata, Larry Campana, Sergio Carrillo, Shawne Cartelli, Louise Della Pesca, James Desantos, Catherine Duncan, Mackey Dykes, Brian Farnen, Bryan Garcia, Bert Hunter, Alex Kovtunencko, Cheryl Lumpkin, Daniel McGill, Jane Murphy, Ariel Schneider, Dan Smith, Eric Shrago, Fiona Stewart, Marianna Trief

Others present: None

1. Call to Order

- Lonnie Reed called the meeting to order at 9:04 am.

2. Public Comments

- No public comments.

Bryan Garcia acknowledged Binu Chandy and Victoria Hackett for their service to the Board of Directors and Chair Reed welcomed and introduced the newest members, Robert Hotaling and Hank Webster.

3. Consent Agenda

a. Meeting Minutes of April 21, 2023

Resolution #1

Motion to approve the meeting minutes of the Board of Directors for April 21, 2023.

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b. Under \$500,000 and No More in Aggregate than \$1,000,000 Staff Transaction Approvals

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 increased the aggregate not to exceed limit to \$1,000,000 (“Staff Approval Policy for Projects Under \$300,000”), on October 20, 2017 the Board increased the finding requests to less than \$500,000 (“Staff Approval Policy for Projects Under \$500,000”); and

WHEREAS, Green Bank staff seeks Board review and approval of the funding requests listed in the Memo to the Board dated June 23, 2023 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 \$500,000;

NOW, therefore be it:

RESOLVED, that the Board approves the funding requests listed in the Memo to the Board dated June 23, 2023 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 \$500,000 in an aggregate amount to exceed \$1,000,000 from the date of this Board meeting until the next Deployment Committee meeting.

c. Energy Storage Solutions – Non-Residential Projects

Resolution #3

WHEREAS, in its June 24, 2022 meeting the Connecticut Green Bank Board of Directors (Board) approved the implementation of an Upfront Incentive Project Approval procedures (“Procedures”) for non-residential projects under the Energy Storage Solutions Program (Program) with an estimated upfront incentive payment greater than \$500,000 and procedures for less than \$500,000;

WHEREAS, as part of the Procedures, Green Bank staff shall present Program projects via the consent agenda utilizing a standard form Tear Sheet process described in the memorandum to the Board dated June 24, 2022;

WHEREAS, in its December 9, 2022 meeting the Board approved updated Procedures to better align with the Program process;

NOW, therefore be it:

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RESOLVED, that the Board hereby approves the estimated upfront incentives for one Program project above \$500,000, totaling \$1,020,770.60 consistent with the approved Procedures and this memorandum dated June 16, 2023;

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver any and all documents and regulatory filings as they shall deem necessary and desirable to affect the above-mentioned incentives consistent with the Procedures.

Upon a motion made by Thomas Flynn and seconded by Bettina Bronisz, the Board of Directors voted to approve the Consent Agenda which includes Resolutions 1-3. None opposed or abstained. Motion approved unanimously.

4. Committee Recommendations and Updates

a. Budget, Operations, and Compensation Committee

i. Proposed FY24 Targets, Budget, and Investments

- Eric Shrago summarized the goals for Incentive programs, Financing programs, and reviewed the FY 2024 Budget including revenues, operating expenses, program incentives and grants, and non-operating expenses. He noted that although the revenues are decreasing due to the RGGI cap, there is an increase in earned revenues which is covering most of the decrease and is the highest ever amount of earned revenue forecasted. As well, the program incentives and grants decrease is primarily driven by a contingent \$5 million incentive to attract Federal Funding in the prior year which was not used. He reviewed the FY 2024 investments and strategic partner selections.

- Thomas Flynn asked for clarification about the increase in operating expenses, especially with the decrease in revenues. Eric Shrago answered that non-operating expenses are also decreasing, and the operating expense increase is viewed as an investment in order to seize opportunities brought on by the Inflation Reduction Act. Thomas Flynn commented that the IRA opportunities are one-time cash infusions and that it sounds like variable costs are being replaced with fixed costs, which is less than ideal from a CFO perspective. Eric Shrago responded that if the IRA funds are treated as one-time infusions, it seems less than what the reality is in that they are being invested into projects which is earning a return in order to recycle it into other ways that bring money to the Green Bank. Thomas Flynn agreed but expressed his concerns without knowing what those precise targets and ROI are. Bryan Garcia added that the investment tax credits which drive the Dream Bigger strategy repeat through 2033 and what is exciting is that those tax credits were slated to be reduced and ended, but the IRA actually extended and increased them and gained adders which are consistent with the Green Bank's vulnerable communities targets. The new adders are so new that it's hard to forecast for them, but the 40% investment in vulnerable communities is the goal and the Green Bank is just short of it but with the adders there should be more progress to it, or possibly even reach it.

- Thomas Flynn asked about the future revenue streams which are being gained by the questioned expenses. Eric Shrago answered that the P&L details are in the full Budget which can be forwarded, and that in terms of developing future pipelines, although the metrics for personnel growth compared to individual return on investment isn't something that has been explored in the past, it can be developed further in the future to better analyze those metrics.

- Thomas Flynn asked why five new staff members specifically is the right number of new staff. Eric Shrago responded with details about the new positions and what they would be responsible for. Thomas Flynn stated the hard numbers are still lacking and in

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terms of need and if positions would be cut should the need come to an end. Bert Hunter gave context as to the various aspects that are affecting the market and what is coming that will support the new positions and reassured that the Green Bank retains employment flexibility as an at-will employer. Thomas Flynn stated what he would be comfortable with is that before each is filled, a better understanding of the targets specific to the position. Lonnie Reed added that the growth of the Green Bank's responsibilities gives her confidence that no one hired would be unnecessary and would be bringing in new expertise not already present within current Staff but appreciated Thomas Flynn's careful examination and diligence. Thomas Flynn stated he just wanted to be sure the discipline in hiring is there as there have been consequences in the private sector that he wants to avoid here.

○ Bettina Bronisz asked about the Resolution, what was the rationale for extending the current PSAs for the Strategic Partners as well as the exception to IPC. Eric Shrago responded that all of them have been winners of RFPs in the last 3 years as well as having favorable pricing or adjacent reason to continue working with them. IPC was not subject to the RFP process because of their specific knowledge of their staff in terms of program administration and because they were originally a branch-out of the Green Bank. Brian Farnen added that there is a step-down process for the amount of money paid to IPC over the long-term arrangement in order to promote their independence and the arrangement with IPC went through Ethics. Eric Shrago clarified the step-down timeline specifics.

Robert Hotaling joined the meeting at 9:42 am.

Resolution #4

WHEREAS, Section 5.2.2 of the Bylaws of the Connecticut Green Bank's requires the recommendation of the Budget, Operations, and Compensation Committee (Committee) of the annual budget to the Connecticut Green Bank Board of Directors;

WHEREAS, on June 7, 2023, the Committee recommended the adoption of these targets and budget for FY2024 and the professional services agreements (PSAs) listed below;

NOW, therefore be it:

RESOLVED, the Board of Directors authorizes Green Bank staff to enter into new or extend existing PSAs with the following, contingent upon a competitive bid process having occurred in the last three years (except Inclusive Prosperity Capital):

- I. New Charter Technologies (Adnet Technologies, LLC parent company)
- II. Alter Domus (formerly Cortland)
- III. Clean Power Research, LLC
- IV. Craftsman Technologies
- V. C-TEC Solar, LLC
- VI. DNV (includes what was formerly ERS)
- VII. Go, LLC
- VIII. Guidehouse (formerly Navigant)
- IX. Inclusive Prosperity Capital
- X. PKF O'Connor Davies
- XI. Strategic Environmental Associates

For fiscal year 2024 with the amounts of each PSA not to exceed the applicable approved budget line item;

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RESOLVED, that the Green Bank Board hereby approves: (1) the FY2024 Targets and Budget.

Upon a motion made by Dominick Grant and seconded by Adrienne Houël, the Board of Directors voted to approve Resolution 4. None opposed or abstained. Motion approved unanimously.

b. Audit, Compliance, and Governance Committee

i. Quarterly Finance Package (Abridged)

- Bryan Garcia summarized the key messages to the quarterly financial statements which includes making an impact, mobilizing private investment, achieving sustainability, and monitoring state benefit allocations.

ii. Legislative Session – 2023 in Review

- James Desantos summarized the legislation that passed and didn't in the most recently finished session. There is no expectation for a special session during the summer or fall, pending Governor Lamont's pending execution of legislation of course. Bills that passed that impact the Green Bank include HB 6851, HB 6664, SB 7, and the two pieces that did not pass that the Green Bank would have been impacted by are SB 961 and HB 6764. James Desantos is also preparing a legislative summary broken into four sections: energy, infrastructure, quasi impacts, and general. Brian Farnen added that he and James Desantos will come back to the Board and ACG Committee before the next legislative session to establish a more robust process to have the Board and ACG Committee more involved in the future. He also explained part of the reason for HB 6764 (solar tax) not passing and stated the Green Bank may take a greater leadership position in support of it next session.

- Brenda Watson asked why SB 961 (healthy schools) failed as it seemed common sense. James Desantos responded that the reason was due to the \$25 million for it was not allocated in the budget or bond package. Brian Farnen added originally it was a larger, more contentious bill which had involved many other organizations and policy goals but it had been slimmed down through the process. James Desantos commented that there are already discussions happening as to what can be implemented outside of legislation to make progress on it until the next session.

- Bettina Bronisz asked if staff could have a discussion with her about HB 6664 in more detail offline due to time, as it has to go through the Treasurer's office.

5. Financing Programs Updates and Recommendations

a. C-PACE Transaction – Bridgeport

- This item has been deferred until the meeting in July 2023.

Resolution #5

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the "Statute"), 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");

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

WHEREAS, the Green Bank seeks to provide a **\$1,135,245** construction and (potentially) term loan under the C-PACE program to WR CT Avenue, LLC, the building owner of 1069 Connecticut Avenue, Bridgeport, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated June 16, 2023, 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 Statute, 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 affect the above-mentioned legal instruments.

b. C-PACE Transaction – Bridgeport

- This item has been deferred until the meeting in July 2023.

Resolution #6

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the "Statute"), the Connecticut Green Bank (Green Bank) is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

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

WHEREAS, the Green Bank seeks to provide a **\$1,285,211** construction and (potentially) term loan under the C-PACE program to WR CT Avenue, LLC, the building owner of 1085 Connecticut Avenue, Bridgeport, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater

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than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated June 16, 2023, 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 Statute, 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 affect the above-mentioned legal instruments.

c. C-PACE Transaction – Danbury

- This item has been deferred until the meeting in July 2023.

Resolution #7

WHEREAS, pursuant to Connecticut General Statute Section 16a-40g (the "Statute"), the Connecticut Green Bank (Green Bank) is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

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

WHEREAS, the Green Bank seeks to provide a **\$1,715,213.00** construction and (potentially) term loan under the C-PACE program to 36 Kenosia Avenue Realty LLC, the building owner of 36 Kenosia Avenue, Danbury, 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

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated June 16, 2023, 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 Statute, 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 affect the above-mentioned legal instruments.

6. Investment Updates and Recommendations
a. SHREC Warehouse Line of Credit Renewal

- Bert Hunter summarized the proposed renewal of the SHREC Warehouse for working capital purposes and history of the facility. The proposal is to keep the \$5 million size with expansion to \$10 million if needed, though it hasn't been necessary in the last year, and explained the terms.

Resolution #8

WHEREAS, the Company intends to enter into a Fourth Amendment to Credit Agreement (the "**Fourth Amendment**"), which amends the Credit Agreement dated as of July 31, 2019, as amended by that certain First Amendment to Credit Agreement and Other Loan Documents dated July 28, 2020, and by that certain Second Amendment to the Credit Agreement and Other Loan Documents dated July 30, 2021, and by that certain Third Amendment to the Credit Agreement and Other Loan Documents dated August 24, 2022 (collectively, the "**Credit Agreement**") with Webster Bank, National Association ("**Webster**"), as Administrative Agent (in such capacity, as "**Agent**") and as a lender and Liberty Bank, as Lead Arranger and as a lender (Webster and Liberty Bank, in their capacities as lenders, are referenced to herein collectively as, "**Webster-Liberty**"), whereby Webster-Liberty have made available to the Company a Five Million and 00/100 Dollar (\$5,000,000) secured revolving line of credit, with a Five Million and 00/100 Dollar (\$5,000,000) uncommitted accordion feature ("**Loan**") for the purpose of financing the Tranche 5-2021 and Tranche 6-2022 (as defined in the Credit Agreement) Solar Home Renewable Energy Credit program ("**Tranche 5-2021 SHRECs**" and "**Tranche 6-2022 SHRECs**" respectively); and

WHEREAS, the Company and Green Bank have requested that Webster-Liberty and Agent modify the Loan and the terms of the Credit Agreement pursuant to the Fourth Amendment, in order to, among other things, extend the term of the Loan; and

WHEREAS, to induce Webster-Liberty to continue to extend the Loan to the Company, Green Bank shall continue to guarantee the Loan pursuant to the Guaranty Agreement dated as of July 31, 2019 made by Green Bank in favor of Agent (the "**Guaranty**"); and

WHEREAS, along with a general repayment obligation by the Company, Agent and/or Webster-Liberty are secured by, and the Company and the Green Bank are authorized to secure the Loan and the Guaranty by, among other things, granting to Agent and/or Webster-Liberty (i) a first priority security interest in all assets of the Company, (ii) a collateral assignment of and security interest in all of the Company's and the Green Bank's right, title and interest in the Tranche 5-2021 SHRECs and Tranche 6-2022 SHRECs and all rights and obligations relating thereunder under those certain Master Purchase Agreements for the Purchase and Sale of Solar Home Renewable Energy Credits by and between the Green Bank and each of The Connecticut Light & Power Company d/b/a Eversource Energy and The United Illuminating Company each dated February 7, 2017, each as amended by those certain First Amendments, dated July 30, 2018, as further amended by those certain Second Amendments, dated April 1, 2020, (as further amended from time to time, the "**MPAs**"), which collateral assignment and security interest shall include any and all rights to payment of money under the MPAs with respect to Tranche 5-2021 and Tranche 6-2022 SHRECs and those other attributes and rights associated with the Tranche 5-2021 and Tranche 6-2022 SHRECs, (iii) a collateral assignment

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of all of the right, title and interest in that certain Sale and Contribution Agreement by and between Green Bank and the Company, dated as of the date of the closing of the Loan, including without limitation, any security interest created under the Sale and Contribution Agreement, and (iv) a security interest in the MPA Collection Account, the Webster Interest Reserve Account and the Liberty Interest Reserve Account (the security interests listed in (i)-(iv) hereof, together, the "**SHREC Collateral**"); and

WHEREAS, Webster-Liberty has requested and the staff of Green Bank has recommended that the Board provide these resolutions approving the renewal and extension of the Loan and the Green Bank's guarantee thereof in accordance with the terms of the Fourth Amendment.

NOW, therefore be it:

RESOLVED, that the Board of the Green Bank hereby authorizes, ratifies and approves the Loan, as modified, from Webster-Liberty to the Company pursuant to the terms of the Fourth Amendment and any ancillary documentation and authorizes, ratifies, directs and approves the Company's and the Green Bank's entering into the Fourth Amendment and any ancillary documentation to which it is a party and of each other contract or instrument to be executed and delivered by the Company and the Green Bank in connection with the transactions contemplated by the Fourth Amendment; and be it further

RESOLVED, that the Board of the Green Bank hereby reauthorizes, ratifies and reaffirms the Green Bank's obligations under the Guaranty; and be it further

RESOLVED, that each of the Company and the Green Bank be and it hereby is, authorized to continue to secure the Loan and the Guaranty by, among other things, granting to Agent and/or Webster-Liberty a first priority security interest in and to the Company's property, including, without limitation the SHREC Collateral; and be it further

RESOLVED, that the Board hereby authorizes, directs, ratifies and approves Green Bank's and the Company's execution, delivery and performance of the Fourth Amendment and any ancillary documentation and all of the Green Bank's and the Company's obligations under the Fourth Amendment and any ancillary documentation; and be it further

RESOLVED, that the actions of Bryan Garcia in his capacity as the President and Chief Executive Officer of Green Bank ("**Garcia**"), Roberto Hunter in his capacity as the Chief Investment Officer of Green Bank ("**Hunter**") and Brian Farnen in his capacity as General Counsel and Chief Legal Officer of Green Bank ("**Farnen**"; and together with Garcia and Hunter, each an "**Authorized Signatory**"), are hereby ratified and approved with regard to the negotiation, finalization, execution and delivery, on behalf of Green Bank and the Company, of the Fourth Amendment and any ancillary documentation and any other agreements that they deemed necessary and appropriate to carry out the foregoing objectives of Green Bank and/or the Company, and any other agreements, contracts, legal instruments or documents as they deemed necessary or appropriate and in the interests of Green Bank and/or the Company in order to carry out the intent and accomplish the purpose of the foregoing resolutions are hereby ratified and approved; and be it further

RESOLVED, that the Authorized Signatories be, hereby are, acting singly, authorized, empowered and directed, for and on behalf of the Green Bank and the Company (in the Green Bank's capacity as the sole member of the Company), to execute and deliver the Fourth

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Amendment and the other Modification Documents; and be it further

RESOLVED, that any other actions taken by any Authorized Signatory are hereby approved and ratified to the extent that such Authorized Signatory or Authorized Signatories have deemed such actions necessary, appropriate and desirable to affect the above-mentioned legal instrument or instruments.

Upon a motion made by Adrienne Houël and seconded by Brenda Watson, the Board of Directors voted to approve Resolution 8. None opposed or abstained. Motion approved unanimously.

b. Total Energies Distribution Generation USA (Funding for State Projects)

- Emily Basham summarized the SolarMAP portfolio history and progress to current. Marianna Trief reviewed the current status of the projects and process to find long-term owners for the projects. Today staff are requesting authorization to enter into a binding term sheet to offer debt and to enter into a contract associated with sale and assignment of the projects.
 - Robert Hotaling asked if the Green Bank has a senior position on the debt and Marianna Trief responded the Green Bank would be the only lender to the transactions though there will be tax equity.
 - Robert Hotaling asked what the possibility of renegotiating the debt is by Total and is there a possibility the owner would come back to renegotiate later for a better rate. Marianna Trief answered it is a binding rate so there is no expected renegotiation of that and there has been diligence done to prepare it as transparent as possible to avoid potential renegotiation needs. Mackey Dykes added that staff has been very clear about how attractive the term sheet is as the market has changed over time. The reason for future discussions is if there are unexpected issues and costs incurred eventually and if the Green Bank wanted to reduce the rate in order to keep the PPA rate the same.
 - Bettina Bronisz asked for more information about the buyer, Total Energies. Marianna Trief gave a history on Total Energies and some information about their scale as they recently acquired SunPower Energy. Mackey Dykes added that they are one of the largest international companies and although they are an oil company originally, they are delving into renewable energies. Bert Hunter confirmed the credit rating for the parent entity of Total.

Resolution #9

WHEREAS, Connecticut Green Bank (“Green Bank”) staff has been working with State of Connecticut (“State”) agencies to develop certain pilot solar projects (“Projects”) identified in the Memorandums June 16, 2023 (the “Memo”) and submitted to the Green Bank Board of Directors (the “Board”);

WHEREAS, Green Bank has developed the State Pilot Projects to the point of construction mobilization and of awarding the long term ownership of the State Pilot Projects via a competitive process to Total Energies or a subsidiary thereof (“PPA Owner”), and

WHEREAS, Green Bank desires to sell and assign the State Pilot Projects and enter into a binding term sheet and subsequent long term debt financing with PPA Owner, as described in the Memo.

NOW, therefore be it:

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RESOLVED, that the Board of Directors approves (1) long term debt funding to the PPA Owner for the State Pilot Projects, in a total not-to-exceed amount of \$12,000,000, and (2) the sale and assignment of the Projects to the PPA Owner.

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 continue to develop and finance the Projects materially consistent with the Memo; 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 affect the above-mentioned legal instruments.

Upon a motion made by Robert Hotaling and seconded by Bettina Bronisz, the Board of Directors voted to approve Resolution 9. None opposed or abstained. Motion approved unanimously.

c. Posigen Second Lien Credit Facility Modification Request (Maturity Extension)

- Bert Hunter summarized the proposal to modify the PosiGen Senior Facility to refinance and increase the 1st lien facility by Brookfield which the Board approved at a prior meeting and resulted in a \$250 million facility which replaced Forbright Bank's \$140 million facility. For the Green Bank's 2nd lien facility, an amendment is needed in order to match Brookfield's maturity date of April 21, 2027.

Resolution #10

WHEREAS, the Connecticut Green Bank ("Green Bank") has an existing partnership with PosiGen, Inc. (together with its affiliates and subsidiaries, "PosiGen") to support PosiGen in delivering a solar lease (including battery storage) and energy efficiency financing offering to LMI households in Connecticut;

WHEREAS, the Green Bank Board of Directors (the "Board") previously authorized and later amended (in March 2023) approval for Green Bank's participation in a new back leverage credit facility (the "New BL Facility") collateralized by all of PosiGen's solar PV system and energy efficiency leases in the United States as part of PosiGen's strategic growth plan, as well as a facility to finance performance based incentives earned by PosiGen on its solar PV portfolio in Connecticut;

WHEREAS, PosiGen has now successfully closed on the New BL Facility;

WHEREAS, PosiGen has requested an extension of the maturity date associated with the Green Bank's participation as 2nd lien lender in the New BL Facility, as explained in the memo submitted to the Board on June 16, 2023 (the "Board Memo");

NOW, therefore be it:

RESOLVED, that the Board authorizes the Green Bank to amend its existing 2nd lien commitment as part of the New BL Facility to extend the maturity date of its position to April 21, 2027, to align with the new first lien lender, Brookfield Asset Management, as set forth in the

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Board Memo;

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

Upon a motion made by Dominick Grant and seconded by Brenda Watson, the Board of Directors voted to approve Resolution 10. None opposed or abstained. Motion approved unanimously.

d. Green Liberty Notes – Program Expansion Request

- David Beech summarized the proposal to expand the Green Liberty Note program and the history with the last 6 issuances.
 - Robert Hotaling asked for clarification about the broker for the transaction and for a high level explanation of the growth factor across the nation as well as possible expansion options. David Beed clarified the crowd funding nature of the Green Liberty Notes and that Raise Green is the strongest partner available even if they aren't the largest company, but there are strategic benefits which play a part in the decision to continue with them. Bryan Garcia also explained some of the other reasons to continue to partnership with Raise Green instead of expanding to other platforms such as IndieGoGo.

Resolution #11

WHEREAS, at the July 2021 meeting of the Connecticut Green Bank ("Green Bank") Board of Directors ("Board"), the Board authorized staff to enter into an agreement (the "Issuer Agreement") with Raise Green, Inc. an entity registered with and approved by the Securities and Exchange Commission (the "SEC") as a crowdfunding funding portal, to issue bonds in an amount not to exceed \$2,000,000 under the SEC's Regulation Crowdfunding.

WHEREAS, subsequently, the Green Bank launched and closed 6 Crowdfunding issuances named "Green Liberty Notes".

WHEREAS, staff has cultivated investor demand and managed investor relations, principal and interest repayment and reinvestment, capitalization table management, accounting, and all other operational and legal requirements of the program.

WHEREAS, staff wishes to build on the successes of the program, which include four consecutive oversubscribed issuances, and ensure that new investors have the opportunity to invest in the Green Bank's efforts to fight climate change in Connecticut.

NOW, therefore be it:

RESOLVED, that the Green Bank is authorized to modify its existing agreement (the "Issuer Agreement") with Raise Green, Inc. an entity registered with and approved by the SEC as a crowdfunding funding portal, to issue bonds in an amount not to exceed \$2,705,000, in quarterly issuances not to exceed \$250,000 for the first six issuances and \$350,000 for the subsequent four issuances (the "Bonds") under the SEC's Regulation Crowdfunding regulations. The Bonds shall be issued by a subsidiary of CEFIA Holdings and shall be issued by and for the sole purposes of the subsidiary and shall not be issued by or on behalf of the Green Bank. The proceeds of the Bonds shall be used by the subsidiary to acquire certain loans under the Small

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Business Energy Advantage program (the “Loans”), and to pay the costs of issuance on the Bonds; and

RESOLVED, that the payment of debt service on the Bonds shall be made solely from the revenues from the Loans and other revenues available to the subsidiary. CEFIA Holdings and/the Green Bank are authorized to assign and transfer all or any portion of their rights in the Loans to the subsidiary as security for the payment of the Bonds and the interest thereon. The Green Bank shall not guarantee or pledge any other revenues for the payment of debt service on the Bonds; and

RESOLVED, that in connection with the Bonds, the President and any Officer of Green Bank (each, an “Authorized Representative”) be, and each of them acting individually hereby is, authorized and directed in the name and on behalf of the Green Bank, to prepare and deliver, or cause to be prepared and delivered, the Issuer Agreement with Raise Green and any other documents required under the SEC’s Regulation Crowdfunding, including a Form C, a Subscription Agreement, a Note and any other documents or instruments necessary to complete the Bond issuance, in such form and with such changes, insertions and omissions as may be approved by an Authorized Representative, as he or she deems advisable for the purpose of issuing the Bonds (collectively, the “Financing Documents”) and the execution and delivery of said Financing Documents shall be conclusive evidence of any approval required by this Resolution; and

RESOLVED, that to the extent that any act, action, filing, undertaking, execution or delivery authorized or contemplated by this Resolution has been previously accomplished, all of the same are hereby ratified, confirmed, accepted, approved and adopted by the Board as if such actions had been presented to the Board for its approval before any such action’s being taken, agreement being executed and delivered, or filing being effected.

Upon a motion made by Adrienne Houël and seconded by Robert Hotaling, the Board of Directors voted to approve Resolution 11. None opposed or abstained. Motion approved unanimously.

e. Historic Cargill Falls – Extension of Forbearance

- Marianna Trief summarized the history of the Cargill Falls project and updates regarding the lead, mold and other health concerns, all of which have been treated, tested, abated, and are now in compliance with Department of Health notices. She explained there is also a lawsuit in process and so some units are paying into escrow until that is resolved. The Department of Housing is fully informed and working with parties involved to restabilize the property. As for the hydroelectric turbines, the larger turbine has been running continuously since end of May 2023 but generally has been delayed due to testing of the turbines and not having a team on-site to fix the various issues with the equipment. The team expects these issues to be resolved by the end of July. She reviewed the request to allow for a deferral of the upcoming C-PACE payments until and including December 2023.

Resolution #12

WHEREAS, pursuant to Conn. Gen. Stat. 16a-40g, the Connecticut Green Bank (“Green Bank”) has established a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy (“C-PACE”);

Subject to Changes and Deletions

WHEREAS, the Board of Directors (“Board”) of the Green Bank previously approved a construction and term financing, secured by a C-PACE benefit assessment lien, not-to-exceed amount of \$8,100,000 (the “Current Lien”) to Historic Cargill Falls Mill, LLC (“HCFM”), the property owner of 52 and 58 Pomfret Street, Putnam, Connecticut, to finance the construction of specified clean energy measures (the “Project”) in line with the State’s Comprehensive Energy Strategy and the Green Bank’s Strategic Plan;

WHEREAS, the Project includes numerous energy conservation measures that align with the goals and priorities of the Green Bank’s multifamily housing program;

WHEREAS, Green Bank staff now seeks approval to defer C-PACE loan payments from HCFM (“Loan Deferral”) until December 31, 2023 as explained in the memorandum in respect of this matter submitted to the Board on June 16, 2023 (the “Board Memo”).

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 Deferral consistent with the Board Memo; 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 affect the above-mentioned legal instrument.

Upon a motion made by Robert Hotaling and seconded by Brenda Watson, the Board of Directors voted to approve Resolution 12. None opposed or abstained. Motion approved unanimously.

7. Incentive Programs Updates and Recommendations

a. Environmental Markets Guide

b. Water Primer

- Bryan Garcia reviewed the progress made to complete the Environmental Markets and Water guides and primers in FY23, in addition to the previous sections completed in FY22 and those which will be completed in FY24, including Waste and Recycling. He noted the Water primer is different than the other segments because specifically in the Green Bank Statute are provisions recognizing the leadership on its Clean Water Revolving Funds to continue to function and identify other opportunities to support water.

- Bettina Bronisz asked if the water primers would be coming soon and Bryan Garcia stated yes, it will be posted to the website soon but it is completed and is in the packet provided.

8. Other Business

a. Greenhouse Gas Reduction Fund – Federal Engagement

- Bryan Garcia reviewed the GGRF within the IRA which is largely modeled after the CT Green Bank. The EPA recently released a three-part implementation framework for the GGRF including a National Clean Investment Fund, Clean Communities Investment Accelerator, and Solar For All grant program. He highlighted the recent public comments on the GGRF made by

Subject to Changes and Deletions

the Green Bank and information shared based on the team's experiences.

b. Residential Solar Investment Program – Policy Closeout

- Bryan Garcia provided a brief summary of the closeout to the RSIP program, which included filing an independent evaluation report after the program reached its target, which has determined that Connecticut has the most effective, most efficient, and most equitable residential solar program in the northeast, including New York and New Jersey.

c. Other Business

- None

Hank Webster had to leave the meeting at 11:01 am.

9. Executive Session – Personnel Related Matters

Upon a motion made by Hank Webster and seconded by Robert Hotaling, the Board of Directors entered Executive Session at 11:00 am.

The Board of Directors returned from Executive Session at 11:16 am.

Resolution #13

WHEREAS, Section 5.3.2 of the Bylaws of the Connecticut Green Bank's (Green Bank) charges the Budget, Operations, and Compensation Committee with the oversight of human resources policies and practices and on Jun 7th the committee recommended to the Board the approval of the discussed severance agreement;

NOW, therefore be it:

RESOLVED, that the Green Bank Board hereby approves of the discussed severance agreement.

Upon a motion made by Robert Hotaling and seconded by Adrienne Houël, the Board of Directors voted to approve Resolution 13. None opposed or abstained. Motion approved unanimously.

10. Adjourn

Lonnie Reed adjourned the Board of Directors Meeting at 11:17 am.

Respectfully submitted,

Lonnie Reed, Chairperson



Memo

To: Board of Directors of the Connecticut Green Bank
From: Lucy Charpentier, Bryan Garcia, Sergio Carrillo, and Eric Shrago
Cc: Mackey Dykes, Brian Farnen, and Bert Hunter
Date: July 21, 2023
Re: Incentive Programs – Program Performance towards Targets for FY 2023 – Preliminary

Overview

FY 2023 Incentive Program targets and performance are focused on Smart-E and the Energy Storage Solutions (ESS) Program, the battery storage incentive program that launched in January 2022. These programs are grant or subsidy program(s) (including credit enhancements – interest rate buydowns and loan loss reserves) that deploy clean energy, while at the same time cost recover expenses associated with these programs within the business unit – including, but not limited to, incentives, administrative expenses, and financing expenses, as well as loan loss reserves on the balance sheet.

Performance Targets and Progress¹

With respect to the Comprehensive Plan approved by the Board of Directors of the Green Bank on June 24, 2022 and revised on January 20, 2023 the following are the performance targets for FY 2023 and progress made to targets for the Incentive Programs (see Table 1) as of June 30, 2023.

Table 1. Program Performance Targets and Progress Made to the Comprehensive Plan for FY 2023

Key Metrics	Program Performance Revised Targets	Program Progress ²	% of Goal
Capital Deployed ³	\$97,369,623	\$101,629,843	104%

¹ This memo is preliminary. An updated final memo will be produced for the October Board Meeting and it will be used as part of our process for employee evaluation and merit compensation.

² Includes only closed transactions. ESS projects are considered closed when the application for upfront incentives are approved.

³ Capital Deployed is used to measure Investment actuals to targets and it includes fees related to financing costs and adjustments for which are not included in the Gross System Cost. It represents: the Amount Financed or Gross System Cost (whichever is greater) for CPACE, the Amount Financed for Residential financing products and the Gross System Cost for all other programs.

Key Metrics	Program Performance Revised Targets	Program Progress ²	% of Goal
Investment at Risk ⁴		\$21,841,648	
Private Capital ⁵		\$84,564,852	
Deployed (MW)	49.9	51.4	103%
# of Loans/Projects	1,180	1,608	136%
Leverage Ratio		4.9	

In summary, for Incentive Programs in FY 2023, there were 1,608 projects (achieving 136% of the goal) requiring \$101.6M of investment (achieving 104% of the goal) that led to the deployment of 51.4 MW of clean energy (achieving 103% of the goal), that delivered a leverage ratio of 4.9 for private to public funds invested. It should be noted that although the projects are approved for incentives through ESS, and considered closed per the Green Bank process, that many of the projects are not installed, nor operational. Many, if not all, of the non-residential battery storage systems are in the interconnection queue with the EDCs seeking review and approval to interconnect. These queues are long and pose a risk to project completion.

Executive Summary for the Incentive Programs

- Public Act 21-53, An Act Concerning Energy Storage, passed by the Connecticut General Assembly in the 2021 legislative session and signed into law by Governor Lamont on June 16, 2021, set energy storage deployment targets of 300 MW by 2024, 650 MW by 2027, and 1000 MW by 2030. Shortly after, PURA issued a Proposed Final Decision in Docket No. 17-12-03RE03 on July 1, 2021, establishing a battery storage program for the state aimed at deploying 580 MW of behind-the-meter (BTM) battery storage by 2030.
- During FY23, the commercial and industrial (C&I) portion of the ESS Program saw an unanticipated interest level. By March of 2023, the Program had approved projects for the 50 MW of storage capacity available in Tranche 1 for the 2022-2024 period, and Program Administrators made the decision to open the second tranche of C&I capacity. The 100 MW of storage capacity in Tranche 2, originally scheduled to be available for the 2025-2027 timeframe, opened on March 15, 2023.
- In FY23, the ESS program approved a total of 30 non-residential applications totaling 49.6 MW of capacity, of which 41.3 MW belonged to Tranche 1, and the remaining 8.3 MW to Tranche 2.
 - The average size of a non-residential project application is 583.7 kW of power rating for small⁶ size customers; 1,836 kW for medium size customers; and 2,069.4 kW for large size customers
 - The average system capacity of a non-residential project application is 2,412.9 kWh of energy capacity for small customers, 5,735.6 kWh for medium customers; and 5,728.9 kWh for large customers.

⁴ Includes funds from the Clean Energy Fund, RGGI allowance revenue, and other resources that are managed by the Connecticut Green Bank that are committed and invested in subsidies, credit enhancements, and loans and leases, which are cost recoverable.

⁵ Private Investment is based on the Gross System Cost and includes adjustments related to financing costs.

⁶ Small customers with annual peak demand less than 250 kW, medium customers with annual peak demand between 250 kW and 500 kW; and large customers with annual peak demand greater than 500 kW.

- In FY23, the ESS program approved a total of 168 residential applications totaling 1.4 MW of installed capacity.
 - The average size of a residential system is 8.1 kW of power rating and 18.5 kWh of energy capacity
- Between residential and non-residential projects, Green Bank staff has committed more than \$21 million in upfront incentives, while at the same time enabled capital deployment of more than \$78 million.

Energize CT Smart-E Loan

- **Volume:** With increased expectations around demand, targets for FY2023 for Smart-E were raised. As a result of the ‘Special Offer’ that concluded at the end of CY 2022 (an interest rate buy down to 2.99% for certain qualifying technologies) plus consistent volume throughout the year, Smart-E exceeded it’s targets with 1,249 loans (130%) for \$23.4 million (exceeding the \$14.9 million target by 156%) and delivered 0.5 MW of solar capacity surpassing the target by 252%.
- **Deployment of ARRA-SEP Funds:** The interest rate buydown special offers that took place during FY 2023 resulted in a total disbursement of \$ 562,949.97 committed in FY 2023 for 235 closed loans across the nine participating Smart-E lenders.
- **Contractor Outreach:** The Smart-E program team prioritized contractor outreach in FY 2023 to ensure continued engagement with the program. This broader outreach has focused on the program process and how to better serve customers. The program team has been working on a review with Catalyst Consulting that is presently wrapping up and has flagged opportunities to make the program run more smoothly and to grow.
- **Lender Outreach:** The program team did a review of activity and check-in with all participating lenders to further identify opportunities for efficiency and growth.

The following are brief descriptions of the progress made under the last comprehensive plan for the Incentive Programs:

Energize CT Smart-E Loan

A credit enhancement program that uses a loan loss reserve to attract private capital from local credit unions and community banks. The product provides low interest (i.e. 4.49-6.99%) unsecured loans at flexible terms (i.e. between 5 to 20 years) for technologies that are consistent with the goals of the Comprehensive Energy Strategy. Occasionally, the Smart-E program offers special financing rates to promote certain technologies using ARRA funds for interest rate buydowns.

Table 4. Energize CT Smart-E Loan Overview for FY 2023⁷

Program Data	Approved ⁸	Closed	Total
Projects	650	1,249	1,899
Installed Capacity (MW)	0.1	0.5	0.6

⁷ All lender data is as of 6/30/2023 except for Capital for Change and Nutmeg State Financial Credit Union.

⁸ This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

Lifetime Clean Energy Produced (MWh)	3,490	104,287	107,777
Annual Combined Energy Generated & Saved (MMBtu)	11,541	17,445	28,986
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$4,318	\$0	\$4,318
Loans or Leases (\$'s)	\$0	\$0	\$0
Total Green Bank Investment (\$'s)	\$4,318	\$0	\$4,318
Private Capital (\$'s)	\$11,129,625	\$28,178,822	\$39,308,446
Direct Job Years	4	159	164
Indirect & Induced Job Years	5	207	213
Lifetime Tons of CO2 Emissions	213	757	970

Table 5. Energize CT Smart-E Loans by Channel for FY 2023

Smart-E Loan Channel	Closed	% of All Loans
Battery Storage	5	0%
EV	0	0%
Health And Safety	5	0%
Home Performance	90	7%
HVAC	1,076	86%
Solar	61	5%
Unknown ⁹	12	1%
Total	1,249	100%

Table 6. Energize CT Smart-E Credit Scores for FY 2023

Credit Ranges										
Unknown	-579	580-599	600-639	640-679	680-699	700-719	720-739	740-779	780+	Grand Total
	2	9	36	91	128	139	133	345	366	1,249

For a breakdown of Smart-E loan volume and investment, see Table 7 for Vulnerable Communities, Table 8 for Above/Below 100% LMI, Table 9 for Above/Below 80% and Table 10 for Environmental Justice Communities as designated by DECD and DEEP. It should be noted that Smart-E is not an income targeted program and only in the second half of FY18 began offering the expanded credit-challenged version of the program, opening new opportunities to partner with mission-oriented lenders focused on reaching consumers in underserved lower income markets.

Table 7. Energize CT Smart-E Closed Activity in Vulnerable Communities for FY 2023

Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Vulnerable	514	41%	0.2	32%	\$10,127,310	36%
Not Vulnerable	735	59%	0.3	68%	\$18,051,511	64%
Total	1,249	100%	0.5	100%	\$28,178,822	100%

⁹ Channel not known due to trailing documentation/timing of data pull.

Table 8. Energize CT Smart-E Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% LMI for FY 2023

LMI Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Below 100% AMI	410	33%	0.1	26%	\$7,980,325	28%
Above 100% AMI	813	65%	0.4	69%	\$19,593,404	70%
Unknown	26	2%	0.0	4%	\$605,092	2%
Total	1,249	100%	0.5	100%	\$28,178,822	100%

Table 9. Energize CT Smart-E Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 80% CRA for FY 2023

CRA Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Below 80% AMI	162	13%	0.1	11%	\$2,930,033	11%
Above 80% AMI	1,063	85%	0.4	89%	\$24,703,944	88%
Unknown	24	2%	0.0	3%	\$544,844	2%
Total	1,249	100%	0.5	100%	\$28,178,822	100%

Table 10. Energize CT Smart-E Closed Activity in Environmental Justice Communities for FY 2023

EJ Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
EJ Community	317	25%	0.1	15%	\$6,035,900	21%
Not EJ Community	932	75%	0.4	85%	\$22,142,921	79%
Total	1,249	100%	0.5	100%	\$28,178,822	100%

Energy Storage Solutions (ESS)

Energy Storage Solutions (ESS) is the energy storage program that launched in Connecticut in January of 2022, designed to help Eversource and UI customers install energy storage at their home or business. Energy storage backup can help customers across the state – from homeowners and small business owners to industrial manufacturers and critical infrastructure facilities – be more secure in the face of our changing climate. ESS helps create a more reliable, resilient Connecticut, especially for vulnerable communities and those hit hardest by storm-related outages.

Table 11. ESS Commercial Overview for FY 2023

Program Data	Approved¹⁰	Closed	Total
Projects	0	30	30
Installed Capacity (MW)	0	48.7	48.7
Lifetime Clean Energy Produced (MWh)	0	0	0
Annual Combined Energy Generated & Saved (MMBtu)	0	0	0
Subsidies (\$'s)	\$0	\$20,617,424	\$20,617,424
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$0	\$0	\$0
Total Green Bank Investment (\$'s)	\$0	\$20,617,424	\$20,617,424
Private Capital (\$'s)	\$0	\$50,700,460	\$50,700,460
Direct Job Years	0	0	0
Indirect & Induced Job Years	0	0	0
Lifetime Tons of CO2 Emissions	0	0	0

For a breakdown of ESS Commercial volume and investment, see Table 12 for Vulnerable Communities, Table 13 for Above/Below 100% LMI, Table 14 for Above/Below 80% and Table 15 for Environmental Justice Communities as designated by DECD and DEEP.

Table 12. ESS Commercial Closed Activity in Vulnerable Communities for FY 2023

Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Vulnerable	13	43%	18.3	38%	\$27,378,354	38%
Not Vulnerable	17	57%	30.4	62%	\$43,939,530	62%
Total	30	100%	48.7	100%	\$71,317,884	100%

Table 13. ESS Commercial Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% LMI for FY 2023

LMI Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Below 100% AMI	11	37%	16.5	34%	\$24,137,999	34%
Above 100% AMI	18	60%	30.9	64%	\$45,379,076	64%
Unknown	1	3%	1.3	3%	\$1,800,809	3%
Total	30	100%	48.7	100%	\$71,317,884	100%

Table 14. ESS Commercial Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 80% CRA for FY 2023

CRA Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
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¹⁰ This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

Below 80% AMI	6	20%	10.9	23%	\$15,315,512	21%
Above 80% AMI	23	77%	36.5	77%	\$54,201,563	76%
Unknown	1	3%	1.3	3%	\$1,800,809	3%
Total	30	100%	47.4	100%	\$71,317,884	100%

Table 15. ESS Commercial Activity in Environmental Justice Communities for FY 2023

EJ Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
EJ Community	9	30%	13.5	28%	\$20,077,911	28%
Not EJ Community	21	70%	35.2	72%	\$51,239,973	72%
Total	30	100%	48.7	100%	\$71,317,884	100%

Table 16. ESS Residential Overview for FY 2023

Program Data	Approved ¹¹	Closed	Total
Projects	0	329	332
Installed Capacity (MW)	0	2.3	2.3
Lifetime Clean Energy Produced (MWh)	0	0	0
Annual Combined Energy Generated & Saved (MMBtu)	0	0	0
Subsidies (\$'s)	\$0	\$1,224,223	\$1,235,179
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$0	\$0	\$0
Total Green Bank Investment (\$'s)	\$0	\$1,224,223	\$1,235,179
Private Capital (\$'s)	\$0	\$5,685,571	\$5,782,426
Direct Job Years	0	0	0
Indirect & Induced Job Years	0	0	0
Lifetime Tons of CO2 Emissions	0	0	0

For a breakdown of ESS Commercial volume and investment, see Table 17 for Vulnerable Communities, Table 18 for Above/Below 100% LMI, Table 19 for Above/Below 80% and Table 20 for Environmental Justice Communities as designated by DECD and DEEP.

Table 17. ESS Residential Closed Activity in Vulnerable Communities for FY 2023

Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Vulnerable	190	58%	1.1	50%	\$2,489,604	36%
Not Vulnerable	139	42%	1.1	50%	\$4,420,190	64%
Total	329	100%	2.3	100%	\$6,909,794	100%

¹¹ This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

Table 18. ESS Residential Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% LMI for FY 2023

LMI Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Below 100% AMI	26	8%	0.2	8%	\$880,421	13%
Above 100% AMI	302	92%	2.1	91%	\$6,004,827	87%
Unknown	1	0%	0.0	0%	\$24,546	0%
Total	329	100%	2.3	100%	\$6,909,794	100%

Table 19. ESS Residential Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 80% CRA for FY 2023

CRA Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Below 80% AMI	169	51%	1.0	43%	\$1,757,407	25%
Above 80% AMI	160	49%	1.3	57%	\$5,152,387	75%
Unknown	0	0%	0.0	0%	\$0	0%
Total	329	100%	2.3	100%	\$6,909,794	100%

Table 20. ESS Residential Activity in Environmental Justice Communities for FY 2023

EJ Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
EJ Community	173	53%	1.0	44%	\$1,964,582	28%
Not EJ Community	156	47%	1.3	56%	\$4,945,212	72%
Total	329	100%	2.3	100%	\$6,909,794	100%

For a breakdown of the use of the Green Bank resources for Incentive Programs, see table 21 below.

Table 21. Distribution of Green Bank Funds Invested in Projects and Programs through Subsidies, Credit Enhancements, and Loans and Leases for FY 2023

Program	Subsidies		Credit Enhancements		Loans and Leases		Total ¹²
Smart-E Loan	\$0	0%	\$0 ¹³	0%	\$0	0%	\$0

¹² Totals are adjusted to remove projects that overlap programs.

¹³ Interest rate buydowns of \$549,949 and loan loss reserve of \$2,106,033 are not included.

ESS - Commercial	\$20,617,424	100%	\$0	0%	\$0	0%	\$20,617,424
ESS - Residential	\$1,224,223	100%	\$0	0%	\$0	0%	\$1,224,223
Total	\$21,841,648	100%	\$0	0%	\$0	0%	\$21,841,648

Of these programs, the following is a breakdown of their contributions made thus far towards the performance target and the human resources required to implement them (see Table 22):

Table 22. Program Progress Made in FY 2023¹⁴

Key Metrics	Smart-E	ESS - Commercial	ESS - Residential	Total Program Progress ¹⁵
Date of Program Approval	Nov 2012			
Date of Program Launch	Nov 2013	Jan-2022	Jan-2022	
Ratepayer Capital at Risk	\$0 ¹⁶	\$20,617,424	\$1,224,223	\$21,841,648
Private Capital	\$28,178,822	\$50,700,460	\$5,685,571	\$84,564,852
Deployed (MW)	0.5	48.7	2.3	51.4
# of Loans/Installations	1,249	30	329	1,447
Lifetime Production (MWh)	104,287	0	0	104,287
Annual Combined Energy Generated & Saved (MMBtu)	17,445	0	0	17,445

“Top 5” Headlines

The following are the “Top 5” headlines for the Incentive Programs:

Smart-E and Energy Storage Solutions

1. [Connecticut utilities launch next 100MW tranche of 580MW customer-sited ESS procurement](#)

Energy Storage News, March 16, 2023

In March 2023, the co-administrators of the Energy Storage Solutions program announced that the second 100 MW tranche for commercial projects was opening ahead of schedule due to demand. This announcement was covered by many trade publications (such as the one linked here) as well as local media.

2. [Smart-E Loan Increases its Maximum Loan Amount to Accommodate Increased Homeowner Demand](#)

Electric Energy Online, June 5, 2023

Due to increased interest in more comprehensive energy-saving technologies, like solar plus storage, the Green Bank announced an update to its Smart-E loan program designed to help more homeowners take advantage of low-interest financing to access energy-saving

¹⁴ Includes only closed transactions.

¹⁵ Totals are adjusted to remove projects that overlap programs.

¹⁶ Interest rate buydowns of \$549,949 and loan loss reserve of \$2,106,033 are not included.

technologies. The loan's maximum amount will increase to \$50,000 (and with exception approval from the lending partner, up to \$75,000) and the FICO score minimum will lower to 580 to help lower credit score homeowners.

3. [Soaring energy prices pushing Connecticut buildings toward solar](#)
WTNH, February 7, 2023

Although the RSIP has ended, the Connecticut Green Bank is still viewed by many homeowners and the media as a go-to resource on solar. A sharp increase in utility bills in early 2023 increased attention on the benefits of going solar, and two members of the incentive team (Bill Colonis and Sara Pyne) were interviewed by a New Haven based TV channel as part of a report on solar.

4. [Electrifying Your Home's Systems Can Save You Money In The Long Run](#)
Middletown Press, Feb. 21, 2023

Another example of the Green Bank as a thought leader and trusted advocate for homeowners, this article featured Ed Kranich and Bill Colonis providing helpful tips for home electrification and solar plus storage.

5. [PowerSmart Campaign Being Launched in Guilford: What You Need To Know](#)
Guilford Patch, May 25, 2023

Long-time Green Bank collaborator SmartPower is running municipal campaigns to raise awareness about solar and storage. One of these 28 campaigns launched in Guilford in May. These campaigns are designed to provide homeowners with information about battery storage technology and the incentives available to reduce the cost of these systems.

Lessons Learned

Based on the implementation of the Incentive Programs thus far, the following are the key lessons learned:

Energize CT Smart-E Loan

- **Heat pump market is growing.**
 - Heat pump awareness is growing amongst consumers, resulting in steady heat pump volume (especially air source) during FY 2023. Due to increase cost of fossil fuel-based heating, customers sought renewable heating and cooling alternatives. However, financing and contractor education remains crucial for continued deployment of heat pumps.
- **Contractor engagement remains critical for continue growth and sustainability of Smart-E.**
 - FY2023 was the first year we dedicated a resource to focus on Smart-E contractors. This has resulted in continued growth in volume and a better connection to those who are responsible for the distribution of our product. This connection is providing valuable insights that are advising how we adjust our offering.
- **We need to engage with our Lenders more.**
 - The program's lenders, for the most part, recognize the value that the program brings to them. Our conversations have presented opportunities to work more

closely with the lenders, in some cases enabling them to continue to offer the Smart-E Loan.

Energy Storage Solutions

- **Installers and developers participation.**
 - Without the presence of large developers and third-party owners (e.g. Tesla, Sunnova, and Sunrun) battery deployment in ESS has proved to be a challenge. The Green Bank recognizes the role that these companies play in the deployment of solar and battery storage, and is actively engaged with them to ensure they join the Program in 2023.
- **Optionality available to customers impede deployment of batteries in ESS.**
 - The availability of Connected Solutions, a battery storage program similar to ESS, has played a crucial role in the slow deployment of batteries in ESS. Green Bank staff is working with utilities and PURA to find solutions to this issue.
- **Battery vendor participation.**
 - Throughout 2022, Green Bank staff researched and contacted several battery storage manufacturers to discuss ESS, with positive results. Electriq, HomeGrid, Pylontech, FranklinWH, Generac, and Fortress are some of the battery manufacturers that joined ESS as a result of direct outreach by Green Bank staff.

Incentive Programs FY 2024 Targets

Of programs being implemented in the Incentive Programs, the following is a breakdown of the key targets:

Table 23. Number of Projects, Capital Deployed, and Clean Energy Deployed (MW)

Program	# of Projects	Capital Deployed	Clean Energy Deployed (MW)	Ann. GHG Emissions Avoided (TCO2)
Energy Storage Solutions	279	\$81,529,412	52.1	
Residential	250	\$8,000,000	2	-
C&I	29	\$73,529,412	50.0	-
Energize CT Smart-E Loan	944	17,852,737	0.3	17,203
Total	1,211	\$98,998,148	52.3	17,203

For the Incentive Programs, there are 20.12 full time equivalent staff members supporting five (5) different products and programs.

Memo

To: Board of Directors of the Connecticut Green Bank
From: Lucy Charpentier, Mackey Dykes, Bryan Garcia, and Eric Shrago
Cc: Brian Farnen and Bert Hunter
Date: July 21, 2023
Re: Financing Programs – Program Performance towards Targets for FY 2023 – Preliminary

Overview

The Green Bank's core business is financing clean energy projects. The Green Bank's focus is to leverage limited public funds to attract and mobilize multiples of private capital investment to finance these projects. In other words, the use of resources by the Green Bank (e.g., public revenues including the Clean Energy Fund ("CEF") and RGGI allowance proceeds) are to be invested with the expectation of principal and interest being paid back over time (i.e., earned revenues). For example, the Green Bank administers the Commercial Property Assessed Clean Energy ("C-PACE") program. Through C-PACE, the Green Bank and other lenders provide capital to building owners to make clean energy improvements on their properties or build more efficient new properties that is paid back over time from a benefit assessment on the building. The interest earned from these types of investments, over time, is expected to cover the operational expenses and a return for the Financing Programs business unit.

The Green Bank has a number of clean energy financing products, including:

- **C-PACE**¹ – enables building owners to pay for clean energy improvements over time through a voluntary benefit assessment on their property tax bills. This process makes it easier for building owners to secure low-interest capital for up to 25 years to fund energy improvements and is structured so that energy savings more than offset the benefit assessment.
- **Green Bank Solar PPA** – third-party ownership structure to deploy solar PV systems for commercial scale end-use customers (e.g., businesses, nonprofits, municipal and state governments, affordable multifamily properties, etc.) that uses a multi-year PPA to finance projects while reducing energy costs for the host customer.
- **Small Business Energy Advantage ("SBEA")** – Eversource Energy administered on-bill commercial energy efficiency loan program for small businesses, in partnership with low-cost capital provided by Amalgamated Bank with a credit enhancement from the Green Bank (i.e., subordinated debt) and the Connecticut Energy Efficiency Fund (i.e., loan loss guaranty and interest rate buydown).

¹ CGS 16a-40g

- **Multifamily Products** – defined as buildings with 5 or more units, the Green Bank provides a suite of financing options through IPC and Capital for Change (a Community Development Financial Institution or “CDFI”) that support property owners to assess, design, fund, and monitor high impact clean energy and health & safety improvements for their properties.
- **Special Projects** – as opportunities present themselves, the Green Bank from time-to-time invests as part of a capital structure in various projects (e.g., fuel cell, hydropower, food waste to energy, state “Lead by Example” energy service agreements, etc.). These projects are selected based on the opportunity to expand the organization’s experience with specific technologies, advance economic development in a specific locale, or to drive adoption of clean energy that would otherwise not occur, while also earning a rate of return.

Performance Targets and Progress²

With respect to the Comprehensive Plan approved by the Board of Directors of the Green Bank on June 24, 2022 and revised on January 20, 2023, the following are the performance targets for FY 2023 and progress made to targets for the Financing Programs (see Table 1) as of June 30, 2023.

Table 1. Program Performance Targets and Progress Made to the Comprehensive Plan for FY 2023

Key Metrics	Program Performance Revised Targets	Program Progress ³	% of Goal
Capital Deployed ⁴	\$64,202,500	\$62,280,903	97%
Investment at Risk ⁵		\$17,862,350	
Private Capital ⁶		\$44,418,553	
Deployed (MW)	7.6	12.6	165%
# of Loans/Projects	882	846	96%
Leverage Ratio		3.5	

In summary, for Financing Programs in FY 2023, there were 846 projects (achieving 96% of the goal) requiring \$62.2M of investment (achieving 97% of the goal) that led to the deployment of 12.6 MW of clean energy (achieving 165% of the goal), that delivered a leverage ratio of 3.5 for private to public funds invested.

² This memo is preliminary. An updated final memo will be produced for the October Board Meeting and it will be used as part of our process for employee evaluation and merit compensation.

³ Includes only closed transactions.

⁴ Capital Deployed is used to measure Investment actuals to targets and it includes fees related to financing costs which are not included in the Gross System Cost. It represents: the Amount Financed or Gross System Cost (whichever is greater) for CPACE, the Amount Financed for Residential financing products and the Gross System Cost for all other programs.

⁵ Includes funds from the Clean Energy Fund, RGGI allowance revenue, repurposed ARRA-SEP funds, and other resources that are managed by the Connecticut Green Bank that are committed and invested in subsidies, credit enhancements, and loans and leases.

⁶ Private Investment is based on the Gross System Cost and includes adjustments related to financing costs.

Executive Summary for the Financing Programs

C-PACE and C-PACE-backed Commercial Solar PPA

- The C-PACE goals are split into CGB-funded projects and projects funded by private lenders. CGB exceeded its own capital deployed goal of \$7M with \$7.2M capital deployed while falling short of its project goal of 15 projects with 11. The private lenders saw a decrease in activity this year. Based on prior years activity, staff had set their goal at 8 projects with \$24M of capital deployed. They financed 4 projects for a total of \$13.5M.
- In the 2022 session, the CT legislature expanded the C-PACE enabling statute to include resilience and electric vehicle (EV) refueling infrastructure, exempting both from the savings-to-investment ratio (SIR) requirement. Staff developed the framework for EV refueling infrastructure financing and updated the program guidelines. Work is ongoing on the resiliency implementation.

Commercial Solar PPA

- In total, closed 18 commercial solar PPA deals that are 10.6 MW in size with a value of \$21.9M.
- Expanded the commercial solar lending facility with Skyview Ventures in CT by deploying a further \$1.85M against 4 PPA projects
- The solar deployment program CGB has built with the state, Solar MAP for State Agencies, is now fully developed as a framework to develop solar projects. It represented the majority of the projects closed in FY23, accounting for 50% of the total projects and 84% of the capital deployed.

Small Business Energy Advantage (SBEA)

- Slightly below program targets for the year
- One key aspect of the underperformance is a contractual issue between Eversource and the State of Connecticut that prevented the State from accessing the program. Resolving the issue required a legislative change which was passed in the 2023 session.

Multifamily Affordable Housing

- With the closing of the Health & Safety Loans for Antilean Manor and Seabury Cooperative, the funding for this program has been fully deployed. IPC is responsible for deploying these funds, with \$1.5MM originating as a grant from DEEP to CGB, and then subsequently transferred from CGB to IPC in 2019
- The underperformance to goal was due to slow market development for affordable multifamily solar and storage. PURA launched the program in January and staff has been working on product development and has a few pilot projects in the pipeline.

The following are brief descriptions of the progress made under the last comprehensive plan for the Financing Programs:

C-PACE and C-PACE-backed Commercial Solar PPA

Commercial Property Assessed Clean Energy (C-PACE) is an innovative financing program that is helping commercial, industrial and multi-family property owners access affordable, long-term financing for smart energy upgrades to their buildings.

Table 2. C-PACE and C-PACE-backed Commercial Solar PPA Overview for FY 2023

Program Data	Approved⁷	Closed	Total
Projects	18	15	33
Installed Capacity (MW)	4.8	2.0	6.8
Lifetime Clean Energy Produced (MWh)	135,944	56,820	192,764
Annual Combined Energy Generated & Saved (MMBtu)	569,650	14,408	584,058
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$923,152	\$1,768,785	\$2,691,937
Total Green Bank Investment (\$'s)	\$923,152	\$1,768,785	\$2,691,937
Private Capital (\$'s)	\$20,284,789	\$18,878,622	\$39,163,411
Direct Job Years	74	97	171
Indirect & Induced Job Years	95	124	219
Lifetime Tons of CO2 Emissions	75,140	31,406	106,546

During the fall 2020 Special Session, the Connecticut General Assembly passed Public Act 20-5 to address emergency response by the state’s electric utilities during recent storms. Within the resiliency aspects of the bill, a definition for “vulnerable communities” was included:

“Vulnerable communities” means populations that may be disproportionately impacted by the effects of climate change, including, but not limited to, low and moderate income communities, environmental justice communities pursuant to section 22a-20a, communities eligible for community reinvestment pursuant to section 36a-30 and the Community Reinvestment Act of 1977, 12 USC 2901 et seq., as amended from time to time, populations with increased risk and limited means to adapt to the effects of climate change, or as further defined by the Department of Energy and Environmental Protection in consultation with community representatives”.

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

Connecticut Environmental Justice (EJ) Communities as defined by section 22a-20a of the Connecticut General Statutes includes distressed municipalities as defined by the CT Department of Economic and Community Development (DECD) as well as census block groups that are not in distressed municipalities in which 30% or more of the population lives below 200% of the federal poverty level (FPL).

C-PACE has been used to fund projects in economically diverse locations across the state as reflected by Table 3 for Vulnerable Communities, Table 4 for Above/Below 100% LMI, Table 5 for Above/Below 80% and Table 6 for Environmental Justice Communities as designated by DECD and DEEP. It should be noted that C-PACE is not an income targeted program.

Table 3. C-PACE and C-PACE-backed Commercial Solar PPA Closed Activity in Vulnerable Communities for FY 2023

Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
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⁷ This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

Vulnerable	6	40%	0.4	20%	\$10,009,238	48%
Not Vulnerable	9	60%	1.6	80%	\$10,638,169	52%
Total	15	100%	2.0	100%	\$20,647,407	100%

Table 4. C-PACE and C-PACE-backed Commercial Solar PPA Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% LMI for FY 2023

LMI Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Below 100% AMI	3	20%	0.1	4%	\$8,986,041	44%
Above 100% AMI	12	80%	1.9	96%	\$11,661,366	56%
Total	15	100%	2.0	100%	\$20,647,407	100%

Table 5. C-PACE and C-PACE-backed Commercial Solar PPA Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 80% CRA for FY 2023

CRA Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Below 80% AMI	2	13%	0.0	0%	\$8,818,480	43%
Above 80% AMI	13	87%	2.0	100%	\$11,828,927	57%
Total	15	100%	2.0	100%	\$20,647,407	100%

Table 6. C-PACE and C-PACE-backed Commercial Solar PPA Closed Activity in Environmental Justice Communities for FY 2023

EJ Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
EJ Community	5	33%	0.3	16%	\$9,841,676	48%
Not EJ Community	10	67%	1.7	84%	\$10,805,731	52%
Total	15	100%	2.0	100%	\$20,647,407	100%

Commercial Solar PPA

A third-party ownership offering that combines public and private funding through the Connecticut Green Bank Solar PPA to provide Power Purchase Agreements (PPAs) for solar PV to creditworthy commercial and industrial, as well as nonprofit, municipal, and multifamily housing, end-users of electricity. This program supports solar PV projects between 50 kW – 5 MW in size – with an average size of 200 kW. Following a strategic decision not to enter into a new tax equity funding structure after the CT Solar Lease 3 fund closed in September 2018, Green Bank has continued to serve the market with our PPA product through Inclusive Prosperity Capital. As further described in the Lessons Learned section, deployment for this program has been affected by the new tariff program and supply chain challenges affecting the solar industry.

The Green Bank also provides debt financing to other third-party owners and these projects are included here.

Table 7. Commercial Solar PPA Overview for FY 2023

Program Data	Approved ⁸	Closed	Total
Projects	0	18	18
Installed Capacity (MW)	0.0	10.6	10.6
Lifetime Clean Energy Produced (MWh)	0	301,128	301,128
Annual Combined Energy Generated & Saved (MMBtu)	0	41,098	41,098
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
PPAs (\$'s)	\$0	\$13,350,805	\$13,350,805
Total Green Bank Investment (\$'s)	\$0	\$13,350,805	\$13,350,805
Private Capital (\$'s)	\$0	\$8,506,454	\$8,506,454
Direct Job Years	0	6	6
Indirect & Induced Job Years	0	8	8
Lifetime Tons of CO2 Emissions	0	166,442	166,442

The Commercial Solar PPA program has been used to fund projects in economically diverse locations across the state as reflected by Table 8 for Vulnerable Communities, Table 9 for Above/Below 100% LMI, Table 10 for Above/Below 80% and Table 11 for Environmental Justice Communities as designated by DECD and DEEP. It should be noted that Commercial Solar PPA is not an income targeted program.

Table 8. Commercial Solar PPA Closed Activity in Vulnerable Communities for FY 2023

Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Vulnerable	7	39%	4.8	46%	\$10,424,108	48%
Not Vulnerable	11	61%	5.7	54%	\$11,433,151	52%
Total	18	100%	10.6	100%	\$21,857,259	100%

Table 9. Commercial Solar PPA Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% LMI for FY 2023

LMI Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Below 100% AMI	6	33%	4.0	37%	\$8,515,256	39%
Above 100% AMI	6	33%	4.9	47%	\$10,729,783	49%
Unknown	6	33%	1.7	16%	\$2,612,220	12%
Total	18	100%	10.6	100%	\$21,857,259	100%

⁸ This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

Table 10. Commercial Solar PPA Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 80% CRA for FY 2023

CRA Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Below 80% AMI	5	28%	2.9	32%	\$6,175,976	28%
Above 80% AMI	7	39%	6.0	68%	\$13,069,063	60%
Unknown	6	33%	1.7	19%	\$2,612,220	12%
Total	18	100%	8.9	100%	\$21,857,259	100%

Table 11. Commercial Solar PPA Closed Activity in Environmental Justice Communities for FY 2023

EJ Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
EJ Community	4	22%	2.2	21%	\$4,734,979	22%
Not EJ Community	14	78%	8.4	79%	\$17,122,280	78%
Total	18	100%	10.6	100%	\$21,857,259	100%

Small Business Energy Advantage (SBEA)

The Green Bank has partnered with Eversource to provide capital for their lending through their SBEA program. SBEA provides audits, incentives and financing for energy efficiency projects at small businesses and municipal and state buildings. The customers get up to 7 year loans at 0% and they are repaid on their electricity bill.

Table 8. SBEA Overview for FY 2023

Program Data	Approved	Closed	Total
Projects	0	810	810
Installed Capacity (MW)	0.0	0.0	0.0
Lifetime Clean Energy Produced (MWh)	0	272,723	272,723
Annual Combined Energy Generated & Saved (MMBtu)	0	0	0
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$0	\$2,742,760	\$2,742,760
Total Green Bank Investment (\$'s)	\$0	\$2,742,760	\$2,742,760
Private Capital (\$'s) ⁹	\$0	\$12,640,977	\$12,640,977
Direct Job Years	0	82	82
Indirect & Induced Job Years	0	105	105
Lifetime Tons of CO2 Emissions	0	147,857	147,857

Multifamily

Offerings for both the affordable and market rate multifamily segments term loan programs that enable property owners to assess, design, fund and implement energy measures and remediate related health and safety measures, as well as PPAs and leases for solar and storage. Term

⁹ This number includes energy and health and safety capital deployed.

loan programs include the Loans Improving Multifamily Energy (LIME) loan, Solar PPA program, and the ECT Health & Safety Revolving Loan program (ECT H&S RLF). LIME is offered by Capital for Change and supported by a FY'20 capital commitment of \$3,000,000 from CGB as well as previous \$3,500,000 of seed capital and \$625,000 of ARRA-SEP and Green Bank funds for a loss reserve. Solar PPA options leverage the C&I sector programs. The ECT H&S RLF is supported by a \$1.5MM grant from DEEP. During FY19 the DEEP H&S funds were transferred from Green Bank to IPC where this program is now administered. Limited Catalyst Loan Funds for flexible gap financing to support term loans using MacArthur Foundation funds, administered by Housing Development Fund are also available.

Table 9. Multifamily Term Financing Overview for FY 2023

Program Data	Approved ¹⁰	Closed	Total
Projects	7	3	10
Installed Capacity (MW)	0.1	0.0	0.1
Lifetime Clean Energy Produced (MWh)	3,473	0	3,473
Annual Combined Energy Generated & Saved (MMBtu)	9,125	0	9,125
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$0	\$0	\$0
Total Green Bank Investment (\$'s)	\$0	\$0	\$0
Private Capital (\$'s) ¹¹	\$1,678,256	\$4,392,500	\$6,070,756
Direct Job Years	9	24	32
Indirect & Induced Job Years	11	31	42
Lifetime Tons of CO2 Emissions	1,920	0	1,920

Table 10. Multifamily Pre-Development Financing Overview for FY 2023

Program Data	Approved	Closed	Total
Projects	0	0	0
Installed Capacity (MW)	0.0	0.0	0.0
Lifetime Clean Energy Produced (MWh)	0	0	0
Annual Combined Energy Generated & Saved (MMBtu)	0	0	0
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$0	\$0	\$0
Total Green Bank Investment (\$'s)	\$0	\$0	\$0
Private Capital (\$'s)	\$0	\$0	\$0
Direct Job Years	0	0	0
Indirect & Induced Job Years	0	0	0
Lifetime Tons of CO2 Emissions	0	0	0

Table 11. Multifamily Number of Units

	Approved ¹²	Closed	Total
Affordable	273	207	480

¹⁰ This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

¹¹ This number includes energy and health and safety capital deployed.

¹² This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

Market Rate	0	0	0
Total # of Units	273	207	480

The CT Green Bank’s Multifamily Program is predominantly focused on properties that serve low-to-moderate income (LMI) residents. The program is equally focused on multifamily properties serving low-and moderate-income residents in the more affluent communities of opportunity as it is on multifamily properties in lower income census tracts. This is aligned with the State of Connecticut’s goals to encourage and support housing opportunities for low- and moderate-income residents in communities of opportunity. (Connecticut is the most geographically segregated state in the nation, with most LMI and people of color concentrated in low-income urban communities.)

Strategic Investments

Table 12. Strategic Investment Financing Overview for FY 2023

Program Data	Approved¹³	Closed	Total
Projects	1	0	1
Installed Capacity (MW)	3.7	0.0	3.7
Lifetime Clean Energy Produced (MWh)	291,708	0	291,708
Annual Combined Energy Generated & Saved (MMBtu)	995,308	0	995,308
Subsidies (\$’s)	\$0	\$0	\$0
Credit Enhancement (\$’s)	\$0	\$0	\$0
Loans or Leases (\$’s)	\$3,200,000	\$0	\$3,200,000
Total Green Bank Investment (\$’s)	\$3,200,000	\$0	\$3,200,000
Private Capital (\$’s) ¹⁴	\$0	\$0	\$0
Direct Job Years	28	0	28
Indirect & Induced Job Years	36	0	36
Lifetime Tons of CO2 Emissions	19,690	0	19,690

For a breakdown of the use of the Green Bank resources for Commercial, Industrial and Institutional Programs, see table 13 below.

Table 13. Distribution of Green Bank Funds Invested in Projects and Programs through Subsidies, Credit Enhancements, and Loans and Leases for FY 2023

Program	Subsidies		Credit Enhancements		Loans and Leases		Total¹⁵
Commercial Lease	\$0	0%	\$0	0%	\$13,350,805	100%	\$13,350,805
CPACE	\$0	0%	\$0	0%	\$1,768,785	100%	\$1,768,785
SBEA	\$0	0%	\$0	0%	\$2,742,760	100%	\$2,742,760
Multi-Family Health & Safety		0%		0%		0%	\$0
Multi-Family Pre-Dev	\$0	0%	\$0	0%	\$0	0%	\$0

¹³ This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

¹⁴ This number includes energy and health and safety capital deployed.

¹⁵ Totals are adjusted to remove projects that overlap programs.

Multi-Family Term	\$0	0%	\$0	0%	\$0	0%	\$0
Strategic Investments	\$0	0%	\$0	0%	\$0	0%	\$0
Total	\$0	0%	\$0	0%	\$17,862,350	100%	\$17,862,350

Of these programs, the following is a breakdown of their contributions made thus far towards the performance target and the human resources required to implement them (see Table 14):

Table 14. Program Progress Made in FY 2023¹⁶

Key Metrics	C-PACE	Commercial Lease	SBEA	Multifamily Pre-Dev ¹⁷	Multifamily Term	Strategic	Total Program Progress ¹⁸
Date of Program Approval	Sep-2012	Jun-2013	-	Oct 2013 – Jan 2017	Oct 2013 – Oct 2015		
Date of Program Launch	Jan-2013	Sep-2013	-	Oct 2013 – Jan 2017	Oct 2013 – Oct 2015		
Ratepayer Capital at Risk	\$1,768,785	\$13,350,805	\$2,742,760	\$0	\$0	\$0	\$17,862,350
Private Capital	\$18,878,622	\$8,506,454	\$12,640,977	\$0	\$4,392,500	\$0	\$44,418,553
Deployed (MW)	2.0	10.6	0.0	0.0	0.0	0.0	12.6
# of Loans/Installations	15	18	810	0	3	0	846
Lifetime Production (MWh)	56,820	301,128	272,723	0	0	0	630,671
Annual Combined Energy Generated & Saved (MMBtu)	14,408	41,098	0	0	0	0	55,506

“Top 5” Headlines

The following are the “Top 5” headlines for the Financing Programs:

[Schneider and Citizens Energy activate unique renewable microgrid on Connecticut campus](#)

MicroGrid Knowledge, Sept. 16, 2022

Schneider Electric and Citizens Energy have activated the first microgrid in Connecticut that can run on 100% renewable energy around the clock while in island mode at the Daughters of Mary of the Immaculate Conception campus. The project was developed through the Green Bank’s C-PACE program, and exemplifies the green bank’s vision for a “planet protected by the love of humanity.”

[5,200 solar panels will save Manchester \\$100,000 each year](#)

Middletown Press, Dec. 13, 2022

¹⁶ Includes only closed transactions

¹⁷ Multifamily is a collection of individual programs, each with their own approval and launch dates.

¹⁸ Totals are adjusted to remove projects that overlap programs.

Six elementary schools and the water and sewer building in Manchester have gone solar as part of the Green Bank's solar municipal assistance program (Solar MAP), helping save the town more than \$100,000 a year in avoided energy costs.

[CT Green Bank expands C-PACE program to cover EV charging infrastructure](#)

Hartford Business Journal, March 29, 2023

Through an expansion of the C-PACE retrofit financing program, building owners can cover the cost of installing EV-charging infrastructure, which can be combined with solar and other energy-efficiency measures.

[Portland Announces Solar at Brownstone Intermediate School](#)

Renewable Energy Magazine, April 5, 2023

The Town of Portland celebrated the installation of solar PV system at Brownstone Intermediate School, which is projected to save the Town more than \$10,000 annually in energy costs and more than \$206,000 over the term of the power purchase agreement. This project was part of the Green Bank's Solar Municipal Assistance Program.

[Second Solar Project Completed at Barker Specialty](#)

Global Renewable News, June 21, 2023

A second rooftop solar photovoltaic system installation financed by C-PACE was installed at the headquarters for Barker Specialty Advertising Co. Inc., a family business and leader in the promotional products industry for more than 70 years. In total, both systems are projected to produce energy savings equal to the energy used by 425 homes in a year and gross total savings of more than \$1.5 million over the 25-year effective useful life of the panels.

Lessons Learned

Based on the implementation of the Financing Programs thus far, the following are the key lessons learned:

C-PACE and C-PACE-backed Commercial Solar PPA

- Solar continues to be the main driver of CGB's C-PACE lending success, accounting for 64% of CGB's projects. Staff is focused on this marketing and continuing the transition to the Non-Residential Energy Solutions incentive program while also looking for ways to grow the energy efficiency business. Work began in late FY23 on a pilot with a software provider to make it easier for contractors to estimate energy efficiency savings and meet the technical requirements of the C-PACE program.
- Connecticut's open market platform continued to attract capital providers to Connecticut and enable private capital investment. With 65% of the investment private versus 35% "public" through CGB-funded projects, CGB is balancing separate goals of leveraging private capital (and not crowding it out) and investing its dollars to build its balance sheet. With much of the private lenders focused on large (\$2M+) new construction and retrofit projects, CGB is filling a gap for small to mid-size retrofit projects.

Commercial Solar PPA

- The Solar MAP program is the main source of PPA projects, accounting for 78% of the PPA total projects and 92% of the capital deployed through the program.
- The contractor/developer pipeline, which was the primary source of projects in the early days of the program, is producing increasingly less projects, with only 1 project this year coming through this channel.
- 4 of the projects were debt provided to another owner for a total of \$1.85M. Staff continues to develop relationships with other owners to look for other opportunities to deploy debt.
- Staff will look to take advantage of the ability of the state to “virtually net meter” through the NRES program for future project development.

Small Business Energy Advantage (SBEA)

- The partnership with Green Bank and Amalgamated to provide capital for SBEA loans continues to be a success in delivering savings for the SBEA program and expanding access to capital.
- The available loan term for customers has been expanded to 7 years and can now include EV chargers or batteries

Multifamily Affordable Housing

- CTGB Multifamily Programs are now primarily focused on solar and storage deployment in affordable multifamily properties. Staff has been actively working with DEEP, DOH, CHFA and other stakeholders to review and provide public comments to PURA on the new multifamily solar incentive through Residential Renewable Energy Solutions. Program development took longer than anticipated and therefore not as many projects were closed as anticipated. However, a new product has been designed, a revenue-sharing lease, that is ideal for this market and, after a few pilots projects, staff expects to scale our deployment in this sector.
- Capital for Change has continued to take full ownership of the Loans Improving Multifamily Energy (LIME) loan program, including marketing and outreach, which has been limited. LIME is primarily focused on funding energy efficiency improvements for mid-cycle multifamily properties.

Financing Programs FY 2024 Targets

Of programs being implemented in the Financing Programs, the following is a breakdown of the key targets:

Table 15. Number of Projects, Capital Deployed, and Clean Energy Deployed (MW)

Program	# of Projects	Capital Deployed	Clean Energy Deployed (MW)	Ann. GHG Emissions Avoided (TCO ₂)
Commercial PACE	19	\$21,170,000		
Green Bank Solar PPA/Roof Leases	16	\$16,081,668	8.2	14,098
Small Business Energy Advantage	480	\$11,728,000		65,493

Multifamily Term Loan	3	\$300,000	0.3	529
Transportation				150,000
Strategic Investments		\$10,000,000		
Total	515	\$58,979,668	8.2	229,591

For the Financing Programs, there are 18.4 full time equivalent staff members supporting ten (10) different programs.



Memo

To: Connecticut Green Bank Board of Directors
From: Eric Shrago, VP of Operations
CC: Bryan Garcia (President and CEO), Bert Hunter (EVP and CIO), Jane Murphy (EVP of Finance and Accounting), Sergio Carrillo (Director of Incentive Programs), and Mackey Dykes (VP of Financing Programs and Officer)
Date: July 18, 2023
Re: Investments – Performance towards Targets for FY 2023 – Preliminary

The following memo outlines Connecticut Green Bank (Green Bank) progress to deploying our own capital in line with the organization’s budget and sustainability plan.

Building a balance sheet has two components: (1) Committing capital to external parties in the form of debt through approved transactions and facilities, and (2) getting those transactions closed and the capital disbursed. The below table captures new commitments made by the Green Bank in terms of approved transactions in FY2023.

Table 1. Budget to Actual Investment Activity – Approved transactions¹

Program	Description	Activity Type	Budget			Actual				
			Rate	Term	Principal	Rate	Term	Principal	Total Investment Income	PV of Interest Income
CPACE	JCI Associates LLC	Standard CPACE Loan	4%	10	\$ 7,000,000	5.0%	14.5	\$ 59,732		
	Mod Associates LLC					5.3%	19.5	\$ 470,978		
	Mill Meadow Development, LLC					4.5%	4.5	\$ 71,173		
	Unicorn Project LLC					5.8%	19.5	\$ 595,435		
	Aron 100 Sanford Street, LLC					5.3%	19.5	\$ 167,561		
	Mystic Business Park LLC					5.3%	19.5	\$ 514,999		
	Mystic Business Park II LLC					5.3%	19.5	\$ 372,473		
	Enko Realty LLC					5.5%	14.5	\$ 727,878		
	Car-Sue Realty LLC					5.8%	19.5	\$ 1,687,886		
							\$ 2,981,525	\$ 2,019,488		
Capital Solutions/Strategic Investments	PosiGen CT LI Storage	Facility to support Posigen Expansion into Solar	4%	10	\$ 8,200,000	3.2%	9.9	\$ 6,000,000		
	C4C Co-Investment w Amalgamated	Support for Capital for Change for Smart-E				4.0%	2.9	\$ 10,000,000		
	PosiGen 1st and 2nd lien	Support for Posigen's continued solar deployment in CT				8.0%	2.9	\$ 2,902,592		
	Debt Facility at Bradley International Airport	Loan to the Airport Authority for Energy Efficiency				7.0%	1.9	\$ 2,500,000		
	Budderfly 2nd Round	Second line of credit for Budderfly				4.0%	5.9	\$ 5,000,000		
	PosiGen Tax Equity Bridge	Support for Posigen's continued solar deployment in CT				9.0%	0.9	\$ 6,000,000		
	C4C Lime Extension	1 year extension to support Capital for Change's multifamily energy lending				3.3%	1.1	\$ 6,500,000		
	Fuel Cell Energy Master Refinancing Facility	Refinancing for Bridgeport Fuel Cell				2.7%	6.9	\$ 10,000,000		
Total New Commitments					\$ 15,200,000	4.6%	25.5	\$ 53,570,706	\$ 8,244,718	\$ 6,187,074

¹ Intacct, Board Materials, & Power BI data source: <https://app.powerbi.com/groups/289235dd-d77d-4043-8dae-d232a51a116a/reports/b24ec66b-a2c1-49f0-9a62-3f7443077b3f/ReportSection13c15e79a907a30b650e>

For FY2023, the board approved a budget where the staff sought to commit \$53.57 MM. These investments will generate a forecast of interest of more than \$ 8.2 MM over the course of their lives. The average interest rate was 4.6% for a term of 25.5 years. This surpasses the Green Banks established internal benchmark of 4% and 10 years.

The Green Bank had a great year in terms of disbursing capital against these and other previous commitments. Getting the capital disbursed from new and previous facilities shows that the organization is following through on its prior commitments and is making progress in building our balance sheet.

Table 2. Budget to Actual Investment Activity – Investment Disbursements²

Program	FY23 Budget	FY23 Actual
SBEA	\$ 3,720,000	\$ 3,115,310
Capital Solutions/Strategic Investments	\$ 8,200,000	\$ 18,870,663
LMI Programs (Posigen)	\$ 4,600,000	\$ 18,291,635
CPACE	\$ 7,000,000	\$ 2,659,283
PPA Dev	\$ 4,000,000	\$ 4,054,191
PPA Dev (State)	\$ 8,330,000	\$ -
Multifamily	\$ 1,580,000	\$ -
Total	\$ 37,430,000	46,991,081.81

These numbers will change and will be updated once the books are closed for the fiscal year. We will capture these updates when we update the memo for the October 20, 2023 BOD meeting.

“Top 5” Headlines

The following are notable headlines related to our aprogramatic, capital markets, and financing activity from FY2023.

[A New Kind Of Bond Is Enlisting Americans In The Fight Against Climate Change](#)

Washington Post, Feb. 14, 2023

Through their green columnist, the Washington Post featured Green Liberty Bonds and Notes as opportunities for ordinary citizens to invest directly in the fight against climate change.

[Connecticut Green Bank and Partners Secure Funding to Deploy EV Charging](#)

Renewable Energy Magazine, March 10, 2023

² Intacct, Board Materials, & Power BI data source: <https://app.powerbi.com/groups/289235dd-d77d-4043-8dae-d232a51a116a/reports/b24ec66b-a2c1-49f0-9a62-3f7443077b3f/ReportSection13c15e79a907a30b650e>

The issuance of these EV charging carbon credits represents the Green Bank's first entry into the carbon markets. "This process has taught us how we can leverage carbon markets to unlock added revenue streams for ourselves and our partners. I expect us to examine where else we can be a participant in these markets, which will open doors for us both in terms of clean energy and environmental infrastructure," said Eric Shrago, Vice President of Operations at the Green Bank.

[How to navigate solar financing in the face of recent bank failures](#)

Solar Power World, May 2, 2023

In light of recent bank failures, Solar Power World contacted the Green Bank to write an editorial on navigating the world of solar financing. Bert Hunter and Louise Della Pesca submitted a piece that provided insight.

[Connecticut company will be 'hiring hundreds' in coming years after \\$500 million investment](#)

CT Insider, July 12, 2022

Shelton-based energy management outsourcing company, Budderfly, was the recipient of \$500 million in investment from a Swiss equity company. This came two weeks after the Green Bank announced a \$5 million loan to Budderfly.

[CT Green Bank driving private investment in climate tech through crowdfunding, partnerships](#)

Hartford Business Journal, Nov. 21, 2022

This article covers Connecticut's first VentureClash Climate Edition, which was created in partnership between the Green Bank, Connecticut Innovations, and other state agencies. In addition to quoting Bert Hunter, this piece included discussion of the Green Liberty Notes.



Memo

To: Board of Directors of the Connecticut Green Bank

From: Brian Farnen, VP, CLO and General Counsel, Tom Flynn, Chair of the Audit, Compliance and Governance Committee

Date: July 14, 2023

Re: Overview of Compliance Reporting and the Board of Directors and Committees for FY 2023

Overview

This memo provides a summary report of the FY 2023 governance as it pertains to the Board of Directors and its Committees.

This summary report also includes status of Statement of Financial Interest (SFI) filing requirements, report filings that are statutorily required by the Connecticut General Assembly for the Connecticut Green Bank (Green Bank), and review of governance documents (i.e., bylaws, operating procedures, etc.).

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

Table 1. Composition of the Board of Directors of the Green Bank in FY 2023

Position	Name	Status (as of 07-11-23)	Voting
Commissioner of DECD (or designee)	Binu Chandy, Robert Hotaling ¹	Ex Officio	Yes
Commissioner of DEEP (or designee)	Victoria Hackett, Hank Webster ²	Ex Officio	Yes
State Treasurer (or designee)	Sarah Sanders, Bettina Bronisz ³	Ex Officio	Yes
Commissioner of OPM (or designee)	Joanna Wozniak-Brown ⁴	Ex Officio	Yes

¹ On May 17, 2023, Commissioner Daum designated Deputy Commissioner Rob Hotaling to serve on the Board of Directors

² On May 10, 2023, Commissioner Dykes designated Deputy Commissioner Hank Webster to serve on the Board of Directors

³ On January 13, 2023, Treasurer Russell designated Bettina Bronisz to serve on the Board of Directors

⁴ On September 9, 2022, Commissioner Beckham designated Joanna Wozniak-Brown to serve on the Board of Directors

Finance of Renewable Energy	Adrienne Farrar Houël	Appointed	Yes
Finance of Renewable Energy	Dominick Grant	Appointed	Yes
Labor Organization	John Harrity	Appointed	Yes
R&D or Manufacturing	Lonnie Reed	Appointed	Yes
Investment Fund Management	Laura Hoydick	Appointed ⁵	Yes
Environmental Organization	Matthew Ranelli	Appointed	Yes
Finance or Deployment	Tom Flynn	Appointed	Yes
Residential or Low Income	Brenda Watson	Appointed	Yes
President of the Green Bank	Bryan Garcia	Ex Officio	No

Board of Directors

The Board of Directors of the Green Bank is comprised of twelve (12) ex officio and appointed voting members, and one (1) ex officio non-voting member. A quorum for a meeting of the Board of Directors is seven (7) voting members at each meeting.

The leadership of the Board of Directors, includes:

- **Chair** – Lonnie Reed
- **Vice Chair**– Vicki Hackett, Bureau Chief of BETP for DEEP (voted in by her peers of the Green Bank Board of Directors)
- **Secretary** – Matthew Ranelli, Partner at Shipman and Goodwin (voted in by his peers of the Green Bank Board of Directors)
- **Staff Lead** – Bryan Garcia, President and CEO

For FY 2023, the Board of Directors of the Green Bank met eight (8) times, seven of which were regularly scheduled meetings, and one of which was a special meeting (see Table 2).

Table 2. Summary of Board of Directors Meetings for FY 2023

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved⁶
July 22, 2022	Regular	9 / 75%	8
July 28, 2022	Special	9 / 75%	1
October 21, 2022	Regular	11 / 92%	11
December 16, 2022	Regular	10 / 83%	14
January 20, 2023	Regular	9 / 75%	8
March 17, 2023	Regular	9 / 75%	6
April 21, 2023	Regular	9 / 82% ⁷	17
June 23, 2023	Regular	9 / 82%	9
Total	7 Regular Meetings 1 Special Meeting 8 Total Meetings	80% 80%	74 74

Overall, the attendance for each meeting established a quorum – 7 of the 12 voting members present – in order to enable business decisions, and on average there were 10 members present at each meeting.

⁵ As of April 2023, Laura Hoydick is no longer a board member.

⁶ Excludes approval of meeting minutes and adjournment.

⁷ Calculation of percentage adjusted to account for Laura Hoydick's departure, which created a vacancy on the Board.

For a link to the materials from the Board of Directors meetings that is publicly accessible – [click here](#).

Statement of Financial Interest

It is required by state ethics laws that senior-level staff (i.e., Director level and above) and members of the Board of Directors annually file a Statement of Financial Interest (SFI). With respect to the 2022 SFI filing – required by May 1, 2023, the OSE received the following from the Connecticut Green Bank (see Table 3):

Table 3. Summary of State of Financial Interest Filings with the Office of State Ethics for CY 2022

	Number of SFIs Submitted	% Submitted on Time
Senior Staff	7	100%
Board of Directors	9	100%

Of the sixteen (16) SFI filings by Senior Staff and the Board of Directors, all were filed online. On May 30, 2023 the Office of State Ethics sent out their May newsletter in which they congratulated us for being one of sixty-six (66) agencies that “earned the distinction of 100% timely compliance.”

Audit, Compliance and Governance Committee

The Audit, Compliance and Governance Committee (ACG Committee) of the Green Bank is comprised of four (4) ex officio and appointed voting members. A quorum for a meeting of the ACG Committee is three (3) voting members at each meeting. Note, that if there aren’t enough voting members of the ACG Committee present at a meeting, then the Chair and/or Vice Chair of the Connecticut Green Bank can participate in the meeting to establish a quorum. The leadership of the ACG Committee, includes:

- **Chair** – Tom Flynn, Managing Partner, Coral Drive Partners, LLC
- **Members** – Lonnie Reed, Matthew Ranelli, Joanna Wozniak-Brown
- **Staff Lead** – Brian Farnen, CLO and General Counsel

For FY 2023, the ACG Committee of the Connecticut Green Bank met three (3) times, all regularly scheduled meetings. (See Table 4).

Table 4. Summary of Audit, Compliance and Governance Committee Meetings for FY 2023

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved
October 11, 2022	Regular	3 / 100%	2
January 17, 2023	Regular	4 ⁸ / 100%	1
May 16, 2023	Regular	4 / 100%	1
Total	3 total meetings	Avg. 100%	4

⁸ Member total adjusted from three to four to account for the addition of Joanna Wozniak-Brown.

The attendance established a quorum with at least 3 voting members present – in order to enable business decisions.

For a link to the materials from the ACG Committee meetings that is publicly accessible – [click here](#).

Review of Governance Documents and Statutory Reporting

With respect to annual review of governance documents and statutory reporting, the following applies:

- Annual review by the ACG Committee of the Governance Documents (i.e., Bylaws, Operating Procedures, and Statement of Purpose) completed on October 11, 2022. Brian Farnen recommended no changes.
- Statutory Responsibilities and Reporting Checklist attached hereto as Exhibit A for continuous reporting tracking.

Budget Operations and Compensation Committee

The Budget Operations and Compensation Committee (BOC Committee) is comprised of five (5) ex officio and appointed voting members. A quorum for a meeting of the BOC Committee is three (3) voting members at each meeting. Note that if there aren't enough voting members of the BOC Committee present at a meeting, then the Chair and/or Vice Chair of the Green Bank can participate in the meeting to establish a quorum. The leadership of the BOC Committee, includes:

- **Chair** – John Harranty, Labor Union Representative (designated as the Chair by the former Chair of the Board Catherine Smith)
- **Members** – Lonnie Reed, Binu Chandy, Brenda Watson, Adrienne Farrar Houël, Robert Hotaling⁹
- **Staff Lead** – Eric Shrago, Vice President of Operations

For FY 2023, the BOC Committee of the Green Bank met three (3) times, and all were regularly scheduled (see Table 5).

Table 5. Summary of Budget Operations and Compensation Committee Meetings for FY 2023

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved
January 11, 2023	Regular	5 / 100%	1
May 10, 2023	Regular	5 / 100%	0
June 7, 2023	Regular	3 / 60%	2
Total	3 Total Meetings	Avg. 78%	3

Attendance at each of the BOC Committee meetings established a quorum – 3 voting members present – in order to enable business decisions.

For a link to the materials from the BOC Committee meetings that is publicly accessible – [click here](#).

⁹ Robert Hotaling replaced Binu Chandy on the committee, beginning at the 6/7/23 meeting, keeping the total number of committee members at 5 at any given time.

Deployment Committee

The Deployment Committee of the Green Bank is comprised of six (6) ex officio and appointed voting members. A quorum for a meeting of the Deployment Committee is four (4) voting members at each meeting. Note that if there aren't enough voting members of the Deployment Committee present at a meeting, then the Chair and/or Vice Chair of the Green Bank can participate in the meeting to establish a quorum. The leadership of the Deployment Committee, includes:

- **Chair** – Vicki Hackett (replaced by Hank Webster), DEEP Designees
- **Members** – Lonnie Reed, Matthew Ranelli, Binu Chandy, Dominick Grant, Sarah Sanders (replaced by Bettina Bronisz), Binu Chandy (replaced by Robert Hotaling)¹⁰
- **Staff Lead** – Bryan Garcia, President and CEO, and Bert Hunter, EVP and CIO

For FY 2023, the Deployment Committee of the Green Bank met two (2) times, all of which were regularly scheduled meetings (see Table 6). Two regularly scheduled meetings, on September 28, 2022 and February 22, 2023, were canceled.

Table 6. Summary of Deployment Committee Meetings for FY 2023

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved
November 16, 2022	Regular	5 ¹¹ / 83%	2
May 24, 2023	Regular	6 / 100%	9
Total	2 Total Meetings	Avg. 92%	11

Overall, the attendance for each meeting established a quorum – 4 of the 6 voting members present – in order to enable business decisions.

For a link to the materials from the Deployment Committee meetings that is publicly accessible – [click here](#).

Joint Committee of the EEB and the CGB

Section 16-245m(d)(2) of the Connecticut General Statutes created a Joint Committee of the Energy Efficiency Board (EEB) and the Connecticut Green Bank. Per bylaws established and approved by the EEB and the Green Bank, the Joint Committee is comprised of four (4) appointed and voting members, one (1) ex officio and voting member, and four (4) ex officio and non-voting members. A quorum for a meeting of the Joint Committee is three (3) voting members at each meeting. The leadership of the Joint Committee, includes:

- **Chair** – Brenda Watson, Executive Director, Operation Fuel, Lonnie Reed¹² and John Harranty, CT Roundtable on Climate and Jobs (voting, Green Bank designees)
- **Vice Chair** – Vicki Hackett, DEEP (voting), replaced by Hank Webster, DEEP (voting)

¹⁰ Bettina Bronisz and Robert Hotaling replaced Sarah Sanders and Binu Chandy on the Deployment Committee, beginning at the 5/24/23 meeting.

¹¹ Bettina Bronisz as proxy for Sarah Sanders and Kirsten Rigney and proxy for Victoria Hackett.

¹² Voting for first two committee meetings, non-voting for third committee meeting.

- **Secretary** – Bryan Garcia, Connecticut Green Bank (non-voting)
- **Green Bank Members** – Bryan Garcia (non-voting) and
- **Staff Lead** – Bryan Garcia, President and CEO of the Connecticut Green Bank

For FY 2023, the Joint Committee of the EEB and the Green Bank met three (3) times, including three (3) regularly scheduled meetings (see Table 7). One (1) regularly scheduled meeting, on March 22, 2023, was canceled.

Table 7. Summary of Joint Committee Meetings for FY 2023

Date	Regular or Special Meeting	Attendees / % Attendance Voting (CGB)	Attendees / % Attendance Non-Voting (CGB)
September 21, 2022	Regular	3 / 75% ¹³	2 / 100%
December 21, 2022	Regular	4 / 100%	2 / 100%
June 21, 2023	Regular	3 / 100%	3 / 100% ¹⁴
Total	3 Total Meetings	Avg. 92%	Avg. 100%

Overall, the attendance for each meeting established a quorum – 3 of the 4 voting members present – in order to enable business decisions, and on average there were 4 members present at each meeting.

For a link to the materials from the Joint Committee meetings that is publicly accessible – [click here](#).

RESOLUTIONS

WHEREAS, in July of 2011, the Connecticut General Assembly passed Public Act 11-80 (the Act), “AN ACT CONCERNING THE ESTABLISHMENT OF THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION AND PLANNING FOR CONNECTICUT’S ENERGY FUTURE,” which created the Connecticut Green Bank (the “Green Bank”) and vests the power in a Board of Directors comprised of eleven voting and one non-voting member; and

WHEREAS, the structure of the Board of Directors is governed by the bylaws of the Connecticut Green Bank, including, but not limited to, its powers, meetings, committees, and other matters.

NOW, therefore be it:

RESOLVED, that Board has reviewed and approved the Overview of Compliance Reporting and the Board of Directors and Committees for FY 2023 memo dated July 14, 2023 prepared by staff, which provides a summary report of the FY 2023 governance of the Board of Directors and its Committees of the Connecticut Green Bank.

¹³ Shubhada Kambli attending on behalf of Vicki Hackett.

¹⁴ Non-voting members now include Lonnie Reed.

Exhibit A

Checklist of Statutorily Required Reports																					
Quarterly Cash Flow		Quarterly Human Resources		Sec. 1-123		REEEFA Bonding		SCRIF Notice		RSIP		Annual Report		Board Meetings				OpenCT Checkbook Data to Comptroller		Board Diversity	
Quarter End	Submitted	Quarter End	Submitted	Due	Submitted	Due	Submitted	Reason Required	Submitted	Due	Submitted	Due	Submitted	Held	Type	Held	Type	Requested by	Delivered	Due	Submitted
9/30/13	3/14/14	10/1/13	6/17/14	1/1/15	12/30/14	1/1/13	2/8/13	CSCU deal	12/1/17	1/1/14	-	1/1/15	12/30/14	12/16/15	regular	2/22/19	regular	1/15/19	1/10/19	10/1/19	9/25/19
12/31/13	3/14/14	1/1/14	6/17/14	1/1/16	12/31/15	1/1/14	1/15/14	CSCU, Meriden	11/30/18	1/1/17	1/30/17	1/1/16	12/31/15	1/15/16	regular	3/29/19	regular	2/1/20	1/31/20	10/1/21	9/14/21
3/31/14	4/21/15	4/1/14	6/17/14	1/1/17	12/29/16	1/1/15	3/15/15	CSCU, Meriden	12/30/19	1/1/19	1/11/19	1/1/17	10/17/16	2/26/16	special	4/26/19	regular	3/15/21	3/15/21	10/1/22	
6/30/14	4/21/15	7/1/14	8/5/14	1/1/18	12/27/17	1/1/16	12/23/15	CSCU, Meriden,	12/7/20	1/1/21	12/31/20	1/1/18	12/1/17	3/3/16	special	6/28/19	regular	3/31/22	3/31/22		
9/30/14	6/16/16	10/1/14	10/2/14	1/1/19	12/31/18	1/1/17	12/15/16	4 certificates	11/24/21	1/1/23	12/29/23	1/1/19	1/11/19	4/22/16	regular	7/18/19	regular	3/31/23	3/29/23		
12/31/14	6/16/16	1/1/15	1/12/15	1/1/20	12/31/19	1/1/18	12/1/17	4 certificates	11/24/22	1/1/20	12/27/19	1/1/20	12/27/19	6/17/16	regular	9/12/19	regular				
3/31/15	6/16/16	4/1/15	4/12/15	1/1/21	12/30/20	1/1/19	12/31/18			1/1/21	12/31/20	1/1/21	12/31/20	7/6/16	special	10/25/19	regular				
6/30/15	6/16/16	7/1/15	7/9/15	1/1/22	12/29/21	1/2/19	12/30/19			1/1/22	12/29/21	1/1/22	12/29/21	7/22/16	regular	11/20/19	special				
9/30/15	5/31/16	10/1/15	10/9/15	1/1/23	12/30/22	1/3/21	12/30/20			1/1/23	12/20/22	1/1/23	12/20/22	10/21/16	regular	12/20/19	regular				
12/31/15	5/31/16	1/1/16	1/8/16			1/4/22	12/29/21							12/16/16	regular	1/24/20	regular				
3/31/16	5/31/16	4/1/16	3/31/16			1/1/23	12/30/22							1/5/17	special	3/25/20	regular				
6/30/16	8/10/16	7/1/16	7/5/16											1/20/17	regular	4/24/20	regular				
9/30/16	11/8/16	10/1/16	10/5/16											3/10/17	special	6/26/20	regular				
12/31/16	2/23/17	1/1/17	2/21/17											4/28/17	regular	7/24/20	regular				
3/31/17	5/10/17	4/1/17	4/10/17											6/9/17	special	9/23/20	special				
6/30/17	8/9/17	7/1/17	7/17/17											6/23/17	regular	10/23/20	regular				
9/30/17	12/21/17	10/1/17	10/6/17											7/21/17	regular	12/18/20	regular				
12/31/17	2/28/18	1/1/18	1/9/18											9/28/17	regular	1/22/21	regular				
3/31/18	5/17/18	4/1/18	4/2/18											10/3/17	special	3/26/21	regular				
6/30/18	9/5/18	7/1/18	7/5/18											10/20/17	regular	4/6/21	special				
9/30/18	11/28/18	10/1/18	10/3/18											11/6/17	special	4/23/21	regular				
12/31/18	7/11/19	1/1/19	1/3/19											11/13/17	special	6/25/21	regular				
3/31/19	9/23/19	4/1/19	4/1/19											12/1/17	special	7/23/21	regular				
6/30/19	9/23/19	7/1/19	7/1/19											12/15/17	regular	10/22/21	regular				
9/30/19	12/27/19	10/1/19	10/1/19											1/26/18	regular	12/17/21	regular				
12/31/19	3/26/20	1/1/20	1/3/20											2/15/18	special	1/21/22	regular				
3/31/20	6/22/20	4/1/20	4/3/20											4/3/18	regular	3/25/22	regular				
6/30/20	9/28/20	7/1/20	7/7/20											4/27/18	regular	4/22/22	regular				
9/30/20	12/18/20	10/1/20	10/9/20											5/25/18	special	6/24/22	regular				
12/31/20	3/11/21	1/1/21	1/11/21											6/13/18	regular	7/22/22	regular				
3/31/21	6/22/21	4/1/21	4/1/21											6/28/18	regular	7/28/22	special				
6/30/21	9/23/21	7/1/21	6/30/21											7/27/18	regular	10/21/22	regular				
9/30/21	12/28/21	10/1/21	9/30/21											8/21/18	special	12/16/22	regular				
12/31/21	3/11/22	1/1/22	1/11/22											9/18/18	special	1/20/23	regular				
3/31/22	6/23/22	4/1/22	4/1/22											10/26/18	regular	3/17/23	regular				
6/30/22	9/30/22	7/1/22	7/12/22											12/14/18	regular	4/21/23	regular				
9/30/22	9/30/22	10/1/22	10/2/22													6/23/23	regular				
12/31/22	12/29/22	1/1/23	12/29/22																		
3/31/23	3/28/23	4/1/23	4/3/23																		
6/30/23	6/22/23	7/1/23	7/2/23																		



Memo

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

From: Bryan Garcia (President and CEO)

CC:

Date: July 21, 2023

Re: Approval of Funding Requests below \$500,000 and No More in Aggregate than \$1,000,000 – Update

At the October 20, 2017 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 \$500,000 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 \$500,000 that were evaluated and approved. During this period, there were no projects evaluated and approved for funding.



Memo

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

From: Bryan Garcia (President and CEO)

CC:

Date: July 21, 2023

Re: Approval of Restructure/Write-Offs Requests below \$100,000 and No More in Aggregate than \$500,000 – Update

At the June 13, 2018 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 loan loss restructurings or write-offs for transactions less than \$100,000 which are pursuant to an established formal approval process in an aggregate amount not to exceed \$500,000 from the date of the last Deployment Committee meeting. At the April 24, 2020 BOD meeting of the Green Bank, it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve a semi-annual (or two quarterly periods) repayment modification of various transaction types in light of the COVID-19 pandemic.¹ And at the June 26, 2020 BOD meeting of the Green Bank, it was resolved that the BOD approves of the framework applying to subsidiaries of the Green Bank.

During this period, there were no projects evaluated for approval for payment restructure/write-offs.

¹ The Board also approved accommodation for one year for C-PACE transactions in certain towns where C-PACE assessments are collected annually.

MEMO

To: Board of Directors of the Connecticut Green Bank

From: Brian Farnen, Blaire Backman, and Bryan Garcia

Date: July 14, 2023

Re: Overview of Requests for Approvals for Professional Services Agreements over \$75,000 for FY2023 per Operating Procedures

Overview

This memo provides a summary report of the requested approvals for those Professional Services Agreement (“PSA”) with a not-to-exceed amount of over \$75,000 in the 2023 fiscal year (“FY2023”). This approval process is outlined in Section IX (ii) of the Connecticut Green Bank (“Green Bank”) Operating Procedures, as follows:

“(ii) for such contracts requiring an expenditure by the Green Bank over seventy-five thousand dollars (\$75,000) and up to and including one hundred fifty thousand dollars (\$150,000) over a period of one (1) fiscal year, the President and the Chairperson must both approve the expenditure, and (iii) for such contracts requiring an expenditure by the Green Bank of over one hundred fifty thousand dollars (\$150,000), such contract shall, whenever possible, be awarded on the basis of a process of competitive negotiation where proposals are solicited from at least three (3) qualified parties. To the extent permitted by any contract for administrative support and services between the Green Bank and Connecticut Innovations, Incorporated, professional services may also be provided by consultants and professionals selected by and under contract to Connecticut Innovations, Incorporated, subject to appropriate cost sharing. The provisions of Section 1-127 of the General Statutes shall apply to the engagement of auditors by the Green Bank”.

Green Bank staff requested a total of forty (40) PSAs, or amendments to existing PSAs, with not-to-exceed amounts over the \$75,000 threshold for FY2023¹, for a total amount of \$8,527,540.28. Approval for sixteen (16) of the forty (40) were requested, and subsequently granted, by Lonnie Reed, Board Chair. The others all gained approval of the full Board of Directors, as either a one-time approval or as strategic selections for FY2023 at the 6/24/2022 BOD meeting or at subsequent meetings of the Board (see Table 2). This number is down from that of FY2022 by \$321,120.72 when approval was sought for thirty-four (34) PSAs and/or amendments over \$75,000, for a total amount of \$8,848,661, with fifteen (15) being approved by direct request of BOD Chair Lonnie Reed and approval for the remaining nineteen (19) being granted by the full Board. A breakdown of the agreements for FY2023 follows.

¹ Including multiple PSAs with the same Consultant having *aggregate* not-to-exceed amounts over the \$75,000 threshold for FY23.

Table 1. FY 2023 PSAs over \$75,000 approved by BOD Chair Lonnie Reed

Date	Agreement	Division / Program	Original PSA Amount	Amount Amended By
6/17/2022	Kevala PSA 5779 ²	S&I - RSIP	\$145,000	
7/1/2022	Strategen PSA 5821	RESI - LMI	\$225,000	\$100,000
7/1/2022	Lamont Financial Services 5849	Generl Op.	\$145,000	
7/1/2021	R. Louise Della Pesca PSA 5829	CI&I - SL2 & CEFIA Holdings	\$149,000	
7/1/2021	Monte Verde Consulting, LLC 5830	CI&I - SL2 & CEFIA Holdings	\$149,000	
10/1/2022	Operation Fuel PSA 5842	RESI - LMI	\$100,000	
10/1/2022	Clean Energy Group PSA 5842	RESI – LMI	\$310,095	
11/15/2022	Strategen PSA 5821 1 st Amendment		\$225,000	\$100,000
11/22/2022	Recurve Analytics PSA 5714 2 nd Amendment	CI&I – CPACE	\$60,000 ³	\$40,000
12/1/2022	Craftsman Technology Group 5763 2 nd Amendment	Marketing	\$42,000	\$93,000
1/10/2023	Carahsoft (SalesForce & Pardot POs)	Marketing	\$108,099.76 total to Carahsoft (1 st PO-\$103,365.01, 2 nd PO-\$4,734.75)	
2/1/2023	Strategic Environmental Associates PSA 5876	Marketing	\$240,000	
2/7/2023	Quantified Ventures PSA 5815 1 st Amendment	CI&I – Environmental Infrastructure	\$70,000	\$27,000
3/10/2023	Kevala PSA 5882	S&I – RSIP	\$190,000	
3/20/2023	CTEC PSA 5667 2 nd Amendment	S&I – RSIP	\$894,000	\$11,000
3/24/2023	Cyber74 PSA	General Op	\$10,125 ⁴	
5/5/2023	Strategic Environmental Associates PSA 5820 1st Amendment	Marketing	\$74,000	\$4,120
		Total:	\$1,771,319.76	\$275,120
				\$2,046,439.76

² PSA dated 6/17/2022 included in FY23 calculations as it was approved by Lonnie on 7/13/2023 and payments to Consultant thereunder commenced during FY23.

³ Highlighted amounts are for illustrative purposes *only* and are not included in calculations, as they pertain to 1. original PSA amounts for FY22 PSAs amended during FY23 or 2. Original corresponding PSA NTE figure was under 75k for PSA Amendment approved in FY23 or 3. Figure is already accounted for within this memo.

⁴ Cyber74 PSA 5883 is added because Adnet is its parent company. As such, PSA 5883's NTE was aggregated into Adnet Budget, which required Lonnie's approval.

Table 2. FY 2023 PSAs over \$75,000 approved by Green Bank BOD

Date	Agreement	Division / Program	Original PSA Amount	Amount Amended By
7/1/2022	Adnet Technologies PSA 5765	General Ops	\$400,000	\$25,000
7/1/2022	Clean Power Research PSA 5776	S&I - RSIP	\$176,756.52	
7/1/2022	AlsoEnergy (Locus) Resi PSA 5813	S&I -RSIP	\$1,000,000	
7/1/2022	AlsoEngery (Locus) Comm PSA 5867	S&I -Commercial	\$33,000 ⁵	
7/1/2022	Cortland Capital Market Services PSA 5775	CI&I - CPACE	\$150,740	
7/1/2022	CSW, LLC PSA 5848	CI&I – State Solar	\$308,000	
7/1/2022	CTEC Solar PSA 5770	S&I - RSIP	\$70,000 ⁴	
7/1/2022	CTEC Solar PSA 5771	S&I - RSIP	\$380,000	
7/1/2022	CTEC Solar PSA 5774	S&I - RSIP	\$610,000	
7/1/2022	DNV Energy Insights USA PSA 5824	CI&I – CPACE	\$102,000	
7/1/2022	Guidehouse PSA 5826	General Ops	\$250,000	
7/2/2022	IPC - Smart-E (A&R) PSA 5410 1 st Amendment	Resi - Smart-E	\$317,022 ⁶	
7/2/2022	IPC - MF (A&R) PSA 5411 1 st Amendment	Resi - MF	\$307,615	
7/2/2022	IPC - Commercial Solar (A&R) PSA 5412 1 st Amendment	Resi - SL	\$741,582	
7/1/2022	PKF O'Connor Davies PSA 5883	General Op	\$13,125 ⁴	
6/12/2023	PKF O'Connor Davies PSA 5884	General Op	\$89,260	
6/12/2023	PKF O'Connor Davies PSA 5885	General Op	\$16,000	
7/1/2022	SunSystem Technology PSA 5773	S&I - RSIP	\$640,000	
7/1/2022	SunSystem Technology PSA 5850	S&I - RSIP	\$74,000 ⁴	
7/1/2022	Stark Raving PSA	Marketing	\$675,000	
1/1/2023	DNV Energy Insight USA	CI&I – CPACE	\$102,000	
6/12/2023	PKF O'Connor Davies PSA 5884	General Op	\$89,260	
6/12/2023	PKF O'Connor Davies PSA 5885	General Op	\$16,000 ⁴	
6/27/2023	Adnet Technologies PSA 5765 1 st Amendment	General Ops	\$400,000	\$25,000
		Total:	\$6,456,100.52	\$25,000
				\$6,481,100.52

⁵ Aggregate NTE for multiple PSAs with this Consultant for FY23 is over \$75,000

⁶ IPC NTE for FY 2023 *only*. Multi-year totals since commencement of 7/2/2021 Amended and Restated PSAs (FYs 2022-2023) are as follows: 5410-\$1,553,670; 5411-\$1,782,493; 5412-\$2,215,238; and, 5413-\$1,110,925.



Memo

To: Connecticut Green Bank Board of Directors

From: Eric Shrago

CC: Bryan Garcia, Sergio Carrillo, and Mackey Dykes

Date: July 21, 2023

Re: Fiscal Year 2023 Progress to Targets and Activity in Vulnerable Communities through Q4 - Preliminary

The following memo¹ outlines Connecticut Green Bank (CGB) progress to targets and capital deployed, including investments in vulnerable communities² for Fiscal Year (FY) 2023 as of June 30, 2023.

Table 1. Incentive Programs FY 2023 Progress to Targets

Product/Program	Projects			Capital Deployed			Capacity (MW)		
	Closed	Target	% to Target	Closed	Target	% to Target	Closed	Target	% to Target
ESS – Commercial	30	30	100%	\$71,317,884	\$67,500,000	106%	2.3	45.0	5%
ESS – Residential	329	350	94%	\$6,909,794	\$14,875,000	46%	2.3	4.7	48%
Smart-E ³	1,249	960	130%	\$23,402,165	\$14,994,623	156%	0.5	0.2	252%
Total Incentive Programs	1,608	1,180	136%	\$101,629,843	\$97,369,623	104%	51.4	49.9	103%

Table 2. Incentive Programs FY 2023 Vulnerable Communities

Product/Program	Capital Deployed			
	Not Vulnerable	Vulnerable	Total	% Vulnerable
ESS – Commercial	\$43,939,530	\$27,378,354	\$71,317,884	38%
ESS – Residential	\$4,420,190	\$2,489,604	\$6,909,794	36%
Smart-E	\$18,051,511	\$10,127,310	\$28,178,822	36%
Total Incentive Programs	\$66,411,231	\$39,995,268	\$106,406,499	38%

¹ This memo is preliminary. An updated final memo will be produced for the October Board Meeting and it will be used as part of our process for employee evaluation and merit compensation.

² CGB Performance Metrics Power BI data source: <https://app.powerbi.com/groups/289235dd-d77d-4043-8dae-d232a51a116a/reports/dcec3754-1e52-4c0c-b579-cfa7df20379c/ReportSection3a1e4346c50856c3c008>

³ See Table 9 for current reporting periods for Smart-E lenders

Table 3. Smart-E Channels

Smart-E Loan Channels	Closed	% of Loans
Battery Storage	5	0%
EV	0	0%
Health and Safety	5	0%
Home Performance	90	7%
HVAC	1,076	86%
Solar	61	5%
(blank)	12	1%
Total	1,249	100%

Table 4. Financing Programs FY 2023 Progress to Targets

Product/Program	Projects			Capital Deployed			Capacity (MW)		
	Closed	Target	% to Target	Closed	Target	% to Target	Closed	Target	% to Target
Commercial Lease	18	19	95%	\$21,857,259	\$13,710,000	159%	10.6	7.6	139%
CPACE	15	23	65%	\$20,647,407	\$31,000,000	67%	2.0	0.0	0%
SBEA	810	839	97%	\$15,383,737	\$18,600,000	83%	0.0	0.0	0%
Multi-Family Health and Safety	0	1	0%	\$0	\$892,500	0%	0.0	0.0	0%
Multi-Family Term	3	6	50%	\$4,392,500	\$1,380,000	318%	0.0	0.6	0%
Total Financing Programs	846	882	96%	\$62,280,903	\$64,202,500	97%	12.6	7.6	165%

Table 5. Financing Programs FY 2023 Vulnerable Communities (excluding SBEA)

Product/Program	Capital Deployed			
	Not Vulnerable	Vulnerable	Total	% Vulnerable
Commercial Lease	\$11,433,151	\$10,424,108	\$21,857,259	48%
CPACE	\$10,638,169	\$10,009,238	\$20,647,407	48%
Multi-Family Health and Safety				
Multi-Family Term		\$4,392,500	\$4,392,500	100%
Total Financing Programs	\$22,071,320	\$24,825,846	\$46,897,166	53%

Table 6. Multi-Family Units

MFH # of Units	Closed
Affordable	207
Market Rate	0
Total	207

Table 7. CGB Totals FY 2023 Progress to Targets

Segment	Projects			Capital Deployed			Capacity (MW)		
	Closed	Target	% to Target	Closed	Target	% to Target	Closed	Target	% to Target
Incentive Programs	1,608	1,180	136%	\$101,629,843	\$97,369,623	104%	51.4	49.9	103%
Financing Programs	846	882	96%	\$62,280,903	\$64,202,500	97%	12.6	7.6	165%
Total	2,454	2,062	119%	\$163,910,746	\$161,572,123	101%	64.0	57.5	111%

Table 8. CGB Totals FY 2023 Vulnerable Communities (excluding SBEA)

Product/Program	Capital Deployed			
	Not Vulnerable	Vulnerable	Total	% Vulnerable
Incentive Programs	\$66,411,231	\$39,995,268	\$106,406,499	38%
Financing Programs	\$22,071,320	\$24,825,846	\$46,897,166	53%
Total	\$88,482,551	\$64,821,114	\$153,303,666	42%

Table 9. Current Reporting Periods for Smart-E Lenders

Lender	Current Reporting Period
Capital For Change	5/1/2023
CorePlus Federal Credit Union	6/1/2023
Eastern Connecticut Savings Bank	6/1/2023
First National Bank of Suffield	6/1/2023
Ion Bank	6/1/2023
Liberty Bank	6/1/2023
Mutual Security Credit Union	6/1/2023
Nutmeg State Financial Credit Union	5/1/2023
Patriot Bank	6/1/2023
Quinnipac Bank & Trust	NULL
Thomaston Savings Bank	6/1/2023
Union Savings Bank	6/1/2023
Workers Federal Credit Union	6/1/2023



Memo

To: Greenbank Board of Directors
From: Brian Farnen (General Counsel), James Desantos (Legislative Liaison)
CC: Bryan Garcia (President/CEO)
Date: July 17, 2023
Re: 2023 Legislative Summary (Connecticut)

The 2023 Connecticut Legislative Session adjourned, “Sine Die” at midnight on June 7, 2023. During the 2023 Legislative Session, the CT State Senate and the CT State House of Representatives passed 239 bills and 106 joint resolutions in concurrence. Governor Ned Lamont has signed 234 of these bills into law and has vetoed 5.

As of today’s date, there are no more bills on the Governor’s desk for execution, the CT State House of Representatives has declined to hold a veto session and all budget related matters were addressed during the session. Therefore, all work for the 2023 Legislative Session is officially concluded.

In order to highlight legislation that was passed, the bills were grouped into four categories; 1) Energy, 2) Infrastructure, 3) General & 4) Quasi’s. In the attached Legislative Summary, you will see legislation that either directly effects programs or aligns with the mission of the Greenbank/State of Connecticut to confront climate change and foster renewable energy deployment within the state.

Each piece of legislation, noted in the attached, contains a brief summary, a link to the language of the public-act language, a link to the Office of Legislative Research (OLR) summary and denotes the date of execution Governor Lamont and the legislation’s effective date.

The most significant pieces of legislation impacting the Green Bank and energy policy are:

Public Act No. 23-156

HB 6851: AN ACT IMPLEMENTING RECOMMENDATIONS OF THE HYDROGEN TASK FORCE

The Hydrogen Task Force was created by Special Act 22-8 and was chaired by Bryan Garcia (President & CEO), Sara Harrari (Associate Director of Innovation) & Erin Childs (Director/Strategen).

The Hydrogen Task Force conducted a comprehensive review of regulations and legislation needed to guide the development of a hydrogen ecosystem in the state. Areas of focus were on workforce initiatives, positioning Connecticut to take full advantage of competitive federal incentive opportunities, identifying funding and tax preferences for building hydrogen-fueled energy facilities and developing hydrogen-fueled energy programs and infrastructure.

Public Act No. 23-170

HB 6664: AN ACT CONCERNING THE MANAGEMENT OF SOLID WASTE AND ESTABLISHING THE MIRA DISSOLUTION AUTHORITY

The reference to “municipal solid waste” in our enabling legislation was removed as a limitation to allow the Green Bank to issue revenue bonds to finance municipal solid waste projects that may utilize combustion technologies.

The Green Bank may issue environmental infrastructure bonds to finance any solid waste facility chosen in DEEP’s RFPs from providers of existing or proposed solid waste management services. It specifically allows, but does not require, the DEEP commissioner to enter agreements with the Green Bank to have the bonds issued, including pledging moneys for revenue bonds to support the solid waste facilities chosen in an RFP. The bill also increases, from \$250 million to \$500 million, the total amount of bonds the Green Bank may issue that are backed by a special capital reserve fund (SCRF).

Public Act No. 23-102 “Take Back the Grid Act II”

SB 7: AN ACT STRENGTHENING PROTECTIONS FOR CONNECTICUT'S CONSUMERS OF ENERGY

Legislation termed the “Take Back the Grid II” and represents the omnibus energy bill of the 2023 Legislative Session. Revisions to SB 7 (PA. 23-102) were made in the budget document (HB 6941- PA. 23-204). Legislation limits EDC cost recovery, directs PURA to revise EDC billing format, makes changes to NRES/SCEF solar programs and increases Class I RPS requirements for hydropower.

If you should have any questions related to any piece of legislation mentioned in the attached document, please do not hesitate to reach out directly.



2023 Legislative Summary

7/14/2023

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Page 3: Section 1: Energy - Legislation

Special Act No. 23-8 - (HB 5628-Hydropower)

Public Act No. 23-1 - (HB 6671-UCONN Hydrogen)

Public Act No. 23-102 - (SB 7-Energy Omnibus Bill)

Public Act No. 23-156 – (HB 6851-CGB Hydrogen Task Force Bill)

Public Act No. 23-157 – (HB 6853-DEEP Microgrids)

Public Act No. 23-163 – (HB 5608-Solar Bond on Farmland)

Page 7: Section 2: Infrastructure - Legislation

Public Act No. 23-57 – (SB 1042-DECD Brownfield Land Banks)

Public Act No. 23-58 – (SB 1092-COG’s Brownfield Land Banks)

Public Act No. 23-74 – (SB 100-PFAS Testing & Remediation)

Public Act No. 23-76 – (SB 895-CEQ Review of municipal environmental programs)

Public Act No. 23-124 – (HB 6807-LoCIP allocation-municipal reporting)

Public Act No. 23-140 – (HB 6479-OTT Climate Resiliency Funds & Projects)

Public Act No. 23-170 – (HB 6664-MIRA/DEEP/Greenbank – Waste to Energy)

Public Act No. 23-184 – (HB 6725-DoAG Farmland Restoration Grant Program)

Page 13: Section 3: General – Legislation

Public Act No. 23-61 – (HB 6354-Green Jobs Corps Program)

Public Act No. 23-114 – (HB 5317-Online Building Permits)

Public Act No. 23-135 – (SB 904-Transportation Carbon Dioxide Reduction Target)

Public Act No. 23-202 – (SB 1147-Environmental Justice Program DEEP/SSC)

Public Act No. 23-204 – (HB 6941-Budget Bill)

Public Act No. 23-205 – (HB 6942-Bonding Bill)

Public Act No. 23-206 – (SB 896-DEEP Tree Canopy in EJ Communities)

Public Act No. 23-207 – (SB 998-Omnibus Housing Bill)

Page 19: Section 4 Quasi - Legislation

Public Act No. 23-37 - (SB 1151-State Code of Ethics/Technical)

1: Energy - Legislation

1: Special Act No. 23-8

AN ACT ESTABLISHING A TASK FORCE TO STUDY THE STATE'S HYDROPOWER ASSETS.

Link to Public Act: <https://cga.ct.gov/2023/act/sa/pdf/2023SA-00008-R00HB-05628-SA.pdf>

The Green Bank has requested an appointment to this task force as a member.

Signed by Governor Lamont: June 28, 2023

Effective Date: Upon Passage

The bill establishes a task force to study existing hydropower assets in the state. The task force is required to submit its findings and recommendations to the Energy & Technology Committee no later than February 1, 2024. The task force will be administratively organized by E&T Committee staff and shall terminate on the date that it submits such report.

2: Public Act No. 23-1

AN ACT CONCERNING FUNDING FOR SCHOOL LUNCHES AND A CENTER FOR SUSTAINABLE AVIATION, SPECIAL EDUCATION FUNDING, CERTAIN BOTTLE DEPOSITS, CERTAIN STATE POSITIONS AND THE POSTING OF STATE JOB OPENINGS AND BOND COVENANT RESTRICTIONS AND THE BUDGET RESERVE FUND.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00001-R00HB-06671-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-06671-R00-BA.PDF>

Signed by Governor Lamont: February 14, 2023

Effective Date: Effective Upon Passage

Sections 2-5: CENTER FOR SUSTAINABLE AVIATION AT UCONN

Requires UConn to participate in an application for federal funding under the U.S. Department of Energy's Regional Clean Hydrogen Hubs program to create and operate a center for sustainable aviation and for DECD to provide UConn with a maximum \$20 million grant for this purpose if the university is awarded, and accepts, the federal funding.

3: Public Act No. 23-102

AN ACT STRENGTHENING PROTECTIONS FOR CONNECTICUT'S CONSUMERS OF ENERGY.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00102-R00SB-00007-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023SB-00007-R01-BA.PDF>

Signed by Governor Lamont: June 29, 2023

Effective Date: Various/By Section

Legislation termed the "Take Back the Grid II" and represents the omnibus energy bill of the 2023 Legislative Session. Revisions to SB 7 (PA No. 23-102) were made in the budget document (HB 6941-Budget Bill)

*Sections 2 & 3 — PROHIBITED COST RECOVERY IN RATES
(Narrowed by Section 119 of 6941 – scope narrowed so that SB7 only applies to EDC’s with over 75,000 customers)*

Section 10 — RETURN OF EDC OVEREARNINGS (PURA Discretion)

*Section 14 — EDC BILLING FORMAT
(Requires PURA to study each of the 4 components of the new format and consider what additional information can be included and possibly an education plan on how to access programs funded through these charges)*

*Sections 21-23 & 36 — PURA COMMISSIONERS
(Requires the governor to select PURA’s chairperson, rather than letting the commissioners elect the chairperson. Modified by Section 121 & 415 of 6941 - Any contested proceeding must be voted on by all commissioners.)*

Section 24 — LOW-INCOME RATES FOR GAS AND WATER COMPANY CUSTOMERS (DEEP)

*Section 25 — RENEWABLE ENERGY PROGRAM CHANGES
Makes changes to the state’s NRES, SCEF, and RRES programs that, among other things, (1) allow EDCs to hold solicitations and seek approval for selected projects jointly or individually; (2) exempt state, municipal, and agricultural customers from the requirement for NRES projects to be located on the customer’s own premises; and (3) allow PURA to modify SCEF capacity requirements and the definitions of low-income and moderate-income customers to align with federal requirements for renewable energy incentives.*

- *Specifies that tariffs for the NRES program also govern disposition of capacity rights*
- *Permits multiple solicitations for both SCEF & NRES in a single year*
- *Reduces ceiling amount on SCEF allocated to commercial customers from 50% to 40%*

Section 35 — DEEP STUDY

Requires DEEP to study (1) the feasibility of deploying small modular reactors, advanced nuclear reactors, fusion energy facilities, and other zero carbon resources; (2) the process for and best practices for certain power purchase agreements; and (3) the capability of state's gas supply system

Section 36 — CLASS I RENEWABLE ENERGY SOURCES

Expands Class I renewables by (1) including nuclear generating facilities built after October 1, 2023, and (2) increasing the maximum capacity of certain eligible run-of-the-river hydropower facilities from 30MW to 60MW

Section 37 — LARGE-SCALE HYDROPOWER AND THE CLASS I RPS

Increases the portion of the Class I RPS requirement that may be met with large-scale hydropower, under certain limited circumstances, from one percentage point to 2.5 percentage points

Section 38 — CLASS I RENEWABLE ENERGY SOURCE PROPERTY TAX EXEMPTION

Excludes nuclear generating facilities from a Class I renewable energy source property tax Exemption if constructed after October 1, 2023

4: Public Act No. 23-156 AN ACT IMPLEMENTING RECOMMENDATIONS OF THE HYDROGEN TASK FORCE.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00156-R00HB-06851-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-06851-R010806-BA.PDF>

Signed by Governor Lamont: June 27, 2023

Effective Date: July 1, 2023 (Section 3 – Upon Passage)

Greenbank Proposal: This bill requires the Department of Energy and Environmental Protection (DEEP) to develop and approve a hydrogen strategic plan, extends certain wage and workforce requirements to hydrogen projects (Community Benefit Agreements) and requires the DEEP commissioner to seek opportunities for federal funding for projects or activities that advance hydrogen in the state. She must do this in consultation with the governor, the Office of Policy and Management secretary, and the Department of Economic and Community Development (DECD) commissioner. The bill requires the DECD commissioner to identify the state's share of projects or activities needed to meet federal matching requirements.

5: Public Act No. 23-157 AN ACT CONCERNING FUNDING FOR MICROGRIDS, RESILIENCE AND STATE AGENCY BUILDING DECARBONIZATION PROJECTS.

Link to Public Act: <https://cqa.ct.gov/2023/ACT/PA/PDF/2023PA-00157-R00HB-06853-PA.PDF>

Link to OLR Summary: <https://cqa.ct.gov/2023/BA/PDF/2023HB-06853-R010842-BA.PDF>

Signed by Governor Lamont:

Effective Date:

DEEP Agency Bill. For the microgrid program, the bill extends eligibility to include any local or regional governmental entity (rather than just municipalities), municipal corporation, regional council of government, public authority, or state and federally recognized tribe. The bill does not include any specific funding for the program but does authorize the use of bond funds taken for microgrids to be used as grants to eligible projects.

The bill allows any state agency to participate in a building decarbonization project for a building or facility that is (1) owned or leased by the state and (2) occupied by the agency. The bill requires a state agency that wants to participate in a building decarbonization project to submit a request to DEEP, which, in consultation with the Department of Administrative Services, may review and recommend approval. Under the bill, OPM may only approve a project if it can be sustained by the state agency's operating budget, based on the operating budget for the fiscal year in which the state agency files the request.

6: Public Act No. 23-163 AN ACT CONCERNING CERTAIN SOLAR PHOTOVOLTAIC FACILITIES LOCATED ON PRIME FARMLAND, FARMLAND OF STATE-WIDE IMPORTANCE OR CORE FOREST LANDS.

Link to Public Act: <https://cga.ct.gov/2023/act/pa/pdf/2023PA-00163-R00HB-05608-PA.pdf>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-05608-R01-BA.PDF>

Signed by Governor Lamont:

Effective Date:

This bill prohibits the Connecticut Siting Council from approving a solar photovoltaic facility of at least two-megawatt capacity on prime farmland or core forest without the project applicant providing a bond to cover the costs of decommissioning the facility and restoring the prime farmland. This includes the costs of an inspection by a qualified soil scientist or other agricultural soils professional to assess and assure the soils' restoration and its suitability for farming.

Bill will result in slightly higher build costs which will be passed to the off-taker through higher PPA rates. Policy goal: the cost of bond will incentivize developers to avoid solar on prime farmland and core forest locations.

2: Infrastructure - Legislation

1: Public Act No. 23-57 AN ACT AUTHORIZING THE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT TO PROVIDE CAPACITY BUILDING GRANTS TO CONNECTICUT BROWNFIELD LAND BANKS

Link to Public Act: <https://cga.ct.gov/2023/act/pa/pdf/2023PA-00057-R00SB-01042-PA.pdf>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023SB-01042-R01-BA.PDF>

Signed by Governor Lamont: June 26, 2023

Effective Date: October 1, 2023

This bill expands the Remedial Action and Redevelopment Municipal Grant Program's scope to include grants for Connecticut brownfield land bank (CBLB) operational expenses. It authorizes the Department of Economic and Community Development (DECD) commissioner to award capacity-building grants of up to \$50,000 from the program for operational expenses to any CBLB that (1) matches the funding award and (2) has not previously been awarded a capacity building grant under this program. DECD's Remedial Action and Redevelopment Municipal Grant Program provides grants of up to \$4 million to municipalities, CBLBs, and economic development agencies for eligible brownfield remediation or assessment projects and administrative expenses of up to 5% of the grant awarded.

2: Public Act No. 23-58 AN ACT CONCERNING THE ACQUISITION AND CONVEYANCE OF CERTAIN PROPERTIES BY CONNECTICUT BROWNFIELD LAND BANKS.

Link to Public Act: <https://cga.ct.gov/2023/act/pa/pdf/2023PA-00058-R00SB-01092-PA.pdf>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023SB-01092-R01-BA.PDF>

Signed by Governor Lamont: June 26, 2023

Effective Date: July 1, 2023

The bill makes corresponding changes in state law to treat COGs the same as municipalities. This bill authorizes Connecticut brownfield land banks (CBLBs) to enter into land banking agreements with regional councils of governments (COGs) to acquire, retain, remediate, and sell property in a COG's planning region. Under current law, CBLBs may only enter into land banking agreements with municipalities, and the agreements are required for CBLBs to acquire brownfield sites or adjacent properties.

3: Public Act No. 23-74 AN ACT ESTABLISHING AN ACCOUNT IN THE GENERAL FUND TO PROVIDE GRANTS TO TOWNS THAT NEED PFAS TESTING AND REMEDIATION.

Link to Public Act: <https://cga.ct.gov/2023/act/pa/pdf/2023PA-00074-R00SB-00100-PA.pdf>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023SB-00100-R01-BA.PDF>

Signed by Governor Lamont: June 27, 2023

Effective Date: July 1, 2023

The bill establishes a separate, non-lapsing General Fund account, the "PFAS Testing account," for municipal grants or reimbursements to test and remediate contamination in drinking water by the Department of Energy and Environmental Protection, in consultation with the Department of Public Health, for the testing and remediation of "perfluoroalkyl and polyfluoroalkyl substances" (PFAS) in drinking water.

4: Public Act No. 23-76 AN ACT CONCERNING THE LABELING OF CERTAIN BEVERAGE CONTAINERS, THE REVIEW OF MUNICIPAL PROGRAMS FUNDED BY NIP PAYMENTS AND THE RETURN OF BEVERAGE CONTAINERS FOR THE REDEMPTION VALUE.

Link to Public Act: <https://cqa.ct.gov/2023/act/pa/pdf/2023PA-00076-R00SB-00895-PA.pdf>

Link to OLR Summary: <https://cqa.ct.gov/2023/BA/PDF/2023SB-00895-R01-BA.PDF>

Signed by Governor Lamont: June 26, 2023

Effective Date: Effective Upon Passage. Deposit collection begins on January 1, 2024

Section 1 requires the Council on Environmental Quality (CEQ) to include, in its annual report, a review of the environmental programs and measures municipalities implemented with revenue generated from the five-cent nip surcharge.

5: Public Act No. 23-124 AN ACT CONCERNING THE ISSUANCE OF LOCAL CAPITAL IMPROVEMENT PROJECT GRANTS.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00124-R00HB-06807-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-06807-R000412-BA.PDF>

Signed by Governor Lamont: June 27, 2023

Effective Date: Effective Upon Passage

Requires the OPM secretary to annually distribute each municipality's total LoCIP allocation by June 30, rather than reimbursing them for their eligible project expenditures as current law requires. It correspondingly requires municipalities to annually report to OPM on how they spent their grants.

6: Public Act No. 23-140 AN ACT CONCERNING CLIMATE RESILIENCY FUNDS AND PROJECTS.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00140-R00HB-06479-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-06479-R010722-BA.PDF>

Signed by Governor Lamont: June 27, 2023

Effective Date: Effective Upon Passage

The bill authorizes the state treasurer to (1) invest municipal Climate Change and Coastal Resiliency Reserve Funds and (2) adopt regulations to do so. Bill also requires the Department of Energy and Environmental Protection (DEEP) commissioner to maximize the state's receipt of federal funds designated for state climate change resiliency projects (e.g., coastal resiliency projects) by taking actions that at least include identifying these funds. Beginning by January 1, 2024, the bill requires the commissioner to report biennially to the Environment Committee on her maximization efforts.

7: Public Act No. 23-170 AN ACT CONCERNING THE MANAGEMENT OF SOLID WASTE AND ESTABLISHING THE MIRA DISSOLUTION AUTHORITY.

Link to Public Act: <https://cga.ct.gov/2023/act/pa/pdf/2023PA-00170-R00HB-06664-PA.pdf>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-06664-R01-BA.PDF>

Signed by Governor Lamont: June 29, 2023

Effective Date: Various Dates

MDA: The act creates the Mira Dissolution Authority (MDA) as a successor quasi-public authority to MIRA and inherits MIRA's duties and powers. The act makes DAS the successor agency to MDA beginning July 1, 2025, and repeals the statutes creating and empowering MIRA and MDA, respectively, on that date. *On July 1, 2023, the terms of MIRA's board of directors end and the act creates a new board comprised of 11 members.* The legislation also allows the Hartford City Council to appoint up to five ad hoc members to the new board.

DEEP: Provides for DEEP to issue an RFP for proposals from providers of existing or proposed solid waste management services like reuse, recycling, and composting (e.g., anaerobic digestion, waste conversion, energy and fuel recovery). Any proposed facility must use an anaerobic digester and fuel cell technology or any other method that uses gas at the generation point. Under the bill, the selected project(s) may be funded through the existing sustainable materials management program and allows DEEP to pledge funds for revenue bonds.

GREEN BANK:

The reference to "municipal solid waste" in our enabling legislation¹ has been removed as a limitation to allow the Green Bank to issue revenue bonds to finance municipal solid waste projects that may utilize combustion technologies.

The Green Bank may issue environmental infrastructure bonds to finance any solid waste facility chosen in DEEP's RFPs from providers of existing or proposed solid waste management services. It specifically **allows but does not require** the DEEP commissioner to enter agreements with the Green Bank to have the bonds issued, including pledging moneys for revenue bonds to support the solid waste facilities chosen in the RFP. The bill also increases, from \$250 million to \$500 million, the total amount of bonds the Green Bank may issue that are backed by a special capital reserve fund (SCRF).

By law, unchanged by the bill:

1. The Green Bank cannot issue SCRF-backed bonds² to pay project costs unless it determines that revenue from the project will be sufficient to (a) pay the bond's principal and interest; (b) establish, increase, and maintain any reserves the bank deems advisable to secure the principal and interest payment on the bonds; (c) pay the cost of keeping the project in good repair and properly insured; and (d) pay other project costs that may be required; 2. Obtain OPM approval.

¹ C.G.S. Section 16-245n.

² SCRF-backed bonds are contingent liabilities of the state.



Ned Lamont
GOVERNOR
STATE OF CONNECTICUT

June 29, 2023

Dear Honorable Members of the Connecticut General Assembly:

As is well known, Connecticut is shipping about 860,000 tons of solid waste out of state each year, primarily for disposal in landfills in Pennsylvania and Ohio. This is both environmentally and fiscally irresponsible. The multi-pronged approach I proposed in February would have returned Connecticut to self-sufficiency and significantly reduced, if not eliminated, our reliance on out-of-state landfills to manage our waste.

Instead, House Bill 6664 provides for at best 45,000 tons per year of diversion and no clear path for developing new disposal infrastructure, addressing only 5% of this pressing problem. Further, House Bill 6664 imposes additional costs on consumers by increasing electric rates and by shifting escalating costs for waste disposal to taxpayers.

Two aspects of the legislation are particularly concerning:

- The bill increases electric rates in order to provide an additional \$5,000,000 per year subsidy for existing trash-to-energy plants with no guarantees that providing those subsidies will extend the life or preserve the capacity of those facilities. Make no mistake: the existing facilities are our partners and are necessary to meet our solid waste management goals. However, I believe it's a mistake to further increase families' electricity bills in order to offset the true costs of our waste management system.
- The bill turns outsized control of the unwinding of the Materials Innovation and Recycling Authority to representatives of one municipality, none of whom are required to have any relevant expertise. The legislation assumes that state taxpayers will fund the significant remediation costs at MIRA sites, even as other municipalities home to former waste or energy infrastructure have been patiently waiting their turn for similar support. I strongly encourage the new board to maintain every penny of the current MIRA reserves to defray remediation costs.

Despite these concerns, recognizing this legislation is the will of the legislature at this time, I will sign House Bill 6664. My administration will work to address the increase in electric rates in other ways and will support this new MIRA board.

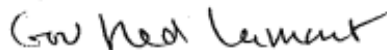
Moving forward, I hope we can work collaboratively in the next legislative session to develop a comprehensive solution. One potential approach is to expand the municipal organics diversion

210 CAPITOL AVENUE, HARTFORD, CONNECTICUT 06106
TEL (860) 566-4840 • www.governor.ct.gov
Governor.Lamont@ct.gov

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programs that we have funded in recent years, which are achieving substantial results. In towns hosting pilot programs, 27% of food scraps are being diverted, reducing waste disposal by 15%. The state has previously implemented successful extended producer responsibility programs to require producers to manage products such as mattresses and paint, diverting these types of waste from the larger waste stream and providing relief to municipal budgets. The success of those pilots and programs provides a clear path forward to a self-sufficient future where organics and packaging materials are not hauled to out-of-state landfills but instead are responsibly managed in state at a lower cost to residents. We can and must realize that future.

Sincerely,

A handwritten signature in black ink that reads "Gov Ned Lamont". The signature is written in a cursive, slightly slanted style.

Ned Lamont
Governor

8: Public Act No. 23-184 AN ACT REVISING CERTAIN FARMING AND AQUACULTURE PROGRAMS OF THE DEPARTMENT OF AGRICULTURE.

Link to Public Act: <https://cga.ct.gov/2023/act/pa/pdf/2023PA-00184-R00HB-06725-PA.pdf>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-06725-R01-BA.PDF>

Signed by Governor Lamont: June 28, 2023

Effective Date: October 1, 2023

Section 1: This bill revises the Farmland Restoration Grant Program. Under current law, the total federal and state grants available to a farmer cannot exceed 90% of the costs to comply with related plans under the program. The bill instead prohibits the total state grant from exceeding 90% of the costs to implement and comply with the plans, removing consideration of federal grants. Additionally, the bill removes a cap on grants for developing, implementing, and complying with a farm resources management plan or a farmland restoration and climate resiliency plan, including farm equipment purchases.

It also allows the grants for developing a farmland restoration and climate resiliency plan to be within available appropriations. Currently, the DoAg commissioner may pay or reimburse certain entities (i.e., a municipality, nonprofit organization, soil and water conservation district, or UConn Extension Services) for a variety of services (e.g., technical assistance, training, pilot programs, and other services designed to increase the number of farmers implementing climate-smart agriculture and forestry practices). Current law does not cap these grants. Under the bill, the commissioner can make these payments or reimbursements within available appropriations, but advance payments cannot exceed 50% of the cost and the total state grant cannot be more than 90% of the cost.

3: General - Legislation

1: Public Act No. 23-61 AN ACT ESTABLISHING A GREEN JOBS CORPS PROGRAM.

Link to Public Act: <https://cga.ct.gov/2023/act/pa/pdf/2023PA-00061-R00HB-06354-PA.pdf>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-06354-R010669-BA.PDF>

Signed by Governor Lamont: June 26, 2023

Effective Date: July 1, 2023

This bill requires the Connecticut Clean Economy Council (CCEC) to develop a workforce training plan for green jobs (i.e., jobs that employ green technology) to accomplish the state's greenhouse gas emissions goals. Report to be submitted to Higher Education Committee by February 1, 2024 and annually thereafter.

2: Public Act No. 23-114 AN ACT CONCERNING ONLINE BUILDING PERMIT APPLICATIONS.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00114-R00HB-05317-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-05317-R000107-BA.PDF>

Signed by Governor Lamont: June 26, 2023

Effective Date: October 1, 2023

This bill explicitly authorizes municipalities to accept electronically submitted building permit applications from contractors, aligning the law's building permit signature requirements with current practice.

3: Public Act No. 23-135 AN ACT IMPLEMENTING THE RECOMMENDATIONS OF THE DEPARTMENT OF TRANSPORTATION AND CONCERNING STATE PARKWAYS, THE CONNECTICUT AIRPORT AUTHORITY, A TRANSPORTATION CARBON DIOXIDE REDUCTION TARGET, A TREE AND VEGETATION MANAGEMENT PLAN, MOTOR VEHICLE NOISE, THE ZERO-EMISSION TRUCK VOUCHER PROGRAM, STREET RACING, EMERGENCY LIGHTS AND THE NAMING OF CERTAIN ROADS AND BRIDGES.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00135-R00SB-00904-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023SB-00904-R01-BA.PDF>

Signed by Governor Lamont: June 26, 2023

Effective Date: July 1, 2023/Effective Upon Passage

Section 32: *Starting by October 1, 2030, the bill requires the DOT commissioner, in consultation with the Department of Energy and Environmental Protection (DEEP) commissioner, to biennially establish a transportation carbon dioxide reduction target for the state that sets the maximum amount of carbon dioxide emissions allowed from the transportation sector. When setting the target, the commissioners must consider the state's long-term greenhouse gas (GHG) emissions reductions requirements.*

By January 1, 2025, and until 2030, the DOT commissioner must annually submit a report to the Transportation and Environment committees with (1) a status update on development of the carbon dioxide reduction target and strategic plan and (2) a description of the public outreach and its results.

The bill also requires the DOT commissioner to biennially submit to these committees, starting by October 1, 2030, a copy of the carbon dioxide reduction target and any legislative recommendations to implement it.

The DOT commissioner, in consultation with DEEP, must also implement a public outreach plan to sufficiently engage the public and stakeholders in developing the carbon dioxide reduction target and strategic plan. The DOT commissioner must submit the plan to the Transportation and Environment committees by July 1, 2028.

Section 38: *The bill delays, from January 1, 2023, to January 1, 2024, the date on and after which DEEP may establish a voucher program to support (1) the use of zero-emission technology in medium- and heavy-duty vehicles and (2) installing electric vehicle charging infrastructure.*

4: Public Act No. 23-202 AN ACT CONCERNING THE ENVIRONMENTAL JUSTICE PROGRAM OF THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION.

Link to Public Act: <https://cga.ct.gov/2023/act/pa/pdf/2023PA-00202-R00SB-01147-PA.pdf>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023SB-01147-R01-BA.PDF>

Signed by Governor Lamont: June 29, 2023

Effective Date: October 1, 2023

This bill makes changes in the state’s environmental justice law, which generally requires applicants seeking to construct, expand, or site certain facilities in environmental justice communities to engage in a public participation process. The bill requires the DEEP commissioner to adopt any necessary and proper regulations to carry out the environmental justice law’s purposes. It allows the Siting Council to follow the same regulations in its decision to approve an application. The bill also allows DEEP or the Siting Council, as applicable, to deny a permit for a new affecting facility if it finds that approving the permit would result in adverse cumulative environmental or public health stressors in the environmental justice community that are greater than those experienced in other communities.

5: Public Act No. 23-204 AN ACT CONCERNING THE STATE BUDGET FOR THE BIENNIUM ENDING JUNE 30, 2025, AND MAKING APPROPRIATIONS THEREFOR, AND PROVISIONS RELATED TO REVENUE AND OTHER ITEMS IMPLEMENTING THE STATE BUDGET.

Link to Public Act: <https://cga.ct.gov/2023/act/pa/pdf/2023PA-00204-R00HB-06941-PA.pdf>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023HB-06941-R01-BA.PDF>

Signed by Governor Lamont: June 28, 2023

Effective Date: July 1, 2023 – Various Dates

Section 118 - *SB 7 CHANGES TO CONTESTED PURA PROCEEDINGS Narrows the scope of a provision in SB 7, as amended, that prohibits utility company rate recovery for certain expenses incurred for PURA rate-making hearings.*

Section 119 - *SB 7 PROHIBITION ON COST RECOVERY FOR MEMBERSHIP DUES, LOBBYING COSTS, AND ADS Narrows the scope of a provision in sSB 7, as amended, that prohibits utility companies' rate recovery for certain expenses like trade association membership, lobbying, and advertising.*

Section 120 - *SB 7 PROVISIONS ON ELECTRIC BILL FORMAT Requires PURA to study the components of the delivery portion of electric bills and consider what additional information should be available to increase transparency about the costs and benefits of programs funded through certain charges on a customer's bill.*

Section 121 & 415 - *SB 7 PROVISIONS ON PURA COMMISSIONERS Repeals a provision in sSB7, as amended, that would have generally (1) allowed PURA's chairperson to assign any matter before PURA to one utility commissioner and (2) required that in any contested proceeding assigned to one commissioner, any proposed final decision must be voted on by all of the PURA commissioners.*

Section 194 - *CLASS I RUN-OF-THE-RIVER HYDROPOWER Undoes a change in the definition of Class I renewable energy sources made by SB 7, as amended by Senate Amendment "A".*

Section 195 - *RPS CAP ON CLASS I RUN-OF-THE-RIVER HYDROPOWER Increases the RPS cap on certain Class I run-of-the-river hydropower from 1 to 2.5 percentage points of the Class I requirement.*

6: Public Act No. 23-205 AN ACT AUTHORIZING AND ADJUSTING BONDS OF THE STATE AND CONCERNING CERTAIN GRANT AND FINANCING PROGRAMS, STATE CONSTRUCTION RELATED THRESHOLDS, SCHOOL CONSTRUCTION PROJECTS, THE FAILURE TO FILE FOR CERTAIN GRAND LIST EXEMPTIONS, THE VALIDATION OF CERTAIN ACTIONS TAKEN BY CERTAIN MUNICIPALITIES, CAPITAL CITY PROJECTS, CERTAIN CONSUMER AGREEMENTS, CERTAIN MODIFICATIONS TO MUNICIPAL CHARTERS AND PETITIONS FOR CERTAIN TOWN REFERENDA, ELECTIONS ADMINISTRATION AND CAMPAIGN FINANCE, CERTAIN CASES BEFORE THE COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES AND OTHER ITEMS IMPLEMENTING THE STATE BUDGET.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00205-R00HB-06942-PA.PDF>

Signed by Governor Lamont: June 29, 2023

Effective Date: October 1, 2023

Section 90: *Establishment of the Housing Environmental Improvement Revolving Loan Fund. The Commissioner of Energy and Environmental Protection, in collaboration with the Commissioner of Housing, are to establish a pilot program or programs to provide financing for retrofitting projects for multifamily residences located in environmental justice communities or*

alliance districts that (1) improve the energy efficiency of such residences, which may include, but need not be limited to, the installation of heat pumps, solar power generating systems, improved roofing, exterior doors and windows, improved insulation, air sealing, improved ventilation, appliance upgrades and any electric system or wiring upgrades necessary for such retrofit, (2) remediate health and safety concerns that are barriers to any such retrofit, including, but not limited to, mold, vermiculite, asbestos, lead and radon, or (3) provide services to assist residents and building owners to access and implement the programs established pursuant to this section or other available state or federal programs that enable the implementation of energy efficiency retrofitting.

The fund may be funded from the proceeds of bonds or from any moneys available to the Commissioner of Energy and Environmental Protection or from other sources.

On and after July 1, 2024, the Commissioner of Energy and Environmental Protection, or any program administrator the commissioner may designate, shall begin accepting applications.

The pilot program shall terminate on September 30, 2028.

7: Public Act No. 23-206 AN ACT CONCERNING TREE REMOVAL ON PROPERTIES UNDER THE CONTROL OF THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00206-R00SB-00896-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023SB-00896-R01-BA.PDF>

Signed by Governor Lamont: June 29, 2023

Effective Date: Upon Passage. Tree Canopy Provision takes effect October 1, 2023

By January 1, 2040, it makes it a state goal to increase the total percentage of environmental justice communities that are covered by tree canopy, by 5% of the total area of those communities that have a current tree canopy cover of less than 40%. It does so to ensure state residents equitably enjoy open space and tree cover benefits.

8: Public Act No. 23-207 AN ACT ESTABLISHING A TAX ABATEMENT FOR CERTAIN CONSERVATION EASEMENTS AND ADDRESSING HOUSING AFFORDABILITY FOR RESIDENTS IN THE STATE.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00207-R00SB-00998-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023SB-00998-R02-BA.PDF>

Signed by Governor Lamont: June 29, 2023

Effective Date: October 1, 2023 (Section 17) – June 1, 2024 (Sections 28-34) – Section 35 (Upon Passage)

Omnibus Housing Bill (Original Bill – SB 4)

Section 17: OPM OFFICE OF RESPONSIBLE GROWTH

Established the Office of Responsible Growth within the Office of Policy and Management's (OPM) Intergovernmental Policy Division, and makes it the successor agency to the office of the same name established by executive order in 2006.

The office has the following responsibilities, for which OPM is generally responsible under existing law:

- 1; Collecting, analyzing, and disseminating information to help the ongoing development of responsible growth goals for the governor,*
- 2; coordinating the development of state agency policy, planning, and programming to improve outcomes and efficiently use state resources and expertise through developing and implementing the state plan of conservation and development,*
- 3; administering OPM's responsibilities under the Connecticut Environmental Policy Act,*
- 4; facilitating coordination between agencies, related to land and water resources and infrastructure improvements.*

Sections 28-35: WORKFORCE HOUSING DEVELOPMENTS

Establishes various state and local financial incentives for individuals and businesses investing in, and developing rental units set aside for, designated workforce populations under these programs.

Under the bill, an eligible workforce housing opportunity development project is a project to build or substantially rehabilitate rental housing that is located in an opportunity zone in the state where residents meet eligibility requirements and to the extent feasible, incorporate renewable energy and be transit-oriented.

4: Quasi - Legislation

1: Public Act No. 23-37 AN ACT CONCERNING REVISIONS TO THE STATE CODES OF ETHICS.

Link to Public Act: <https://cga.ct.gov/2023/ACT/PA/PDF/2023PA-00037-R00SB-01151-PA.PDF>

Link to OLR Summary: <https://cga.ct.gov/2023/BA/PDF/2023SB-01151-R000466-BA.PDF>

Signed by Governor Lamont: June 7, 2023

Effective Date: October 1, 2023

The bill makes technical changes in the ethics codes' definition of "quasi-public agency" by referencing state law's primary definition of quasi-public agency (i.e., the definition in CGS § 1-120, which is part of the quasi-public agency chapter of the General Statutes), rather than separately listing each quasi-public agency in the ethics codes. It also makes conforming changes (§§ 1-2 & 6-10)



CONNECTICUT **GREEN BANK**®

Comprehensive Plan Fiscal Years 2023 and 2024





Comprehensive Plan

Fiscal Years s 2023 and 2024

Green Bonds US

July 2022

January 2023 (Revised)

July 2023 (Revised)

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1. ~~Executive Summary~~ Introduction

The United States is an economy in transition.

Although the federal government officially declared the end of the COVID-19 Public Health Emergency on May 11, 2023, the country still ripples with aftershocks. In Connecticut alone, over 1,070,000 confirmed COVID-19 cases and more than twelve thousand COVID-19 associated deaths have left a lasting mark.¹ The pandemic caused disruptions in global supply chains, resulting in delayed arrival of clean energy technology required for our programs. The shift to remote or hybrid work schedules became the new norm for non-frontline workers – in Connecticut twice as many employees now work from home compared to pre-pandemic times.² The shift in hiring and spending behavior led to spiraling inflation, prompting the US Federal Reserve to institute a series of interest rate hikes, raising the rate from 0.25% in March 2022 to 5.25% in May 2023.

To compound matters, international conflicts such as the Russian invasion of Ukraine have sent shockwaves through the supply chain and energy markets, causing electricity rates to rise in Connecticut. These and other emergencies have diverted political attention away from the climate crisis while increasingly frequent and violent storms, drought, wildfires and floods wreak havoc worldwide.

The most recent update from the United Nations on progress towards the Sustainable Development Goals³ paints a bleak picture: to avoid the worst effects of climate change, global GHG emissions will “need to peak before 2025 and then decline by 43% by 2030, falling to net zero by 2050. Instead under current voluntary national commitments to climate action, greenhouse gas emissions will *rise* [emphasis added] by nearly 14 percent by 2030.”

The effects of anthropogenic climate change are undeniably present. We are witnessing firsthand how climate change impacts our state. Canada is currently experiencing its worst fire season in modern history. Over 20 million acres of boreal forest in Quebec have succumbed to the flames⁴, and the smoke has drifted south, enveloping the northeast coast in an eerie, orangey haze reminiscent of science fiction films. While fires are a natural part of these forests’ lifecycle, hotter temperatures fueled by climate change have intensified wildfires and prolonged fire seasons. In July 2023, torrential rains caused the National Weather Service to issue flood warnings along the Connecticut River as water levels surged⁵. Roads and ferries crossing the river were closed in anticipation of potential flash flooding or washouts.

Amidst these challenges, there have been significant positive developments in federal policy to address climate change. We have witnessed historical progress at the federal level towards changing our emissions trajectory towards 40% reduction from 2005 levels by 2030. In November 2021, the US Congress enacted the Infrastructure Investment and Jobs Act (“IIJA”), also called the Bipartisan Infrastructure Law (“BIL”). The \$1.2 trillion act established and refunded programs to support new infrastructure over a 10-year period. The IIJA contains

¹ COVID-19 data resources | Connecticut Data

² Number of remote workers in CT has almost doubled since 2019 (ctmirror.org)

³ The-Sustainable-Development-Goals-Report-2022.pdf (un.org)

⁴ This is Canada's worst fire season in modern history — but it's not new : Short Wave : NPR

⁵ National Weather Service flood warning for Connecticut River (courant.com)

research and development funds for low-carbon energy technology and support for deployment of clean energy technology such as electric vehicles. In fact, the largest portion of this investment will be overseen by the Department of Transportation.⁶

Furthermore, in August 2022, Congress reached a deal on budget reconciliation and enacted the Inflation Reduction Act (“IRA”). This landmark federal law which aims to curb inflation and represents the single most significant legislation to combat climate change in our nation’s history. It allocates \$369 billion to help build the clean energy economy through incentives and tax credits, including the creation of a \$27 billion Greenhouse Gas Reduction Fund (“GGRF”) modelled after the Connecticut Green Bank (“Green Bank”).⁷

Here in Connecticut, the Green Bank continues to seek solutions that can accelerate progress towards the state decarbonization goals established in the 2008 Global Warming Solutions Act (“GWSA”). Our investments have already made a measurable difference. In the 12 years of its existence, the Green Bank has helped avoid nearly 10 million tons of carbon dioxide emissions (the equivalent of 2.1 million passenger vehicles driven for one year).⁸ Avoiding 1 million tons of carbon dioxide emissions a year, for a state that emits nearly 35 million tons per year,⁹ is nearly 3 percent of all emissions avoided, or over 25 percent of emissions avoided from electricity generation (and consumption).¹⁰

However, we must acknowledge that Connecticut will need to significantly accelerate annual reductions to be on track to achieve 2030 and 2050 targets set forth in the GWSA.¹¹ The 2021 Connecticut Greenhouse Gas Emissions Inventory,¹² released in April 2023 by the Connecticut Department of Energy and Environmental Protection (“DEEP”),¹³ revealed that emissions estimates for 2021 are a 22 percent decrease from the 1990 baseline, but a 6 percent increase from 2020. Transportation is the highest emitting sector (i.e., 40% of emissions), with residential (i.e., 19% of emissions) and electric power (i.e., 15% of emissions) following.

In recognition of the Green Bank’s successful track record of deploying green infrastructure, Governor Ned Lamont, with the support of the Governor’s Council on Climate Change, signed into law Public Act 21-115 on July 6, 2021.¹⁴ This act expanded the Green Bank mandate to include environmental infrastructure – a recognition that the same financing tools we have successfully leveraged to increase investment in and deployment of clean energy in Connecticut can support other environmental sectors in need of rapid transformation as well. The act includes the creation of an Environmental Infrastructure Fund which could receive federal funds (e.g., GGRF) to mobilize private investment in environmental infrastructure.

⁶ The US Bipartisan Infrastructure Law: Breaking it down | McKinsey

⁷ <https://www.ctgreenbank.com/connecticut-green-bank-the-countrys-first-state-green-bank-salutes-u-s-congress-and-president-biden-for-passage-and-signage-of-inflation-reduction-act/>

⁸ <https://www.ctgreenbank.com/wp-content/uploads/2022/09/FY12-FY22-CGB-ImpactReport-8242022.pdf>

⁹ Connecticut Greenhouse Gas Inventory (Update for 1990-2021) by DEEP (April 20, 2023)

¹⁰ Ibid (11)

¹¹ Reduce GHG emissions by 45% from 2001 levels by 2030 and 80% from 2001 levels by 2050

¹² https://portal.ct.gov/-/media/DEEP/climatechange/1990-2021-GHG-Inventory/DEEP_GHG_Report_90-21_Final.pdf

¹³ https://portal.ct.gov/-/media/DEEP/climatechange/GHG_Emissions_Inventory_2018.pdf

¹⁴ An Act Concerning Climate Change Adaptation – <https://www.cga.ct.gov/2021/ACT/PA/PDF/2021PA-00115-R00HB-06441-PA.PDF>

Liu Zhenmin, the United Nations Under-Secretary-General for Economic and Social Affairs, concludes his comments on the annual SDG report with the following guidance: “Nothing short of a comprehensive transformation of the international finance and debt architecture will be required to accomplish these aims...”

Although the Green Bank is geographically limited in our ability to invest in resilience and mitigation to confront climate change, we can continue to be a leader in the space and demonstrate how new financing models through public-private partnerships can drive innovative investment in our global future.¹⁵ Since the Green Bank’s launch in 2011 as the first state level green bank in the nation, dozens of state and local green banks have popped up both nationally and abroad. With the IIJA and the IRA in place at the federal level, and the public policies and incentives available in Connecticut, the Green Bank is poised to continue its leadership and advance its mission.

As the saying goes “think globally – act locally”. With the infusion of federal funding from the IIJA and the IRA, we now have a unique opportunity to accelerate the transition to a green economy. These funds come with a welcome forcing mechanism to ensure that the benefits of this transition reach low-income families and disadvantaged communities, promoting an equitable deployment that benefits all communities in our state. Together, we can create a sustainable future that leaves no one behind.

2. Organizational Overview

The Green Bank¹⁶ was established on a bipartisan basis by Governor Malloy and the Connecticut General Assembly (“CGA”) on July 1, 2011 through Public Act (“PA”) 11-80¹⁷ as a quasi-public agency that supersedes the former Connecticut Clean Energy Fund (“CCEF”). On July 1, 2021, the 10th anniversary of the Green Bank, again, on a bipartisan basis, Governor Lamont and the CGA enacted PA 21-115 expanding the scope of the Green Bank beyond “clean energy” to include “environmental infrastructure”. As the nation’s first state green bank, the Green Bank leverages public funds to mobilize multiples of private investment to increase and accelerate investment in clean energy deployment and environmental infrastructure improvement in Connecticut.

The Green Bank’s statutory purposes are:

- To develop programs to finance and otherwise support clean energy and environmental infrastructure investment in residential, municipal, small business and larger commercial projects and such other programs as the Green Bank may determine;
- To support financing or other expenditures that promote investment in clean energy sources and environmental infrastructure to foster the growth, development and

¹⁵ “There’s finally a national climate bank. Here’s how it can make its \$27 billion go even further” in Fast Company by Ashley Stimpson (December 16, 2022)

¹⁶ PA 11-80 repurposed the Connecticut Clean Energy Fund (CCEF) administered by Connecticut Innovations, into a separate quasi-public organization called the Clean Energy Finance and Investment Authority (CEFIA). Per Public Act 14-94, CEFIA was renamed to the Connecticut Green Bank.

¹⁷ An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut’s Energy Future – <https://www.cga.ct.gov/2011/act/pa/pdf/2011PA-00080-R00SB-01243-PA.pdf>

commercialization of clean energy sources, environmental infrastructure, and related enterprises; and

- To stimulate demand for clean energy and the deployment of clean energy sources and investment in environmental infrastructure within the state that serves end-use customers in the state.

The Green Bank's purposes are codified in Section 16-245n(d)(1) of the Connecticut General Statutes ("CGS") and restated in the Green Bank's Board approved [Resolution of Purposes](#). The Green Bank is a public policy innovation that exemplifies Connecticut's more than two-decade history of bipartisan executive and legislative branch leadership on the issue of climate change. Leadership highlights include:

- **Governor Rowland** – co-chaired the New England Governors and Eastern Canadian Premiers Conference, which established a regional commitment to reduce greenhouse gas ("GHG") emissions (i.e., 1990 levels by 2010, 10% below 1990 levels by 2020, and 80% below 2001 levels by 2050);¹⁸
- **Governor Rell** – supported PA 08-98¹⁹ codifying the regional commitment into state law, appointing Gina McCarthy to be the Commissioner of the Department of Environmental Protection who would help lead the development of the Regional Greenhouse Gas Initiative ("RGGI"), later become the Administrator of the United States Environmental Protection Agency ("USEPA") under President Obama, and ~~becoming~~ become the White House National Climate Advisor for President Biden;
- **Governor Malloy** – led the passage of PA 11-80 establishing DEEP, creating the Green Bank, and other policies catalyzing the market for clean energy, as well as PA 18-50²⁰ and PA 18-82²¹ increasing the state's renewable portfolio standard ("RPS") to 40% by 2030 and establishing a midterm GHG emissions reduction target of 45% below 2001 levels by 2030, respectively; and
- **Governor Lamont** – issued his first²² and third²³ executive orders on state "Greener Gov" for sustainability, clean energy, and climate change leadership, passing PA 21-115 expanding the scope of the Green Bank to include "environmental infrastructure," PA 22-5²⁴ including a 100% zero emission electricity target by 2040, and PA 22-25²⁵ confronting greenhouse gas emissions from the transportation sector, including 100%

¹⁸ NEG-ECP Resolution 26-4 adopting the "Climate Change Action Plan 2001" (August 2001 in Westbrook, CT) – Westbrook Resolution

¹⁹ An Act Concerning Connecticut Global Warming Solutions – <https://www.cga.ct.gov/2008/ACT/Pa/pdf/2008PA-00098-R00HB-05600-PA.pdf>

²⁰ An Act Concerning Connecticut's Energy Future – <https://www.cga.ct.gov/2018/act/pa/pdf/2018PA-00050-R00SB-00009-PA.pdf>

²¹ An Act Concerning Climate Change Planning and Resiliency – <https://www.cga.ct.gov/2018/act/pa/pdf/2018PA-00082-R00SB-00007-PA.pdf>

²² <https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-1.pdf>

²³ <https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-3.pdf>

²⁴ An Act Concerning Climate Change Mitigation – <https://www.cga.ct.gov/2022/act/Pa/pdf/2022PA-00005-R00SB-00010-PA.PDF>

²⁵ An Act Concerning the Connecticut Clean Air Act – <https://www.cga.ct.gov/2022/ACT/PA/PDF/2022PA-00025-R00SB-00004-PA.PDF>

targets for school buses in environmental justice communities by 2030 and all communities by 2040.

The CGA has worked hand-in-hand with these Governors and the citizens of the state over the years to devise and support public policies that promote clean energy, environmental infrastructure, and lead the movement to confront climate change.²⁶

2.1 Vision Statement

...a planet protected by the love of humanity.²⁷

2.2 Mission Statement

Confront climate change by increasing and accelerating investment into Connecticut's green economy to create more resilient, healthier, and equitable communities.

2.3 Goals

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

1. To leverage limited public resources to scale-up and mobilize private capital investment in the green economy of Connecticut.
2. To strengthen Connecticut's communities, especially vulnerable communities,²⁸ by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses.
3. To pursue investment strategies that advance market transformation in green investing while supporting the organization's pursuit of financial sustainability.

The vision statement, mission statement, and goals support the implementation of Connecticut's climate change, clean energy, and environmental infrastructure policies be they statutorily required (e.g., PA 21-53),²⁹ planning (e.g., Comprehensive Energy Strategy), or regulatory (e.g., Docket No. 17-12-03RE03)³⁰ in nature.

Framework for an Equitable Modern Grid³¹

²⁶ Reducing greenhouse gas emissions and confronting climate change is supported by a number of public policies, including, but not limited to PA 17-3, PA 18-82, PA 19-71, Governor Lamont's Executive Orders 1 and 3, Comprehensive Energy Strategy, Governor's Council on Climate Change, and many other past acts, plans, or policies.

²⁷ Vision Statement inspired by the Innovations in American Government Awards at the Ash Center of Harvard University's Kennedy School of Government, Maya Angelou's "On the Pulse of Morning," the powerful words of Mary Evelyn Tucker on "inclusive capitalism," and [the late](#) Mother Jennifer of the Daughters of Mary of the Immaculate Conception

²⁸ Per PA 20-05, "An Act Concerning Emergency Response by Electric Distribution Companies, the Regulation of Other Public Utilities and Nexus Provisions for Certain Disaster-Related or Emergency-Related Work Performed in the State," "vulnerable communities" means populations that may be disproportionately impacted by the effects of climate change, including, but not limited to, low and moderate income communities, environmental justice communities pursuant to section 22a-20a, communities eligible for community reinvestment pursuant to section 36a-30 and the Community Reinvestment Act of 1977, 12 USC 2901 et seq., as amended from time to time, populations with increased risk and limited means to adapt to the effects of climate change, or as further defined by DEEP in consultation with community representatives.

²⁹ An Act Concerning Energy Storage – <https://www.cga.ct.gov/2021/act/Pa/pdf/2021PA-00053-R00SB-00952-PA.PDF>

³⁰ Equitable Modern Grid Initiative – Electric Storage

³¹ <https://portal.ct.gov/PURA/Electric/Grid-Modernization/Grid-Modernization>

The Public Utilities Regulatory Authority's ("PURA") Framework for an Equitable Modern Grid, seeks to (1) support, or remove barriers to, the growth of Connecticut's green economy; (2) enable a cost-effective, economy-wide transition to a decarbonized future; (3) enhance customer access to a more resilient, reliable and secure electricity commodity; and (4) advance the ongoing energy affordability dialogue in the state, particularly in underserved communities.

The Green Bank supports PURA in their efforts through participation in many of the re-openers in the equitable modern grid as a commentator, a participant and a program administrator.

2.4 Definitions – Clean Energy and Environmental Infrastructure

The Green Bank's investment focus is on "clean energy" and "environmental infrastructure" as defined by CGS Section 16-245n:

- **Clean Energy** – "clean energy" means solar photovoltaic energy, solar thermal, geothermal energy, wind, ocean thermal energy, wave or tidal energy, fuel cells, landfill gas, hydropower that meets the low-impact standards of the Low-Impact Hydropower Institute, hydrogen production and hydrogen conversion technologies, low emission advanced biomass conversion technologies, alternative fuels, used for electricity generation including ethanol, biodiesel or other fuel produced in Connecticut and derived from agricultural produce, food waste or waste vegetable oil, provided the Commissioner of Energy and Environmental Protection determines that such fuels provide net reductions in GHG emissions and fossil fuel consumption, usable electricity from combined heat and power systems with waste heat recovery systems, thermal storage systems, other energy resources and emerging technologies which have significant potential for commercialization and which do not involve the combustion of coal, petroleum or petroleum products, ~~municipal solid waste~~ or nuclear fission, financing of energy efficiency projects, projects that seek to deploy electric, electric hybrid, natural gas or alternative fuel vehicles and associated infrastructure, any related storage, distribution, manufacturing technologies or facilities and any Class I renewable energy source, as defined in CGS 16-1(a)(2).
- **Environmental Infrastructure** – "~~environmental infrastructure~~" means structures, facilities, systems, services and improvement projects related to (A) water, (B) waste and recycling, (C) climate adaptation and resiliency, (D) agriculture, (E) land conservation, (F) parks and recreation, and (G) environmental markets, including, but not limited to carbon offsets³² and ecosystem services.³³

³² Carbon offsets means an activity that compensates for the emission of carbon dioxide or other greenhouse gases by providing for an emission reduction elsewhere.

³³ Ecosystem services means benefits obtained from ecosystems, including, but not limited to, (A) provisioning services such as food and water, (B) regulating services such as floods, drought, land degradation and disease, and (C) supporting services such as soil formation and nutrient cycling.

2.5 Governance

Pursuant to Section 16-245n of the CGS, the powers of the Green Bank are vested in and exercised by a Board of Directors (“BOD”)³⁴ that is comprised of twelve voting and one non-voting members each with knowledge and expertise in matters related to the purpose of the organization – see Table 1.³⁵

Table 1. Board of Directors of the Connecticut Green Bank

Position	Status	Appointer	Voting
State Treasurer (or designee)	Ex Officio	Ex Officio	Yes
Commissioner of DEEP (or designee)	Ex Officio	Ex Officio	Yes
Commissioner of DECD (or designee)	Ex Officio	Ex Officio	Yes
Secretary of OPM (or designee)	Ex Officio	Ex Officio	Yes
Residential or Low-Income Group	Appointed	Speaker of the House	Yes
Investment Fund Management	Appointed	Minority Leader of the House	Yes
Environmental Organization	Appointed	President Pro Tempore of the Senate	Yes
Finance or Deployment of Renewable Energy	Appointed	Minority Leader of the Senate	Yes
Finance of Renewable Energy	Appointed	Governor	Yes
Finance of Renewable Energy	Appointed	Governor	Yes
Labor	Appointed	Governor	Yes
R&D or Manufacturing	Appointed	Governor	Yes
President of the Green Bank	Ex Officio	Ex Officio	No

There are four (4) committees of the BOD of the Green Bank, including Audit, Compliance, and Governance Committee (“ACG Committee”), Budget, Operations, and Compensation Committee (“BOC Committee”), Deployment Committee, and the Joint Committee of the Energy Efficiency Board (“EEB”) and the Green Bank.³⁶

Principal Statement of the Joint Committee

To support the Joint Committee of the EEB and the Green Bank, the following is a principal statement to guide its activities:

The EEB and the Green Bank have a shared goal to implement state energy policy throughout all sectors and populations of Connecticut with continuous innovation towards greater leveraging of ratepayer funds and a uniformly positive customer experience.

The BOD of the Green Bank is governed through enabling legislation, as well as by an [Ethics Statement](#) and [Ethical Conduct Policy](#), Resolutions of Purposes, [Bylaws](#), [Joint Committee](#)

³⁴ <https://www.ctgreenbank.com/about-us/governance/board-of-directors/>

³⁵ <https://www.ctgreenbank.com/about-us/governance/>

³⁶ Pursuant to CGS 16-245m(d)(2) – There shall be a joint committee of the Energy Conservation Management Board and the board of directors of the Connecticut Green Bank. The boards shall each appoint members to such joint committee. The joint committee shall examine opportunities to coordinate the programs and activities funded by the Clean Energy Fund pursuant to section 16-245n with the programs and activities contained in the plan developed under this subsection and to provide financing to increase the benefits of programs funded by the plan so as to reduce the long-term cost, environmental impacts and security risks of energy in the state. Such joint committee shall hold its first meeting on or before August 1, 2005.

[Bylaws](#), and a Comprehensive Plan. All meetings, agendas, and materials of the Green Bank's BOD and its Committees are publicly available on the organization's website.^{37,38}

2.6 Organizational Structure

The Green Bank is administered by a professional staff overseeing three (3) business units, including:

- **Incentive Programs** – the Governor and the CGA from time-to-time may decide that there are certain incentive programs that they seek to have the Green Bank administer (e.g., PA 21-53). The Green Bank administers such programs with the goal of delivering on the public policy objectives, while at the same time ensuring that funds invested by the Green Bank are cost recoverable.³⁹ For example, the Green Bank co-administers the Energy Storage Solutions ("ESS") program with the Electric Distribution Companies ("EDC") (i.e., Avangrid and Eversource Energy) to deploy 580 MW of behind the meter residential and non-residential battery storage systems through an upfront declining incentive block structure and ongoing performance-based incentive.
- **Financing Programs** – the Green Bank's core business is financing clean energy projects. The use of public revenues by the Green Bank (i.e., Clean Energy Fund ("CEF") and RGGI allowance proceeds) are to be invested with the expectation of principal and interest being paid back over time (i.e., earned revenues). For example, per CGS 16a-40g, the Green Bank administers the Commercial Property Assessed Clean Energy ("C-PACE") program. Through C-PACE, the Green Bank provides capital to building owners to make clean energy and resilience improvements on their properties that is paid back over time from a benefit assessment on the building owner's property tax bill. The interest earned from these types of investments, over time, is expected to cover the operational expenses and a return for the Green Bank.
- **Environmental Infrastructure Programs** – as a result of the passage of PA 21-115 expanding the scope of the Green Bank beyond "clean energy" to include "environmental infrastructure," the financing tools of the green bank model will be used to mobilize private investment in Connecticut's green economy. Raising capital for the Environmental Infrastructure Fund ("EIF") through the issuance of Green Liberty Bonds, accessing federal resources (e.g., IIJA, GHRF), and/or other means, will provide resources to invest in the modernization, decarbonization, and resilience of the state's environmental infrastructure.

These three business units – Incentive Programs, Financing Programs, ~~(i.e., for "clean energy")~~ and Environmental Infrastructure Programs – serve the purposes of the Green Bank. To support the business units and their investments, the Green Bank has administrative support from finance, legal, marketing and operations.

³⁷ <https://www.ctgreenbank.com/about-us/governance/board-meetings/>

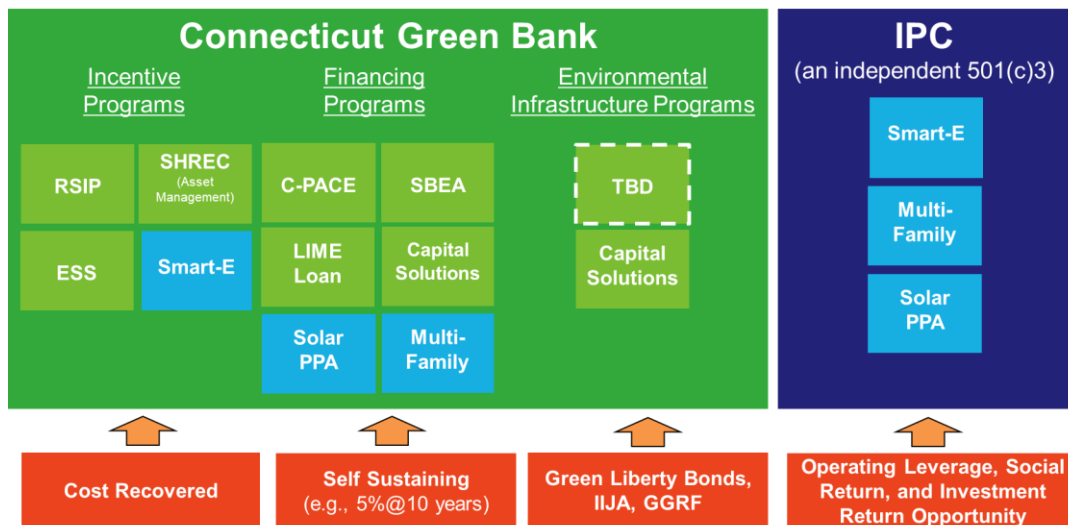
³⁸ <https://www.ctgreenbank.com/about-us/governance/committee-meetings/>

³⁹ In the past, per CGS 16-245ff, the Green Bank administered the Residential Solar Investment Program ("RSIP") which resulted in 350 MW of residential solar photovoltaic system deployment between 2012 through 2021. [RSIP is cost recoverable per CGS 16-245gg.](#)

In FY19, the Green Bank, in partnership with DEEP and the Kresge Foundation, formed a nonprofit organization called Inclusive Prosperity Capital (“IPC”). The mission of IPC is to attract mission-oriented investors in underserved clean energy market segments (e.g., low-to moderate-income (“LMI”) single and multifamily properties) of the green economy. Although not an affiliate, nor a component unit of the Green Bank, IPC serves an important role supporting Green Bank programs (e.g., Smart-E, Solar PPA, and Multifamily Affordable) through FY26.

For an overview of the organizational structure of the Green Bank, and its partnership with IPC – see Figure 1.

Figure 1. Organizational Structure of the Green Bank with Support from Inclusive Prosperity Capital



An Employee Handbook and [Operating Procedures](#) have been approved by the BOD and serve to guide the staff to ensure that it is following proper contracting, financial assistance, and other requirements.

3. Incentive Programs

The Green Bank administers incentive programs, including credit enhancements (e.g., interest rate buydowns, loan loss reserves), used to deploy clean energy and environmental infrastructure, while at the same time cost recovering the expenses associated with several of these programs (i.e., CGS 16-245ff, PA 21-53) within the business unit – including, but not limited to, incentives, administrative expenses, and financing costs.

3.1 Residential Solar Investment Program and Residential Renewable Energy Solutions

Residential Solar Investment Program

Per CGS 16-245ff, the Green Bank administered the Residential Solar Investment Program (“RSIP”) to deploy ~~no more than~~ 350 megawatts of new residential solar PV systems on or before December 31, 2022, while promoting the sustained, orderly development of a local state-based solar PV industry and ensuring that solar PV systems are accessible and affordable

to vulnerable communities.⁴⁰ As of ~~June 30~~December 31, 2022, the RSIP achieved ~~380-378~~ MW of deployment, providing ~~nearly more than 47,000~~46,300 households with access to solar PV systems, including 50% within vulnerable communities.⁴¹ With the end of the RSIP policy ~~on December 31, 2022~~, the focus of the Green Bank will be to manage the Solar Home Renewable Energy Credits (“SHREC”) generated from the systems supported through the RSIP to recover incentives, administrative expenses, and financing costs, by selling SHRECs to the EDCs through a 15-year Master Purchase Agreement (“MPA”) to pay for bonds sold to support the program.

Residential Renewable Energy Solutions

Starting January 1, 2022, the residential solar PV market transitioned from the RSIP and net metering to a tariff-based compensation structure.⁴² In order to ensure the continued sustained, orderly development of the local solar industry beyond the conclusion of the RSIP, and access to such clean energy technologies by vulnerable communities, the Green Bank actively engaged in the regulatory process (i.e., Docket No. 20-07-01) overseen by PURA to establish Residential Renewable Energy Solutions (“RRES”) – an EDC-administered residential renewable energy tariff program.

As a result of the Green Bank’s engagement in the PURA process for the RRES, the following key program design principles were included:

- **Rate of Return** – a just, reasonable, and adequate rate of return of between 9 to 11 percent was determined (i.e., equivalent to \$0.294/kWh in 2021) for the 20-year tariff through the Green Bank’s inclusion of an objective rate of return analysis of the RSIP;
- **HES or HES-IE Requirement** – to continue the linkage between energy efficiency and solar PV as demonstrated by the RSIP, an important objective of the Joint Committee, the Green Bank advocated for a Home Energy Solutions (“HES”) or Home Energy Solutions – Income Eligible (“HES-IE”) requirement as part of ~~every project supported through~~ the RRES;
- **Additional Incentives for Vulnerable Communities** – given the success of the RSIP in reaching vulnerable communities, the Green Bank wanted to ensure that solar PV was affordable and accessible to LMI households, and thus adds for low income (i.e., \$0.0250/kWh) or households located in distressed municipalities⁴³ (i.e., \$0.0125/kWh) over the 20-year tariff were determined;
- **Direct Payment** – due to the perceived risks of underwriting financing (i.e., loans, leases, or power purchase agreements (“PPAs”)) for vulnerable communities, the Green ~~Bank-Bank~~ advocated for direct payments of the tariff rates from the EDCs to a third-party in-part or in-whole as a way to reduce borrower risk (including perceived risk) and therefore make renewable energy more affordable and accessible to vulnerable

⁴⁰ Each year, from 2019 through ~~2021~~2022, and cumulatively from 2014 through 2021, Connecticut had the largest per capita deployment of residential solar PV in the entire northeast (i.e., New England, New Jersey, and New York) as a result of administering the RSIP (SEIA – Solar Market Insights 2022).

⁴¹ [“Residential Solar Investment Program – 2012-2022 Program Impact Evaluation and Future Recommendations” by Slipstream \(May 3, 2023\) – click here.](#)

⁴² See CGS 16-244z and Docket No. 20-07-01

⁴³ https://portal.ct.gov/DECD/Content/About_DECD/Research-and-Publications/02_Review_Publications/Distressed-Municipalities

communities. This provides a financing mechanism that would allow the Green Bank to provide investment in developers serving vulnerable communities; and

- **Affordable Housing** – as part of the Green Bank-led amendments to Section 2 of PA 21-48,⁴⁴ which includes “affordable housing” as part of RRES (i.e., versus Non-Residential Renewable Energy Solutions or “NRES”), and a subsequent decision by PURA in Docket No. 22-08-02, it will be easier for property owners to participate in RRES, enabling energy savings to both the property owner and its low-income tenants.

These key program design principles within the EDC-administered tariff program will improve the program’s likelihood of success in deploying no less than fifty (50) megawatts of new residential solar PV a year, while ensuring that vulnerable communities have continued opportunities to reduce the burden of energy costs that they experienced through the RSIP. To support PURA in overseeing the EDC-administered RRES, the Green Bank is a consultant to the Office of Education, Outreach, and Enforcement.

3.2 Energy Storage Solutions

With the passage of PA 21-53 establishing a 1000 MW energy storage target by 2030, and the final decision in Docket No. 17-12-03RE03 on electric storage, the Green Bank was selected by PURA to co-administer a 580 MW behind the meter residential and non-residential battery storage incentive program with the EDCs called Energy Storage Solutions (“ESS”). The Green Bank is responsible for administering the upfront incentive, marketing the program, overseeing evaluation, measurement, and verification (“EM&V”), and fostering the sustained, orderly development of a state-based electric energy storage industry. ESS seeks to deploy battery storage systems to help families and businesses become more resilient against power outages, while reducing peak demand during summer and winter periods reducing electric rates for all ratepayers.

3.3 EnergizeCT Smart-E Loan

The EnergizeCT Smart-E Loan (“Smart-E Loan”) is a partnership between the Green Bank and local community banks and credit unions that provide easy and affordable access to capital for homeowners to finance clean energy and environmental infrastructure improvements on their properties through local contractors. The Green Bank provides credit enhancements to the participating financing institutions in the form of interest rate buydowns (i.e., from the use of federal resources and from the Green Bank balance sheet through linked deposits) and loan loss reserves (i.e., from the Green Bank balance sheet). This allows financial institutions to provide low-interest and longer-term loans to families.

In FY 2023, the Green Bank, working with Connecticut Institute for Resilience and Climate Adaptation (“CIRCA”), DEEP, Connecticut Department of Public Health (“DPH”), Connecticut Insurance Department, and other stakeholders, identified additional measures (i.e., climate adaptation and resilience, water) for inclusion within will-be-expanding the Smart-E Loan offering-beyond-clean-energy-to-includefor environmental infrastructure measures. Such measures will be included in the Smart-E Loan and made available in 2024.

⁴⁴ An Act Establishing and Energy Efficiency Retrofit Grant Program for Affordable Housing – <https://www.cga.ct.gov/2021/act/Pa/pdf/2021PA-00048-R00SB-00356-PA.PDF>

3.4 Incentive Program Targets

The Green Bank has set targets for its Incentive Programs business unit for FY 2023⁴⁵ and FY 2024 in terms of the number of projects, total investment (i.e., public and private), and installed capacity – see Tables 2 and 3.

Table 2. Revised FY 2023 Targets for the Incentive Programs Business Unit

Program / Product	Projects	Total Capital Deployed (\$MM's)	Installed Capacity (kW)
Energy Storage Solutions – Residential	350	\$14.9	4,700
Energy Storage Solutions – Non-Residential	30	\$67.5	45,000
EnergizeCT Smart-E Loan	960	\$15.0	200
Total	1,340	\$97.4	49.9

Table 3. FY 2024 Targets for the Incentive Programs Business Unit

Program / Product	Projects	Total Capital Deployed (\$MM's)	Installed Capacity (kW)
Energy Storage Solutions – Residential	250	\$8.0	2,000
Energy Storage Solutions – Non-Residential	29	\$73.5	50,000
EnergizeCT Smart-E Loan	944	\$17.9	300
Total	1,211	\$99.0	52,300

In terms of the Green Bank’s vulnerable community’s prioritization, the following is a goal for Incentive Programs:

- By 2025, no less than 40 percent of investment and benefits (e.g., reduction in energy burden, increase in resilience, jobs) from Incentive Programs is directed to vulnerable communities.

As a result of successfully achieving these targets, the Green Bank will reduce energy burden and increase energy security/resilience for Connecticut families and businesses, especially those in vulnerable communities, create jobs in our communities, raise tax revenues for the State of Connecticut, and reduce air pollution causing local public health problems and contributing to global climate change.

4. Financing Programs

The Green Bank manages financing programs. That is to say that it oversees financing programs that invest capital upfront (i.e., public revenues including CEF and RGGI) to deploy clean energy, while at the same time returning principal and interest (i.e., earned revenues) over time from the financing of projects, products, or programs to ensure the financial sustainability of the Green Bank.

⁴⁵ Revised by the BOD on January 20, 2023

4.1 Commercial Property Assessed Clean Energy

Per CGS 16a-40g, C-PACE enables building owners to pay for clean energy improvements over time through a voluntary benefit assessment placed by participating municipalities on their property tax bills. As of June 30, ~~2022~~2023, there have been 139 cities and towns that have opted into C-PACE. This process makes it easier for building owners to secure low-interest capital for up to 25 years to fund clean energy improvements and is structured so that energy savings more than offset the benefit assessment. With the passage of PA 22-6,⁴⁶ resilience and electric vehicle recharging stations were added to the list of eligible measures for C-PACE.

~~Continuing its efforts, in~~ In FY 2024~~3~~, the Green Bank, working with DEEP, ~~Connecticut Institute for Resilience and Climate Adaptation (“CIRCA”)~~, and other stakeholders, will be expanding C-PACE beyond clean energy to include resilience⁴⁷ measures.

4.2 Green Bank Solar Power Purchase Agreement & Solar Roof Lease

The Green Bank Solar PPA and the Green Bank Solar Roof Lease are third-party ownership structures to deploy solar PV systems for commercial scale end-use customers (e.g., businesses, nonprofits, municipal and state governments, schools, affordable multifamily properties, etc.) that uses a multi-year PPAs or site lease to finance projects while either reducing energy costs for the host customer or providing a fixed annual lease payment.

4.3 Small Business Energy Advantage & Business Energy Advantage

Small Business Energy Advantage (“SBEA”) and Business Energy Advantage (“BEA”) are Eversource Energy administered on-bill commercial energy efficiency financing programs for small and medium-sized businesses, municipalities and Connecticut state agencies. Low-cost capital is provided by Amalgamated Bank with a credit enhancement from the Green Bank (i.e., subordinated debt) and the Connecticut Energy Efficiency Fund (i.e., loan loss guaranty and interest rate buydown). SBEA and BEA enables qualifying customers to access 0% on bill financing for up to \$100,000 per site for businesses (up to a maximum of \$1,000,000), up to \$5,000,000 for municipalities, and up to \$5,000,000 per project for state facilities with no overall outstanding loan cap.

4.4 Multifamily Products

~~Defined as buildings with 5 or more units, the~~The Green Bank provides a suite of financing options in collaboration with our partners IPC and Capital for Change (a Community Development Financial Institution or “CDFI”) that support property owners of multifamily buildings⁴⁸ to assess, design, fund, and monitor high impact clean energy and health & safety improvements for their properties. Beginning in FY24, as a result of public policy,⁴⁹ the Green Bank will focus its effortssupport of RRES onby deploying solar and storage in affordable multifamily properties through the Green Bank Solar PPA & Lease as well as C-PACE and the

⁴⁶ An Act Concerning the Commercial Property Assessed Clean Energy Program – <https://www.cga.ct.gov/2022/act/Pa/pdf/2022PA-00006-R00SB-00093-PA.PDF>

⁴⁷ Per CGS 16-244aa, “resilience” means the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from deliberate attacks, accidents or naturally occurring threats or incidents, including, but not limited to, threats or incidents associated with the impacts of climate change.

⁴⁸ [Buildings with 5 or more units](#)

⁴⁹ [Public Act 21-48 and Docket No. 22-08-02](#)

[Solar Loan](#). The Green Bank will continue to support energy efficiency through its support of the [LIME](#) product offered by Capital for Change, as well as [C-PACE](#).

4.5 Green Bank Capital Solutions

As opportunities present themselves, the Green Bank from time-to-time invests as part of a capital structure in various projects (e.g., fuel cell, hydropower, food and farm waste to energy). These projects are selected based on the opportunity to expand the organization’s experience with specific technologies, advance economic development in a specific locale, or to drive adoption of clean energy that would otherwise not occur, while also earning a rate of return.

4.6 Financing Program Targets

The Green Bank has set targets for its Financing Programs business unit for FY 2023 [and FY 2024](#) in terms of the number of projects, total investment (i.e., public and private), and installed capacity – see [Tables 34 and 5](#).

Table 34. Revised FY 2023 Targets for the Financing Programs Business Unit

Program / Product	Projects	Total Capital Deployed (\$MM's)	Green Bank Capital Deployed (\$MM's)	Installed Capacity (kW)
Commercial PACE	23	\$31.0	\$7.0	-
Green Bank Solar PPA	19	\$13.7	\$2.7	7,600
Small Business Energy Advantage	839	\$18.6	\$3.7	-
Multifamily Term Loan	6	\$1.4	-	600
Multifamily Health and Safety	1	\$0.9	-	-
Total	882	\$64.2	\$13.4	7,600

Table 5. FY 2024 Targets for the Financing Programs Business Unit

Program / Product	Projects	Total Capital Deployed (\$MM's)	Green Bank Capital Deployed (\$MM's)	Installed Capacity (kW)
Commercial PACE	19	\$21.2	\$7.7	-
Green Bank Solar PPA	16	\$16.1	\$11.0	8,200
Small Business Energy Advantage	480	\$11.7	\$2.3	-
Multifamily Term Loan	3	\$0.3	\$0.3	300
Total	515	\$49.0	\$21.1	8,200

In terms of the Green Bank’s vulnerable communities prioritization, the following is a goal for Financing Programs:

- By 2025, no less than 40 percent of investment and benefits (e.g., [reduction in energy burden, increase in resilience, jobs](#)) from Financing Programs is directed to vulnerable communities.

The capital provided by the Green Bank, which is a portion of the total investment, is expected to yield a return commensurate with the financial sustainability objectives of the organization and business unit.

As a result of successfully achieving these targets, the Green Bank will contribute to its financial sustainability, ~~while-and~~ also ~~reducing-reduce~~ the energy burden ~~and increase resilience on-and~~ ~~improve the resiliency from climate change~~ for Connecticut families and businesses, especially those in vulnerable communities, create jobs in our communities, raise tax revenues for the State of Connecticut, and reduce air pollution that cause local public health problems and global climate change.

5. Environmental Infrastructure Programs

Following the passage of PA 21-115 in June of 2021, the Green Bank began the process of policy assessment and development for environmental infrastructure in FY 2022, including:

- **Governance Amendments** – revising various governance documents including the Resolution of Purpose, Bylaws, and Operating Procedures;
- **Assessing Bond Potential** – investigating the potential for Green Liberty Bonds to be issued to raise proceeds for environmental infrastructure investment, including fifty (50) year maturity terms;
- **Developing Products** – expanding the ability for the Smart-E Loan to support environmental infrastructure projects for single family property owners and C-PACE to support resilience projects for multifamily and commercial property owners;
- **Stakeholder Engagement** – initiating outreach to public, private, nonprofit, and academic stakeholder organizations to introduce the Green Bank, understand public policies and targets, identify funding opportunities, market potential, investment requirements, and financing models, and metrics for environmental infrastructure; and
- **Strategic Retreat** – engaging members of the BOD, staff, and key stakeholders in an offsite strategic retreat to expand the scope of the Green Bank to mobilize private investment in environmental infrastructure.⁵⁰⁵¹

As a result of these efforts in FY 2022, the Green Bank makes the following observations with respect to environmental infrastructure:

1. **Market Intermediary Role** – as is the case with respect to “clean energy,” the Green Bank has a role to play as a market intermediary for “environmental infrastructure” – see Figure 2. Given the ambitious nature of public policies with respect to environmental infrastructure (e.g., 21% open space by 2023), and the need to mobilize and attract private investment to achieve the policy objectives (e.g., \$1.5 billion of additional public and/or private investment needed to achieve the open space target),

⁵⁰ <https://www.ctgreenbank.com/wp-content/uploads/2022/07/2022-Strategic-Retreat-Report.pdf>

⁵¹ <https://www.youtube.com/watch?v=6V3wwMcaUvU>

there is a need for an intermediary role for the Green Bank between capital markets and public policy.

Figure 2. Market Intermediary Role - Capital Markets and Public Policy



2. **Better Market Signals** – again, as is the case with respect to “clean energy” (e.g., zero emission renewable energy credits), there is a need for public policy to send better market signals to unlock and mobilize private capital investment in “environmental infrastructure”. For example, beyond “sticks” (e.g., regulation and enforcement requiring producers of food waste to transport their waste to an anaerobic digester per PA 11-127), there need to also be associated “carrots” (e.g., virtual net metering, low emission renewable energy credits, renewable natural gas) in order to enable private investment in “environmental infrastructure”. A strong market signal public policy for green and blue infrastructure is Maryland’s Conservation Finance Act of 2022 and the pay-for-success contracts for certain environmental outcomes.⁵²
3. **Appropriately Priced Capital** – if public policy in Connecticut is designed to reduce risks (including perceived risks), then attracting and mobilizing appropriately priced private capital (e.g., lower interest rates, longer terms) must ensue. The Green Bank can access affordable private capital through the issuance of Green Liberty Bonds, which can be paid back over 50 years (or the useful life of the asset) and whose proceeds can be invested in environmental infrastructure.
4. **Community Engagement** – there is a continuous need to not only engage public, private, nonprofit and academic stakeholders, but also municipal, councils of government, and other community-level officials. Empowering impacted communities, especially vulnerable communities, through near-term engagement (i.e., informing, consulting, and involving) to long-term engagement (i.e., collaborating and empowering) is vital to identifying needs to support the development of programs and the success of investments in projects to achieve their intended impacts.
5. **Vulnerable Communities** – with a key goal to “strengthen Connecticut’s communities, especially vulnerable communities, by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses,” as is the goal for

⁵² <https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/sb0348?ys=2022RS>

“clean energy,” the Green Bank will ensure that by the end of 2025 no less than 40 percent of investment and benefits (e.g., jobs) in “environmental infrastructure” are directed to vulnerable communities.

In FY 2023, the Green Bank ~~will~~ continued its progress ~~on~~ developing its environmental infrastructure business unit and programs ~~including, but not limited to~~ by:

- **Building the Team** – hiring several critical positions including the Manager of Community Engagement and Director of Environmental Infrastructure, as well as qualifying a suite of contractors to support the work of the business unit;
- **Continuing Engagement** – wrapping up stakeholder outreach for ~~the water,~~ and ~~continuing initiating~~ engagement of municipal and regional governments, especially those in vulnerable communities ~~(e.g., Bridgeport, Hartford)~~;
- **Raising Resources** – identifying and realizing opportunities for federal (i.e., ~~GHGRF~~) and foundation ~~(i.e., Robert Woods Johnson Foundation)~~ funding, and developing the Green Liberty Bonds to raise proceeds from the issuance of bonds to provide capital for investment;
- **Launching New Products** – developing existing financing products for clean energy (i.e., Smart-E Loan, C-PACE) to support environmental infrastructure measures; and
- **Conducting Research and Development** – continuing to identify research opportunities to develop markets for carbon offsets and ecosystem services for the purposes of generating revenues from projects as a result of Green Bank investments.

In FY 2024, the Green Bank will continue to make steady developing its environmental infrastructure business unit and programs including, but not limited to:

- **Strategic Assessment of Market Readiness** – identification and synthesis of market conditions, readiness, and opportunities across sectors, including resources needed to develop, expand, or launch new programs and markets;
- **Continuing to Build the Team** – identification of critical positions and/or contractual support services to implement programs and opportunities based on the strategic assessment;
- **Continuing Engagement** – initiating stakeholder outreach for waste and recycling, continuing engagement of municipal and regional governments, especially those in vulnerable communities;
- **Explore Stakeholder Advisory Committee** – explore the formation of an Environmental Infrastructure Stakeholder Advisory Committee to engage various state agencies to act as liaisons to the Green Bank.⁵³ Consider other important engagement

⁵³ Per Section 5.3 Advisory Committees within its bylaws, the Green Bank may form advisory committees to advise and assist the Board or management in the performance of its statutory responsibilities.

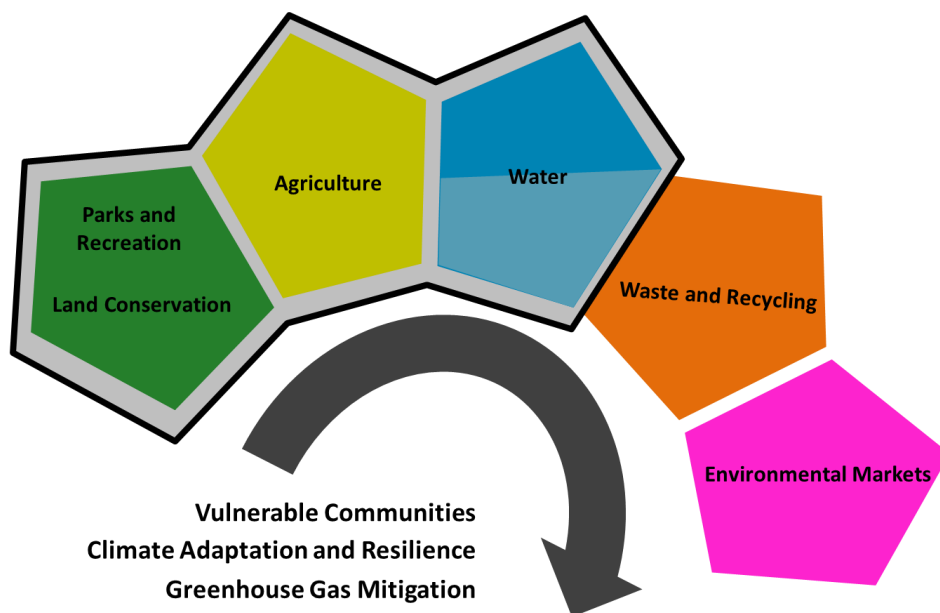
or advisory opportunities with strategic organizations, stakeholders, and/or municipalities;

- **Raising Resources** – identifying, seeking, and receiving funding opportunities from federal (e.g., IIJA, IRA, GGRF) and foundation (e.g., grants, program related investments (“PRIs”)). In 2024, develop and issue Green Liberty Bonds to raise proceeds to provide capital for investment (e.g., revolving loan fund);
- **Launching or Expanding Existing Products Inclusive of Key Outcomes** – develop and launch existing financing products for clean energy (i.e., Smart-E Loan, C-PACE) to support environmental infrastructure measures. Assess additional clean energy incentive and financing product expansion opportunities in alignment with strategic assessment; and
- **Continue Conducting Research and Development** – continue to identify research and development opportunities for the purposes of generating revenues, including environmental market revenues (e.g., carbon offsets, ecosystem services) from projects as a result of Green Bank investments.

5.1 Confronting Climate Change and Vulnerable Communities

Given the mission of the Green Bank, investments in environmental infrastructure must seek to confront climate change (i.e., mitigate GHG emissions and increase resilience against its impacts) and increase investment in vulnerable communities – see Figure 3. The combination of land conservation, parks and recreation, agriculture, and water – together “green infrastructure” or “nature-based solutions” – provide an opportunity for the Green Bank, in partnership with public, private, nonprofit, municipal and other stakeholders, to mobilize investment.

Figure 3. Confronting Climate Change and Enabling Investment in Vulnerable Communities through Environmental Infrastructure



Through stakeholder engagement, the Green Bank recognizes the opportunity for investment in nature-based solutions that protect land and water from loss, improve management of natural resources for productive use in the economy, and restore native cover – all of which help Connecticut confront climate change – see Figure 4.

Figure 4. Nature-Based Solutions and Green Infrastructure



In terms of the Green Bank’s vulnerable communities prioritization, the following is a goal for Environmental Infrastructure Programs:

- By 2025, no less than 40 percent of investment and benefits (e.g., [reduction in air and water pollution, increase in resilience, public health improvement, jobs](#)) from Environmental Infrastructure Programs is directed to vulnerable communities.

The following is a succinct breakdown of each area of environmental infrastructure, including links to more detailed [guides or primers](#) based on stakeholder outreach.

5.2 Environmental Markets – Carbon Offsets and Ecosystem Services

Carbon offsets are measurable outcomes from carbon sequestration activities, traded in voluntary (e.g., requiring verification and certification) and compliance (e.g., RGGI) markets, whereby regulations, sustainability priorities, and public relations are motivators for buyers and sellers. Ecosystem services are the benefits people obtain from ecosystems.⁵⁴ Fundamentally, ecosystem services markets are designed to embed the positive benefits (e.g., public health, resilience) and negative impacts (e.g., GHG emissions) of individuals on natural resources into market-based systems which financially incentivize environmental stewardship, conservation, and rehabilitation of natural ecosystems.

Environmental infrastructure projects that involve carbon offsets and ecosystem services can be quantified and sold in markets to generate additional [earned](#) revenues from the projects.

⁵⁴ Provisioning services (e.g., food, water, fuel, wood), supporting services (e.g., nutrient cycling, soil formation, habitat provision, primary production), regulating services (e.g., climate regulation, flood regulation, water purification), and cultural (e.g., spiritual, aesthetic, educational, and recreational).

At present, the Green Bank has one carbon offsets project, using methodology VM0038⁵⁵ and VMD0049⁵⁶ published under the Verified Carbon Standard (“VCS”) Program, administered by the nonprofit Verra. This methodology allows those with the rights to electric vehicle charging infrastructure to earn carbon credits based on vehicle charging activity.

This project is a third-party aggregation, with the Green Bank as the sole project proponent, and all partners assigning to the Green Bank the rights and title to the environmental attributes of electric vehicle (“EV”) charging transactions, so that the associated data sets may be converted into carbon offsets to make verifiable, permanent and liquid (tradable) claims of emissions avoidance.

The Green Bank led the development of this methodology with several partners going back to 2016 and worked with a consortium of partners⁵⁷ to submit for credits in 2021 for activity from 2016-2021.⁵⁸ Credits were certified, verified, and minted in the fall of 2022. The Green Bank is currently preparing to file for activity for calendar years 2021 and 2022 and expects to file for credits on behalf of its partners going forward for the life of the project, through 2041.

For ~~further details on the market opportunity~~the basics on environmental markets, see Primer Guide – Environmental Markets.⁵⁹

5.3 Land Conservation

Nature-based solutions such as protecting intact lands from loss (e.g., forestlands, wetlands), improving the management of working lands (e.g., sustainably certified timberlands), and restoring native land cover, including coastlines, can both mitigate GHG emissions that cause climate change (e.g., forest carbon sequestration) and increase resilience against the impacts of climate change (e.g., flood protection).

The following is the market potential for land conservation from the perspective of forestland – see Table 46.

Table 46. Market Potential for Land Conservation in Connecticut based on Forest Land

3,205,762 Acres Land in Connecticut				
1,869,761 Acres Forest Land			1,336,001 Acres Non-Forest Land	
298,994 Acres Protected Core Forests	568,857 Acres Unprotected Core Forest	1,001,910 Acres Non-Core Forest	1,130,000 Acres Urban Area	206,001 Acres Other Non- Urban and Non- Forest

⁵⁵ <https://verra.org/methodologies/vm0038-methodology-for-electric-vehicle-charging-systems-v1-0/>

⁵⁶ <https://verra.org/methodologies/vmd0049-activity-method-for-determining-additionality-of-electric-vehicle-charging-systems-v1-0/>

⁵⁷ Partners include: AmpUp, Blink Dominion Energy, EV Match, EV Structure, Exelon, Opconnect, OptiWatt, and UGO. We have been facilitated by the expertise brought by the Climate Neutral Business Network.

⁵⁸ <https://verra.org/new-methodology-for-ev-charging-systems-approved/>

⁵⁹ https://www.ctgreenbank.com/wp-content/uploads/2023/04/Environmental-Infrastructure_Environmental-Markets-Guide_062323.pdf

To retain the multiple benefits that forests provide, there is a “no net loss of forest” policy goal.

The following is a breakdown of the land conservation target outlined in the CGS 23-8⁶⁰ – see Table 57.

Table 57. Progress Towards the Open Space Land Target in Connecticut (as of December 31, 2019)

3,205,762 Acres Land in Connecticut								2,532,552 Acres No Land Conservation (@79%)
320,576 Acres State Goal (@10%)				352,634 Acres Partner Goal (@≥11%)				
175,000 Acres State Forests⁶¹	36,000 Acres State Parks⁶²	46,000 Acres Wildlife Area and Other⁶³	63,500 Acres left to achieve target	84,000 Acres Cities and Towns	99,000 Acres Water Companies	66,000 Acres Non- Profit Land Trusts	104,000 Acres left to achieve target	

Of the open space goal of 21% by 2023 (i.e., 673,210 acres), approximately 510,249 acres are conserved (as of December 31, 2019), or 76% of the open space goal comprising 261,806 acres of state (i.e., 82% of the 10% state target) and 248,953 acres of partner (i.e., 71% of the partner target) – leaving an estimated 162,451 acres of open space left to achieve. If the average land acquisition cost is \$9,000 per acre, then approximately \$1.5 billion of public and private investment in land conservation would be needed to acquire and protect over 160,000 acres of open space in order to achieve the 21% target.

As the Green Bank looks to increase and accelerate private investment in land conservation, it will be exploring the following financing tools, including, but not limited to:

- Carbon offset markets
- Ecosystem services markets
- Pay-for-Performance
- Eco-Labeling (e.g., FSC Certified)
- Green Liberty Bonds
- Buy-Protect-Sell Revolving Loan Fund
 - Predevelopment Financing
 - Bridge Financing
 - Traditional Debt Financing
- Forest Investment Fund

For further details on the market opportunity, see Primer – Land Conservation.⁶⁴

5.4 Parks and Recreation

Infrastructure investments in parks and recreation can both mitigate the GHG emissions that cause climate change (e.g., carbon sinks from urban tree canopy cover) and increase resilience

⁶⁰ State goal for open space acquisition – <https://law.justia.com/codes/connecticut/2012/title-23/chapter-447/section-23-8/>

⁶¹ 33 locations

⁶² 107 locations

⁶³ Including wildlife management areas, fish hatcheries, flood control, natural area preserve, water access, wildlife sanctuaries, and other

⁶⁴ https://www.ctgreenbank.com/wp-content/uploads/2023/01/Environmental-Infrastructure_Land-Conservation_Oct-16-2022.pdf

against the impacts of climate change (e.g., stormwater management through urban parks, improve public health).

The following is a breakdown of the market potential for parks and recreation from the perspective of active⁶⁵ and passive⁶⁶ outdoor recreation facilities, and on “land” or “water” based activities from the Statewide Comprehensive Outdoor Recreation Plan (“SCORP”) – see Table 68.

Table 68. Outdoor Recreation Facilities in Connecticut (2005)

Outdoor Recreation Type	# of Facilities	DIRPS ⁶⁷ per 10,000 Residents	Ownership		
			Statewide Average	Municipal Average	Other Average
Active – Land	4,788	1.4	4%	77%	20%
Active – Water	137	0.4	2%	69%	30%
Passive – Land	1,957	1.0	27%	46%	27%
Passive – Water	1,130	1.1	22%	45%	33%
Total	8,012	1.2	14%	62%	24%

The Trust for Public Land’s (“TPL”) ParkScore Index is a comprehensive rating system to measure how cities are meeting the needs for parks.⁶⁸ In an effort to assess ParkScore, the following data are for Connecticut’s “Top 10” most populated municipalities with respect to park access – see Table 79.

Table 79. “Top 10” Most Populated Municipalities in Connecticut and ParkScore

City	Population	Acres	% Land as Parks	Acres of Land as Parks	Acres of Parks per 10,000 Residents	# of Parks	Parks per 10,000 Residents	10-Minute Walk
Hartford	121,203	11,136	9%	1,002	83	218	18.0	99%
New Haven	130,764	11,968	12%	1,436	110	128	9.8	96%
West Hartford	63,063	13,952	20%	2,790	442	48	7.6	82%
Stamford	129,302	24,064	5%	1,203	93	54	4.2	74%
New Britain	72,303	8,576	7%	600	83	23	3.2	73%
Bridgeport	143,653	10,304	7%	721	50	35	2.4	73%
Waterbury	106,458	18,240	6%	1,094	103	30	2.8	60%
Norwalk	88,326	14,656	3%	440	50	45	5.1	55%

⁶⁵ Active outdoor recreation facilities based on 2005 data (X – #) and 2017 use frequency index data, if available (# – Y), include fields, courts, and courses for baseball and softball (984 – 16.0), basketball (645 – 23.0), football (154 – 10.0), golf (125 – 13.6), multi-use (624), soccer (495 – 14.6), tennis (384 – 11.2), and volleyball (74 – 23.0), as well as playgrounds (1,065), swimming pools (137 – 60.9), and winter sports (238 – 9.3)

⁶⁶ Passive outdoor recreation facilities based on 2005 data (X – #) and 2017 use frequency index data, if available (# – Y) include access to sites for beaches (176 – 60.1), boating (285 – 10.9), camping (88 – 13.5), fishing (669 – 19.0), gardens (109), historic landmarks (99 – 35.9), hunting (88 – 3.5), picnics (677), and trails (896 – 102.8)

⁶⁷ Discrete Identifiable Recreation Places

⁶⁸ The “% of Land as Parks,” “# of Parks,” and “10-Minute Walk” data were used from TPL’s ParkScore data set.

Bristol	59,639	16,896	4%	676	113	20	3.4	51%
Danbury	84,732	26,880	5%	1,344	159	17	2.0	37%

The quality of parks is difficult to discern. To better understand the quality of parks, TPL partnered with the Urban Resources Institute (“URI”) to compare New Haven against the nation’s most populous cities on five (5) categories reflective of an excellent city park system: Acreage,⁶⁹ Access,⁷⁰ Investment,⁷¹ Amenities,⁷² and Equity⁷³ – see Table 810.⁷⁴

Table 810. TPL and URI Analysis of New Haven Compared to Other Cities

City	Overall	Acreage	Access	Investment	Amenities	Equity
New Haven, CT	60	36	95	35	71	65
Boston, MA	-	47	100	79	65	79
Baltimore, MD	-	25	81	68	40	83
Buffalo, NY	-	25	85	47	61	64

The TPL-URI research also delves deeper into the twenty (20) neighborhoods of New Haven to collect data with respect to population, acres of parks, and acres per 1,000 population, as well as demographic data including income and people of color. Based on data from TPL from 14,000 cities, parks that serve low-income households are four (4) times as crowded as parks that serve high-income households, and parks that serve people of color are five (5) times as crowded as parks that serve majority-white populations.⁷⁵ Such analyses in municipalities across Connecticut could elucidate opportunities for areas of improvement, including improving the public health of residents (e.g., reducing urban heat island effects) with access to parks and the economic development impact of property values within proximity to parks. [Through its research and development efforts, the Green Bank has supported TPL and other community-based nonprofits to conduct a similar assessment for Hartford, the birth and burial place of Frederick Law Olmstead.](#)

As the Green Bank looks to increase and accelerate private investment in parks and recreation, it will be exploring the following financing tools, including, but not limited to:

- Carbon offset markets
- Ecosystem services markets (e.g., Park Rx)
- Pay-for-Performance
- Green Liberty Bonds
- Buy-Protect-Sell Revolving Loan Fund
 - Predevelopment Financing
 - Bridge Financing
 - Traditional Debt Financing

⁶⁹ Acreage score indicates the relative abundance of large ‘destination’ parks, which include large natural areas that provide critical mental health as well as climate and conservation benefits.

⁷⁰ Access score indicates the percentage of the city’s residents that live within a walkable half-mile of a park – the average distance that most people are willing to walk to reach a destination.

⁷¹ Investment score indicates the relative financial health of a city’s park system, which is essential to ensuring parks are maintained at a high level for all to enjoy.

⁷² Amenities score indicates the relative abundance of six park activities popular among a multi-generational cross-section of user groups (i.e., playgrounds, basketball courts, dog parks, senior and recreation center, splashpads, and permanent restrooms).

⁷³ Equity score indicates how fairly parks and park space are distributed within a city, including percentage of people of color and low-income households within a 10-minute walk of a park, and comparison of the amount of park space between neighborhoods by race and income.

⁷⁴ For example, a score of 90 means that the municipality is within the top 90 percent across the country.

⁷⁵ “The Heat is On” by The Trust for Public Lands

- Tax Increment Financing

For further details on the market opportunity, see Primer – Parks and Recreation.⁷⁶

5.5 Agriculture

Nature-based solutions such as protecting farmlands from loss and improving farming practices, can both mitigate GHG emissions that cause climate change (e.g., climate smart agriculture) and increase resilience against the impacts of climate change (e.g., flood protection).

The following is a breakdown of the market potential for “agriculture” (i.e., farmland), including other natural forms of land cover (i.e., forestland and wetlands) – see Table 911.

Table 911. Land Cover in Connecticut (2015)⁷⁷

3,179,253 Acres Land and Water in Connecticut				
921,827 Acres Developed Land ⁷⁸ 29%	233,847 Acres Farmland 7%	1,873,471 Acres Forestland ⁷⁹ 59%	129,153 Acres Wetlands ⁸⁰ 4%	20,955 Acres Other Lands ⁸¹ 1%

More than 70% of Connecticut’s land is farmland, forestland, or wetland. From 2001 through 2016, approximately 6% of the state’s farmland was converted to urban or low-density residential development – placing the state in the top three nationally in percent of farmland lost to development.⁸²

The long-term goal of the Farmland Preservation Program, which was set back in the 1980’s, is to preserve 130,000 acres of farmland – see Table 1012.

Table 103. Progress Towards the Farmland Preservation Program Target in Connecticut

3,205,762 Acres Land in Connecticut				
381,539 Acres⁸³ Farmland				2,824,223 Acres Non-Farmland
148,609 Acres Farmland	113,355 Acres Woodland	31,923 Acres Pastureland	87,652 Acres	

⁷⁶ https://www.ctgreenbank.com/wp-content/uploads/2023/01/Environmental-Infrastructure_Parks-and-Recreation_Oct-16-2022.pdf

⁷⁷ UCONN CLEAR Project – 2015 Land Cover

⁷⁸ Includes “Developed,” “Turf & Grass,” and “Other Grasses” classifications

⁷⁹ Includes “Deciduous Forest,” “Coniferous Forest,” “Forested Wetland,” and “Utility-Rights-of-Way (Forest)” classifications

⁸⁰ Includes “Water,” “Non-Forested Wetlands,” and “Tidal Wetlands” classifications

⁸¹ Includes “Barren” classification

⁸² “Planning for Agriculture – A Guide for Connecticut Municipalities: Emerging Agricultural Trends” by the American Farmland Trust and Connecticut Department of Agriculture (2020 Edition) (Page 19)

⁸³ USDA Economic Research Service – 2017 data

			Other ⁸⁴
130,000 Acres			
Preserved Farmland Goal			
48,744 Acres	81,256 Acres		
Preserved	Not Preserved		

As of October 2020, the Farmland Preservation Program has protected nearly 49,000 acres on 418 farms with agricultural conservation easements – leaving 81,000 acres of farmland left to preserve.⁸⁵ If the average real estate value of an acre of farmland in Connecticut in 2019 was \$12,200, and Purchasing Development Rights (“PDR”) is 30-50% of value, then between \$300 to \$500 MM of public investment (e.g., through the Connecticut Department of Agriculture (“DoAg”) and/or USDA-Natural Resources Conservation Service (“NRCS”)) would be needed to protect 81,000 acres of farmland to achieve the 130,000 acres of farmland preserved target.

As the Green Bank looks to increase and accelerate private investment in agriculture, it will be exploring the following financing tools, including, but not limited to:

- Carbon offset markets
- Ecosystem services markets
- Pay-for-Performance
- Eco-Labeling (e.g., Connecticut Grown)
- Green Liberty Bonds
- Linked Deposits
- Buy-Protect-Sell Revolving Loan Fund
 - Predevelopment Financing
 - Bridge Financing
 - Traditional Debt Financing
- Farmland Investment Fund
- Loan Guarantees (e.g., Smart-E Loan)

For further details on the market opportunity, see Primer – Agriculture.⁸⁶

5.6 Water

~~Water infrastructure and market opportunities in Connecticut are complex. Water is managed through several state agencies (i.e., DEEP, DPH), including issuing green bonds by the Office of the Treasurer, and federal departments (i.e., EPA). In FY 2023, the Green Bank will continue to explore opportunities to enable private investment in Connecticut’s water infrastructure.~~

Per PA 21-115, there are several boundaries with respect to what the Green Bank can do with respect to water, including:

- **Environmental Infrastructure Fund** – may not receive funds from the Clean Water Fund pursuant to sections 22a-475 to 22a-438f, or funds collected from a water company as defined in section 25-32a; and
- **Apply for Federal Assistance** – may not apply directly or through a subsidiary to be eligible for federal grant assistance under the Clean Water Act, 33 USC 1251 et seq., the Safe Drinking Water Act, 42 USC 300f et seq., without the approval of the State Treasurer, Commissioner of Energy and Environmental Protection, and Commissioner of Public Health.

⁸⁴ Land in house lots, ponds, roads, wasteland, etc.

⁸⁵ Connecticut Department of Agriculture, Farmland Preservation Programs Report (January 2022)

⁸⁶ https://www.ctgreenbank.com/wp-content/uploads/2023/01/Environmental-Infrastructure_Agriculture_Oct-16-2022a.pdf

As a result of these restrictions, and since Connecticut’s State Revolving Fund (“SRF”) hasn’t invested in green infrastructure,⁸⁷ the Green Bank will focus its efforts on nature-based solutions (e.g., land conservation) and stormwater (e.g., green roofs), as well as its financing programs (e.g., Smart-E Loan, C-PACE) to help end-use customers improve water on their property. It should be noted that within PA 21-115, that municipalities can create stormwater authorities.

As a result of climate change, there is increased possibilities of instream (i.e., ecological, recreational) and out-of-stream (i.e., drinking, industry, agriculture, energy needs) water shortages from droughts as a result of heat waves, flooding as a result of rain bombs, and other adverse local impacts. These impacts are likely to impact vulnerable communities first and worst, as evidenced by recent flooding impacts on stormwater systems.⁸⁸

As the Green Bank looks to increase and accelerate private investment in water, in collaboration with its state agency partners, it will be exploring the following financing tools, including, but not limited to:

- Ecosystem services markets
- Pay-for-Performance
- Green Liberty Bonds
- Linked Deposits
- Loan Guarantees (e.g., Smart-E Loan)
- Buy-Protect-Sell Revolving Loan Fund
 - Predevelopment Financing
 - Bridge Financing
 - Traditional Debt Financing

For further details on the market opportunity, see Primer – Water.⁸⁹

5.7 Waste and Recycling

In ~~FY~~2024, the Green Bank will explore opportunities to enable private investment in Connecticut’s waste and recycling infrastructure.

It should be noted that the Green Bank is a leading financier of food waste⁹⁰ and farm waste⁹¹ to energy projects that utilize anaerobic digesters and combined heat and power to reduce methane and produce renewable natural gas for onsite clean energy.

6. Citizen and Community Engagement – Green Bonds US

The Green Bank, and its predecessor the CCEF, have a long-standing history of community engagement in Connecticut. In 2002, the CCEF partnered with six private foundations⁹² to co-found SmartPower – which launched the 20 percent by 2010 campaign and led the administration of the CCEF’s EPA award-winning Connecticut Clean Energy Communities

⁸⁷ Hansen, K., Thomas, T., Vo, S., Berven, K., Moudgalya, P., Vedachalam, S. (2022). Financing Green Stormwater and Natural Infrastructure with Clean Water State Revolving Funds. by the Environmental Policy Innovation Center – EPIC. (pp 11)

⁸⁸ “Hartford to Get \$85M for Sewage System Fix” by Deidre Montague in the Hartford Courant (June 27, 2023)

⁸⁹ https://www.ctgreenbank.com/wp-content/uploads/2023/04/Environmental-Infrastructure_Water_Primer_062323.pdf

⁹⁰ Quantum Biopower – <http://www.quantumbiopower.com/>

⁹¹ Fort Hill Farm – <https://aggridenergy.com/fort-hill-ag-grid-digester/>

⁹² Emily Hall Tremaine Foundation, The John Merck Fund, Pew Charitable Trust, The Oak Foundation, Rockefeller Brothers Fund, and Surdna Foundation

Program to engage citizens in signing-up to purchase clean energy.⁹³ Then in 2013, the Green Bank launched a series of Solarize campaigns in communities across the state in partnership with SmartPower and the Yale Center for Business and the Environment to help citizens install solar PV on their homes,⁹⁴ while also advancing the SunShot Initiative of the U.S. Department of Energy (“USDOE”) in partnership with the Clean Energy States Alliance through projects that reduce soft-costs for solar PV (i.e., customer acquisition, permitting, and financing) and provide better access to solar PV for LMI households.

Citizen and community engagement have been in the DNA of the Green Bank since its inception. In 2022, in collaboration with the Greater Bridgeport Community Enterprises and Operation Fuel, the Green Bank continued its efforts to learn more about community engagement by seeking to understand the importance of community benefit agreements through the Communities Local Energy Action Plan (“Communities LEAP”) pilot program of the DOE.⁹⁵ The Green Bank is reaching citizens and communities through various ways including green bonds, community match funds, community-based campaigns, ~~and~~ municipal assistance programs, and eventually community benefit agreements.

6.1 Green Bonds US

Whether through markets or within communities, the Green Bank is bringing people together and strengthening the bonds we share with one another. As the name of the Comprehensive Plan suggests – “Green Bonds US” seeks to promote a simple but critically important message; green, the environment, bonds us, brings us together, the environment unites us. The simple slogan combines the financial tool of green bonds that are being sold to retail investors across the United States with a unifying message that humanity and the environment are inextricably linked.

CGS Section 16-245n(d)(1)(C) is the enabling statute that allows the Green Bank to issue revenue bonds for up to 25 years for clean energy and 50 years for environmental infrastructure projects to support its purposes. Green Bonds are bonds whose proceeds are used for projects or activities with environmental or climate benefits, most usually climate change mitigation and adaptation. Research shows that citizens across the US, including Connecticut, are interested in seeing their investments go towards green projects – see Table ~~1113~~.⁹⁶

Table ~~1113~~. Green Project Types of Interest by Private Investors by Location

Green Project Types	Composite	National	Connecticut	Connecticut with Solar
Clean Water	68.85.4%	71.463.5%	68.6%	54.265.8%
Waste Reduction and Recycling	53.148.8%	51.040.7%	53.851.4%	63.962.2%

⁹³ “Climate Policy and Voluntary Initiatives: An Evaluation of the Connecticut Clean Energy Communities Program,” by Matthew Kotchen for the National Bureau of Economic Research (Working Paper 16117).

⁹⁴ “Solarize Your Community: An Evidence-Based Guide for Accelerating the Adoption of Residential Solar” by the Yale Center for Business and the Environment.

⁹⁵ <https://www.energy.gov/communitiesLEAP/communities-leap>

⁹⁶ ~~2021-2022~~ Brand Awareness Digital Survey by Great Blue for the Connecticut Green Bank (~~August 2021~~October 2022)

Rooftop Solar	48.5%	45.334.9%	46.038.4%	75.385.6%
Home Energy Efficiency	42.71.6%	40.130.7%	41.837.2%	61.467.6%
Electric Vehicles	32.738.0%	30.69%	32.630.0%	45.860.2%
Land Conservation	39.637.3%	37.129.5%	40.64%	51.249.4%
Agriculture	37.233.2%	36.026.1%	39.636.6%	37.343.8%
Parks and Recreation	31.830.1%	31.524.8%	32.634.6%	31.336.0%
Climate Adaptation and Resiliency	30.928.8%	29.221.8%	32.030.4%	38.041.0%

To enable everyday citizens with an opportunity to invest in the green economy, the Green Bank created two fixed income securities – Green Liberty Bonds and Green Liberty Notes, which have three features:

1. **Use of Proceeds** – funds raised from the bonds must go towards projects that support the Paris Agreement (i.e., mitigation of GHG emissions or adaptation to the impacts of climate change);
2. **Retail Accessible** – like the Series-E War Bonds of the 1940’s, bonds must be small denomination (i.e., less than \$1,000) and available to everyday retail investors; and
3. **Independently Certified and Verified** – due to the expectation by retail investors that the use of proceeds will go towards projects that support the Paris Agreement, the bonds must be independently certified and verified as green.

6.2 Green Liberty Bonds

In April of 2019, the Green Bank issued \$38.6 million in green asset backed securities – its first rated debt issuance and the first ever solar asset-backed security (“ABS”) transaction by a green bank. The issuance was certified by Kestrel Verifiers and independently assessed by Climate Action Reserve. In July 2020, the Green Bank issued \$16.8 million in a Special Capital Reserve Fund (“SCRF”) backed Green Liberty Bond that was Climate Bond Certified. And in April 2021, the Green Bank sold out \$25 million in Green Liberty Bonds drawing four times as much demand as could be fulfilled from retail investors in Connecticut and across the U.S., as well as institutional investors interested in sustainability investments.

In March and December of 2020, and June of 2022, the Green Bank’s Green Liberty Bonds were awarded for innovation and green bond structure by Environmental Finance, The Bond Buyer, and Clean Energy States Alliance respectively.

[The Green Bank will look towards its Green Liberty Bonds, and ability to use SCRF, to support its clean energy and environmental infrastructure efforts.](#)

For more information on Green Liberty Bonds, visit www.greenlibertybonds.com

6.3 Green Liberty Notes

In January of 2022, the Green Bank, in collaboration with Raise Green, began a two-year campaign to raise \$2 million by providing an opportunity for citizens to invest as little as \$100 to confront climate change. Issuances are anticipated quarterly. [Of the six \(6\) issuances through FY23, four were sold out resulting in an extension for a third year and an increase per quarterly issuance from \\$250,000 to \\$350,000.](#) Investment by everyday citizens in Green Liberty Notes

supports Eversource’s SBEA program, administered through the Conservation and Load Management Plan, which helps small businesses reduce their energy consumption through deploying energy efficient equipment. As a result of the climate benefits associated with this program, the offering was reviewed and verified for its environmental attributes by Kestrel Verifiers.

To attract more investors, the program offers one-year maturity notes, with \$100 minimums, that are easy to purchase through an online platform without a broker. The Green Liberty Notes were created as an investment companion to Green Liberty Bonds, which have been offered in \$1,000 minimums to retail and institutional investors through brokerage firms.

For more information on Green Liberty Notes, visit <https://invest.raisegreen.com/offeringswww.greenlibertynotes.com>

6.4 Sustainable CT and Community Match Fund

The strategic partnership between Sustainable CT⁹⁷ and the Green Bank is focused on the following key priorities:

- Driving investment in projects in our communities, with a goal to accelerate over time;
- Community-level engagement, from project origination through financing, that is inclusive, diverse, and “knitted”;
- Creating a structure that harnesses all types of capital for impact – from donations to investment;
- Developing a business model that covers the cost of the program; and
- Creating a measurable impact, both qualitative and quantitative.

Sustainable CT’s voluntary certification program⁹⁸ for Connecticut’s cities and towns provides thirteen (13) action areas (e.g., inclusive and equitable communities, well stewarded land and natural resources, renewable and efficient energy) to achieve bronze, silver, or gold status, including a climate leader designation. The Green Bank works closely with Sustainable CT to encourage local actions that are consistent with the respective missions of the organizations. In FY24, the Green Bank will focus on working with Sustainable CT to expand its support for modernizing environmental infrastructure.

~~Sustainable CT~~Also, in collaboration with Patronicity, Sustainable CT has developed a community matching grant platform to raise capital in support of local projects that provide individuals, families, and businesses with funding opportunities to make an impact on sustainability in their communities. This online crowdfunding platform enables citizen leaders to have access to financial resources (i.e., matching grants) that they need to support local sustainability projects.

For more information on Sustainable CT’s Community Match Fund, visit <https://www.patronicity.com/sustainablect>

⁹⁷ <https://sustainablect.org/>

⁹⁸ <https://sustainablect.org/actions-certifications>

6.5 Community-Based Campaigns

The Green Bank has once again partnered with the Yale School of the Environment,⁹⁹ to support USDOE-funded Solar Energy Evolution and Diffusion Study 3 (“SEEDS 3”). SEEDS 3 research builds on nearly a decade of work investigating the peer-to-peer effects of solar PV adoption – how do prospective solar PV customers make the decision to adopt and how do people talk to each other about going solar. Professor Gillingham developed a community-based solar adoption strategy that accelerated the adoption of solar in Connecticut through various Solarize campaigns.¹⁰⁰

SEEDS 3 expands on this work to investigate the co-adoption of solar, storage, and electric vehicles. The Green Bank will support Professor Gillingham as he initiates and runs community-based solar plus storage campaigns over the next two years. We will leverage the learnings that these campaigns create to refine our storage marketing messages to assist ESS in achieving its goals.

6.6 Municipal Assistance Programs

Supported by public policy,¹⁰¹ the Green Bank continues to support municipalities in their sustainability initiatives through the Solar Marketplace Assistance Program for Towns and Cities (“Solar MAP”).¹⁰² Many Connecticut towns, primarily smaller towns, are challenged to get through the many project steps preventing them from taking advantage of clean energy. Solar MAP provides turnkey support from start to finish to make it easier for towns to identify projects that will provide savings, to access necessary incentives and Green Bank financing, and to add much-needed capacity to manage project implementation and construction. The program administers a competitive solicitation to select a construction partner and bring more projects to the market to grow our state’s clean energy economy. Projects are bundled into portfolios to achieve economies of scale driving down project costs and delivering better savings a town wouldn’t experience if they acted alone. With feedback from contractors and municipalities, the Green Bank integrated additional transparency into the Programs’ status and activities and developed a clearer mission and target audience. Solar MAP aims to support municipalities that are underserved by the market, typically towns that are smaller in population and/or town staff without recent history of doing solar projects. The comprehensive program support and refined mission help better serve municipalities and the clean energy market.

7. Investment

The Green Bank pursues investments that advance market transformation in green investing while supporting the organization’s pursuit of financial sustainability. With the mission to confront climate change, the Green Bank leverages limited public resources to scale-up and mobilize private capital investment in the green economy of Connecticut.

⁹⁹ Professor Ken Gillingham [and the Yale Center for Business and the Environment](#)

¹⁰⁰ <https://cbey.yale.edu/our-stories/lessons-learned-from-solarize-campaigns-in-connecticut>

¹⁰¹ CGS 16-245n “...stimulate demand for clean energy and deployment of clean energy sources that serve end use customers in the state...” (i.e., 16-245n(c)); and “...shall (i) develop separate programs to finance and otherwise support clean energy investment in residential, municipal, small business and larger commercial projects...” CGS 16-245n(d)(1)(B).

¹⁰² <https://www.ctgreenbank.com/community-solutions/solar-solutions-for-communities/solar-map/>

7.1 State Funds

The Green Bank receives public revenues from a number of sources that are leveraged to mobilize multiples of private capital investment in the green economy of Connecticut.

System Benefit Charge

As its primary source of public revenues, the Green Bank through CGS 16-245n(b) receives a 1 mill per kilowatt-hour surcharge called the [Renewable Energy Investment Fund or Clean Energy Fund \(“CEF”\)](#) from ratepayers of Eversource Energy and Avangrid. The CEF has been in existence since Connecticut deregulated its electric industry in the late 1990s.¹⁰³¹⁰⁴ On average, households contribute between \$7-\$10 a year for the CEF, aggregating to about \$25 ~~MM~~-million per year, which the Green Bank leverages to attract multiples of private capital investment in clean energy through its Financing Programs.

Regional Greenhouse Gas Emission Allowance Proceeds

As a secondary source of public revenues, the Green Bank receives a portion (i.e., 23%) of Connecticut’s RGGI allowance proceeds through CGS 22a-174(f)(6)(B). The Green Bank invests RGGI proceeds to finance clean energy projects through its Financing Programs. It should be noted that with the passage of PA 22-25, that allowance proceeds received in excess of \$5.2 ~~MM~~-million from the Green Bank’s portion of RGGI, are to be directed to DEEP for the purposes of supporting electric school buses in environmental justice communities.

7.2 Federal Funds

The Green Bank receives public revenues through a number of past, current, and future sources¹⁰⁵ of federal funds as well that it leverages to scale-up and mobilize private capital investment in the green economy of Connecticut.

American Recovery and Reinvestment Act

Through the American Recovery and Reinvestment Act (“ARRA”) the CCEF received \$20 million for its programs and initiatives. After nearly \$12 million of those funds were invested as grants, the Green Bank [repurposed and](#) invested the remaining \$8.2 million in financing programs. With \$600,000 of ARRA funds left,¹⁰⁶ the Green Bank invested over \$7.6 million of ARRA funds to attract and mobilize \$167 million of public and private investment in residential clean energy financing programs.¹⁰⁷

United States Department of Agriculture

~~The Green Bank has applied to the United States Department of Agriculture (“USDA”) to seek access to low-cost and long-term federal loan funds for the deployment of clean energy in rural~~

¹⁰³ PA 98-28 An Act Concerning Electric Restructuring – <https://www.cga.ct.gov/ps98/act/pa/1998pa-00028-r00hb-05005-pa.htm>

¹⁰⁴ The Clean Energy Fund should not be mistaken with the Conservation Adjustment Mechanism (or the Conservation and Loan Management Fund), which is administered by the EDCs

¹⁰⁵ There have been ongoing public policy proposals at the national level that the Connecticut Green Bank has been a part of to create a US Green Bank. If such a public policy were passed, then the Connecticut Green Bank would have access to significant federal funds to leverage to scale-up and mobilize private capital investment in the green economy of Connecticut.

¹⁰⁶ As of June 30, 2022

¹⁰⁷ https://www.ctgreenbank.com/wp-content/uploads/2023/01/CGB_ARRA_infographic-Jan-2023.pdf

communities.¹⁰⁸ The USDA has vast lending authority under the Rural Electrification Act of 1936, which enables direct loans, project financing and loan guarantees to a variety of borrowers.

Infrastructure Investment and Jobs Act

As a result of the IIJA, significant federal resources are being made available to local and state governments through formula grants, and through competitive requests for proposals from budget allocations across many federal agencies. The Green Bank has been an active participant in the various federal agency public engagement processes under the IIJA and IRA.¹⁰⁹

The Green Bank will compete for and pursue federal funding opportunities to support its programs, where appropriate, including:-

- Department of Energy’s Loan Program Office¹¹⁰ – on March 25, 2022, the Loan Program Office (“LPO”) of the DOE presented to the Board of Directors of the Green Bank,¹¹¹ and the Green Bank subsequently followed with public comments to the DOE on July 1, 2022.¹¹² Specifically, the LPO presented the new State Energy Financing Institutions (“SEFI”) provisions within the IIJA that amended Title 17 to (1) include projects receiving financial support or credit enhancements from SEFIs as eligible projects, and (2) clarifies that such projects do not require “new or significantly improved technologies” to qualify.¹¹³ As defined by the DOE-LPO, the Green Bank is a SEFI.

Subsequently, through the passage of the IRA, a congressional appropriation for Title 17 ensued, which triggered the expansion of the LPO’s authority including enabling SEFI. LPO can now augment state-administered clean energy programs, providing additional financial support to projects that align federal energy priorities with those of U.S. states like Connecticut. Qualifying project participation may include equity, loan loss reserves, co-lending (i.e., by the SEFI providing debt financing which may be pari-passu with or subordinate to LPO funding or financial support) , and other financing mechanisms for eligible technologies such as renewable energy, energy efficiency, fuel cells, hydrogen, energy storage, and more.

The Connecticut Green Bank, in collaboration with other states (e.g., New York Green Bank, Massachusetts Community Climate Bank or the Rhode Island Infrastructure Bank), can individually or collectively apply to the LPO or support other proposals submitted to

¹⁰⁸ “Rural” communities are defined by a population bound and the various limits depend on the program; at the broadest, “rural” may be considered a town that has a population not greater than 50,000 people. Despite its positioning in a mostly developed corridor, we estimate Connecticut would have 69% of towns eligible at the 20,000 person limit and 89% of towns at the 50,000 person limit.

¹⁰⁹ <https://www.ctgreenbank.com/engagement-on-iija-ira/>

¹¹⁰ It should be noted that the President and CEO of the Connecticut Green Bank voluntarily served on the Biden-Harris Transition Team following the November 2019 elections and was assigned to the DOE team and responsible for ascertaining the LPO.

¹¹¹ <https://www.youtube.com/watch?v=TPb7AHRWFhg>

¹¹² https://www.ctgreenbank.com/wp-content/uploads/2022/12/3_DOE_LPO_Title-XVII_CT-Green-Bank_Public-Comments_070122.pdf

¹¹³ <https://www.energy.gov/lpo/state-energy-financing-institutions-sefi-supported-projects>

the LPO through SEFI to leverage federal funding to mobilize private deployment of eligible technologies.

Inflation Reduction Act

As a result of IRA, significant federal resources are being made available through investment tax credits (e.g., 25D Residential Clean Energy Credit, 48 Energy Investment Tax Credit) and other resources including the GGRF. These tax credits, along with their associated adders (i.e., energy communities, low-income, domestic content), are consistent with the Green Bank's efforts to mobilize investment in vulnerable communities through its various incentive and financing programs.

The Green Bank will compete for and pursue federal funding opportunities to support its programs, where appropriate, including:

- **Greenhouse Gas Reduction Fund** – \$27 billion GGRF modelled after the ~~Connecticut~~ Green Bank, comprising:
 - **Solar for All** – \$7 billion competition that will provide up to 60 grants to states, tribes, municipalities and nonprofits to expand the number of low-income and disadvantaged communities for investment in residential and community solar, as well as associated storage and other enabling upgrades (e.g., new roof, electric panels, energy efficiency).
 - **Clean Communities Investment Accelerator ("CCIA")** – \$6 billion competition that will fund 2-7 hub nonprofits with the plans and capabilities to rapidly build the clean financing capacity of specific networks of public, quasi-public, and nonprofit community lenders to ensure that households, small businesses, schools, and community institutions in low-income and disadvantaged communities have access to financing.
 - **National Clean Investment Fund ("NCIF")** – \$14 billion competition that will fund 2-3 national nonprofits that will partner with private capital providers to deliver financing at scale to businesses, communities, community lenders, and others.

The Green Bank's federal competitive funding priority is the GGRF. The Green Bank has been actively involved in all public engagement aspects of the GGRF.¹¹⁴

United States Department of Agriculture

The Green Bank has applied to the United States Department of Agriculture ("USDA") to seek access to low-cost and long-term federal loan funds for the deployment of clean energy in rural communities.¹¹⁵ The USDA has vast lending authority under the Rural Electrification Act of

¹¹⁴ <http://www.ctgreenbank.com/ggrf/>

¹¹⁵ "Rural" communities are defined by a population bound and the various limits depend on the program; at the broadest, "rural" may be considered a town that has a population not greater than 50,000 people. Despite its positioning in a mostly-developed corridor, we estimate Connecticut would have 69% of towns eligible at the 20,000-person limit and 89% of towns at the 50,000-person limit.

1936, which enables direct loans, project financing and loan guarantees to a variety of borrowers.

7.3 Additional Funding Sources

Per CGS 16-245n, additional funding sources include, but are not limited to:

- Charitable gifts, grants, contributions as well as loans from individuals, corporations, university endowments and philanthropic foundations;
- Earnings and interest derived from financing support activities for clean energy projects backed by the Connecticut Green Bank;
- If it qualifies as a CDFI under Section 4702 of the United States Code, funding from the CDFI Fund administered by the United States Department of Treasury, as well as loans from and investments by depository institutions seeking to comply with their obligations under the United States Community Reinvestment Act of 1977; and
- Contracts with private sources to raise capital.

8. Impact

The Green Bank's evaluation efforts seek to understand how the increase in investment and deployment of clean energy and environmental infrastructure supported through the Green Bank, result in benefits to society. To that end, the Green Bank has devised an Evaluation Framework and Impact Methodologies for various societal benefits.

8.1 Evaluation Framework

The Green Bank has established an Evaluation Framework to guide the assessment, monitoring and reporting of the program impacts and processes, including, but not limited to energy savings and clean energy production and the resulting societal impacts or benefits arising from clean energy investment.¹¹⁶ This framework focuses primarily on assessing the market transformation the Green Bank is enabling, including:

- **Supply of Capital** – including affordable interest rates, longer term maturity options, improved underwriting standards, etc.
- **Consumer Demand** – increasing the number of projects, increasing the comprehensiveness of projects, etc.
- **Financing Performance Data and Risk Profile** – making data publicly available to reduce perceived technology risks by current or potential private investors.
- **Societal Impact** – the benefits society receives from more investment in and deployment of clean energy.

¹¹⁶ <https://ctgreenbank.com/wp-content/uploads/2017/02/CTGreenBank-Evaluation-Framework-July-2016.pdf>

With the goal of pursuing investment strategies that advance market transformation in green investing, the Green Bank's evaluation framework provides the foundation for determining the impact it is supporting in Connecticut and beyond across the four (4) "E's" (i.e., E⁴) – including Economy, Environment, Energy, and Equity.¹¹⁷

The Evaluation Framework will have to be revised, over time, to include environmental infrastructure, as well as the important role Green Liberty Bonds play in raising capital for investments.

8.2 Impact Methodologies

To support the implementation of the Evaluation Framework, the Green Bank, working with various public sector organizations, has developed methodologies that estimate the impact from the investment, installation and operation of clean energy projects, including:

- **Jobs** – working in consultation with the Connecticut Department of Economic and Community Development ("DECD"), through the work of Guidehouse (formerly Navigant), the Green Bank devised a methodology that takes investment in clean energy to reasonably estimate the direct, indirect, and induced job-years resulting from clean energy deployment.¹¹⁸
- **Tax Revenues** – working in consultation with the Connecticut Department of Revenue Services ("DRS"), through the work of Guidehouse, the Green Bank devised a methodology that takes investment in clean energy to reasonably estimate the individual income, corporate, ~~and~~ sales, ~~and~~ property tax revenues from clean energy deployment.¹¹⁹
- **Environmental Protection** – working in consultation with the USEPA and DEEP, the Green Bank devised a methodology that takes the reduction in consumption of energy and increase in the production of clean energy to reasonably estimate the air emission reductions (i.e., CO₂, NO_x, SO₂, and PM_{2.5}) resulting from clean energy deployment.¹²⁰
- **Public Health Improvement** – working in consultation with the USEPA, DEEP, and ~~the Connecticut Department of Public Health ("DPH")~~, the Green Bank devised a methodology that takes air emission reductions to reasonably estimate the public health benefits (e.g., reduced hospitalizations, reduced sick days, etc.) and associated savings to society resulting from clean energy deployment.¹²¹
- **Equity** – with the passage of PA 20-05, the Green Bank devised a methodology that takes the definition of "vulnerable communities" to track progress towards the goal of ensuring that no less than 40 percent of investment from its programs are directed to vulnerable communities by 2025.¹²²

¹¹⁷ <https://www.ctgreenbank.com/wp-content/uploads/2022/09/FY12-FY22-CGB-ImpactReport-8242022.pdf>

¹¹⁸ https://www.ctgreenbank.com/wp-content/uploads/2018/03/CGB_DECD_Jobs-Study_Fact-Sheet.pdf

¹¹⁹ <https://www.ctgreenbank.com/wp-content/uploads/2018/09/CGB-Eval-Tax-Methodology-7-24-18.pdf>

¹²⁰ <https://www.ctgreenbank.com/wp-content/uploads/2018/01/CGB-Eval-IMPACT-091917-Bv2.pdf>

¹²¹ <https://www.ctgreenbank.com/wp-content/uploads/2018/03/CGB-Eval-PUBLICHEALTH-1-25-18-new.pdf>

¹²² https://www.ctgreenbank.com/wp-content/uploads/2022/07/Equity_Investment_in_Vulnerable_Communities.pdf

- **Energy Burden** – working in consultation with DEEP and PURA, the Green Bank devised a methodology that takes actual solar PV production data from meters compared against contractual lease and PPA prices and electricity rates, to estimate the energy burden reduction from financing solar PV.¹²³

Each year, the Green Bank develops additional methodologies that value the impact the Green Bank is helping create in Connecticut and all of society. For more information on the Green Bank’s impact methodologies, visit the Impact page of the website.¹²⁴

In time, additional impact methodologies will be developed for environmental infrastructure.

8.3 Green Bond Framework

The Green Bank’s Green Bond Framework¹²⁵ provides a structure in which the Green Bank can more efficiently and effectively support its efforts to raise capital and deploy more clean energy and environmental infrastructure through the issuance of green bonds.

Connecticut has been at the forefront of state-level efforts to combat the threat of global climate change. In order to increase investment, the Green Bank will use its statutory authority (i.e., CGS 16-245kk) to issue bonds, including green bonds. These are key to sourcing capital for clean energy and environmental infrastructure projects and providing a way for all residents, businesses, and institutions of Connecticut to invest in growing our green economy.

The framework sets out how the Green Bank proposes to use its Master Trust Indenture (“MTI”) in a manner consistent with its purpose and provide the transparency and disclosures investors require to make investment decisions through green bonds. This framework is specifically intended for the MTI approved and adopted April 22, 2020, which establishes the purposes for which the Green Bank may issue green bonds or other public debt. The Framework is established in accordance with the Climate Bonds Initiative (“CBI”) Standard and adheres to the Green Bond Principles issued by the International Capital Market Association.

The Green Bond Framework will have to be revised, over time, to include environmental infrastructure.

9. Reporting and Transparency

The Green Bank has extensive reporting on its financial management and societal impact through various mechanisms. As a recipient of public revenues (i.e., CEF and RGGI allowance proceeds), the Green Bank believes that complete transparency is important to ensure the public’s continued trust in serving its purpose. The Green Bank reports to the Governor’s Office (i.e., Office of Policy and Management (“OPM”)), various committees of cognizance within the CGA (i.e., energy & technology, commerce, environment, and banking), and other departments (e.g., DEEP, Office of Fiscal Analysis).

¹²³ <https://www.ctgreenbank.com/wp-content/uploads/2022/07/CGB-Eval-Solar-Methodology-combined-6-8-2021-final.pdf>

¹²⁴ <https://www.ctgreenbank.com/strategy-impact/evaluations/>

¹²⁵ https://ctgreenbank.com/wp-content/uploads/2020/04/CGB_Green-Bond-Framework_final-4-22-2020.pdf

9.1 Annual Comprehensive Financial Report

An Annual Comprehensive Financial Report (“ACFR”) is a set of government financing statements that includes the financial report of a state, municipal or other government entity that complies with the accounting requirements promulgated by the Governmental Accounting Standards Board (“GASB”). GASB provides standards for the content of an ACFR in its annually updated publication *Codification of Governmental Accounting and Financial Reporting Standards*. An ACFR is compiled by a public agency’s accounting staff and audited by an external American Institute of Certified Public Accountants (“AICPA”) certified accounting firm utilizing GASB requirements. It is composed of three sections – Introductory, Financial, and Statistical. The independent audit of the ACFR is not intended to include an assessment of the financial health of participating governments, but rather to ensure that users of their financial statements have the information they need to make those assessments themselves.¹²⁶

To date, the Green Bank has issued ~~eight-nine~~ (9) ACFR’s, including:

- [Fiscal Year Ended June 30, 2014 \(Certificate of Achievement\)](#)
- [Fiscal Year Ended June 30, 2015 \(Certificate of Achievement\)](#)
- [Fiscal Year Ended June 30, 2016 \(Certificate of Achievement\)](#)
- [Fiscal Year Ended June 30, 2017 \(Certificate of Achievement\)](#)
- [Fiscal Year Ended June 30, 2018 \(Certificate of Achievement\)](#)
- [Fiscal Year Ended June 30, 2019 \(Certificate of Achievement\)](#)
- [Fiscal Year Ended June 30, 2020 \(Certificate of Achievement\)](#)
- [Fiscal Year Ended June 30, 2021 \(Certificate of Achievement\)](#)
- [Fiscal Year Ended June 30, 2022](#)

As the “gold standard” in government reporting, the ACFR is the mechanism the Green Bank uses to report its fiscal year financial, investment, and impact performance to its stakeholders. For each of its ~~seven-eight~~ years filing the ACFR with the Government Finance Officers Association the Green Bank has received a Certificate of Achievement for Excellence in Financial Reporting.¹²⁷

9.2 Annual Report

Beyond the ACFR, the annual reports of the Green Bank are compiled by the marketing staff and include consolidated financial statement information and narratives of various program achievements in a condensed format that can be widely distributed.

To date, the Green Bank has issued eleven annual reports, including:

- [Fiscal Year 2012 Annual Report](#)
- [Fiscal Year 2013 Annual Report](#)

¹²⁶ The Government Finance Officers Association (GFOA), founded in 1906, represents public finance officials throughout the United States and Canada. GFOA’s mission is to enhance and promote the professional management of governmental financial resources by identifying, developing, and advancing fiscal strategies, policies, and practices for the public benefit. GFOA established the Certificate of Achievement for Excellent in Financial Reporting Program in 1945 to encourage and assist state and local governments to go beyond the minimum requirements of generally accepted accounting principles to prepare CAFRs that evidence the spirit of transparency and full disclosure and then to recognize individual governments that succeed in achieving that goal.

¹²⁷ GAO has yet to designate the FY ~~2021-2022~~ ACFR with a Certificate of Achievement

- [Fiscal Year 2014 Annual Report](#)
- [Fiscal Year 2015 Annual Report](#)
- [Fiscal Year 2016 Annual Report](#)
- [Fiscal Year 2017 Annual Report](#)
- [Fiscal Year 2018 Annual Report](#)
- [Fiscal Year 2019 Annual Report](#)
- [Fiscal Year 2020 Annual Report](#)
- [Fiscal Year 2021 Annual Report](#)
- [Fiscal Year 2022 Annual Report](#)

9.3 Auditors of Public Accounts

The office of the Auditors of Public Accounts (“APA”) is a legislative agency of the State of Connecticut whose primary mission is to conduct audits of all state agencies, including quasi-public agencies. Included in such audits is an annual Statewide Single Audit of the State of Connecticut to meet federal requirements. The office is under the direction of two state auditors appointed by the state legislature. The APA audited certain operations of the Green Bank in fulfillment of its duties under Sections 1-122 and Section 2-90 of the CGS

To date, the APA has conducted four audits, including:

- [Fiscal Years 2012 and 2013](#)
- [Fiscal Years 2014 and 2015](#)
- [Fiscal Years 2016 and 2017](#)
- [Fiscal Years 2018 and 2019](#)

9.4 Open Connecticut and Open Quasi

Open Connecticut centralizes state financial information to make it easier to follow state dollars. In Connecticut quasi-public agencies are required to submit annual reports to the legislature, including a summary of their activities and financial information. In addition to that, the Comptroller’s Office requested that quasi-public agencies voluntarily provide payroll and checkbook-level vendor payment data for display on Open Connecticut. The Green Bank, which was among the first quasi-public organizations to participate, has voluntarily submitted this information since the inception of Open Connecticut.¹²⁸ In June of 2020, the Comptroller launched Open Quasi, which provides payroll and checkbook level data for all quasi-public organizations in Connecticut.

For more information, go to <https://openquasi.ct.gov/>

10. Research and Product Development

As the Green Bank implements its Comprehensive Plan, there will be ongoing efforts to develop market opportunities for future green investments. With the lessons being learned and best practices being discovered in the green economy, the Green Bank’s ability to deliver more societal benefits requires understanding potential opportunities and the development of pilot programs and initiatives to increase and measure impact, including, for example:

¹²⁸ <https://openquasi.ct.gov/>

- **Ecosystems Services** – increasing understanding of ecosystem services values from environmental infrastructure, will help to identify opportunities to mobilize private investment to maximize GHG emissions reductions and resiliency against climate change. Ongoing support of research studies to understand the value of ecosystem services from environmental infrastructure is important.
- **Carbon Offsets** – continuing to increase understanding of carbon offsets,¹²⁹ recognizing their importance within environmental infrastructure (e.g., forest carbon, climate-smart agriculture) and the potential to generate revenues in support of projects, there is need for ongoing support of research studies to understand carbon offset markets.
- **Resiliency** – in its efforts to advance resilience, the Green Bank working with DEEP, Insurance Department, and CIRCA, will seek to better understand labelling (e.g., FORTIFIED by the Insurance Institute for Business and Home Safety), direct install measures, and other programs (e.g., adapting Solarize campaigns to Ruggedize campaigns). To continue to develop ESS, research and pilots for vehicle to grid (“V2G”) ~~will~~ may also be pursued.
- **Electric School Buses** – per Public Act 22-25, the Green Bank supported contract extensions for electric school buses (“ESB”) and financial support through RGGI for vouchers in support of ESB deployment in environmental justice communities through the Connecticut Hydrogen and Electric Automobile Purchase Rebate (“CHEAPR”) program. Support for the deployment of ESBs and electric vehicle supply equipment (“EVSE”) will enable increased private investment to support the 100% zero emission ESB goals for 2030 (i.e., environmental justice communities) and 2040 (i.e., all communities).
- **Hydrogen** – per Special Act 22-8,¹³⁰ and consistent with the definition of “clean energy” under CGS 16-245n, the Green Bank is chair of the task force to study hydrogen power. Recognizing the importance of “green hydrogen” to Connecticut’s fuel cell industry, there may be the need for research on the sources, infrastructure, and uses related to hydrogen.
- **Impact Methodologies** – building on the Green Bank’s leading impact methodologies for “clean energy,” efforts will be undertaken to develop impact methodologies for “environmental infrastructure”.
- **Battery Recycling** – as the co-administrator of the 580 MW Energy Storage Solutions program, understanding the implications, challenges, and opportunities for battery recycling (e.g., lithium-ion batteries) is important.

¹²⁹ Verified Carbon Standard – VM0038 Methodology for Electric Vehicle Charging Systems (V1.0) – <https://verra.org/methodology/vm0038-methodology-for-electric-vehicle-charging-systems-v1-0/>

¹³⁰ An Act Establishing a Task Force to Study Hydrogen Power – <https://www.cga.ct.gov/2022/ACT/SA/PDF/2022SA-00008-R00HB-05200-SA.PDF>

- **Artificial Intelligence** – undertake research to identify the challenges and opportunities posed by Artificial Intelligence (“AI”) in terms of the Green Bank’s operations and mission.

The Green Bank’s research product development efforts are intended to open-up new market channels for private investment in Connecticut’s green economy through studies, pilot projects, and other initiatives that have the potential for expanding the impact of the Green Bank.

11. Budget

11.1 FY 2023 Budget

For the details on the FY 2023 budget– [click here](#).

For details on the FY 2023 revised budget – [click here](#).

11.2 FY 2024 Budget

For the details on the FY 2024 budget– [click here](#).

12. Glossary of Acronyms

ABS	Asset-Backed Security
ACFR	Annual Comprehensive Financial Report
ACG Committee	Audit, Compliance, and Governance Committee
AICPA	American Institute of Certified Public Accountants
AI	Artificial Intelligence
APA	Auditors of Public Accounts
ARRA	American Recovery and Reinvestment Act
BEA	Business Energy Advantage
BIL	Bipartisan Infrastructure Law
BOC Committee	Budget, Operations, and Compensation Committee
BOD	Board of Directors
CCIA	Clean Communities Investment Accelerator
CEF	Clean Energy Fund (or Renewable Energy Investment Fund)
CBI	Climate Bonds Initiative
CCEF	Connecticut Clean Energy Fund
CDFI	Community Development Financial Institution
CEF	Clean Energy Fund
CGA	Connecticut General Assembly
CGS	Connecticut General Statutes
CHEAPR	Connecticut Hydrogen and Electric Automobile Purchase Rebate
CIRCA	Connecticut Institute for Resilience and Climate Adaptation
C-PACE	Commercial Property Assessed Clean Energy
DECD	Department of Economic and Community Development
DEEP	Department of Energy and Environmental Protection
DoAg	Department of Agriculture
DPH	Department of Public Health
DRS	Department of Revenue Services
EDC	Electric Distribution Company
ESB	Electric School Bus
EEB	Energy Efficiency Board
EIF	Environmental Infrastructure Fund
ESS	Energy Storage Solutions
EM&V	Evaluation, Measurement, and Verification
EVSE	Electric Vehicle Supply Equipment
GASB	Governmental Accounting Standards Board
GHG	Greenhouse Gas Emissions
GHGRF	Greenhouse Gas Reduction Fund
GWSA	Global Warming Solutions Act
HES	Home Energy Solutions
HES-IE	Home Energy Solutions – Income Eligible
IPC	Inclusive Prosperity Capital
IIJA	Infrastructure Investments and Jobs Act
IRA	Inflation Reduction Act
LMI	Low-to-Moderate Income

MPA	Master Purchase Agreement
MTI	Master Trust Indenture
NCIF	National Clean Investment Fund
NRCS	Natural Resources Conservation Service
NRES	Non-Residential Renewable Energy Solutions
OPM	Office of Policy and Management
PA	Public Act
PDR	Purchasing Development Rights
PPA	Power Purchase Agreement
PRI	Program Related Investment
PURA	Public Utilities Regulatory Authority
RGGI	Regional Greenhouse Gas Initiative
RPS	Renewable Portfolio Standard
RRES	Residential Renewable Energy Solutions
RSIP	Residential Solar Investment Program
SBEA	Small Business Energy Advantage
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SCRf	Special Capital Reserve Fund
SHREC	Solar Home Renewable Energy Credit
SRF	State Revolving Fund
TPL	Trust for Public Land
URI	Urban Resources Institute
USDA	U.S. Department of Agriculture
USDOE	U.S. Department of Energy
USEPA	United States Environmental Protection Agency
V2G	Vehicle to Grid



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7/22

Memo

To: Board of Directors of the Connecticut Green Bank

From: Sergio Carrillo (Managing Director of Incentive Programs), Bryan Garcia (President and CEO)

Cc: Mackey Dykes, Brian Farnen, Bert Hunter, Jane Murphy, and Eric Shrago

Date: July 14, 2023

Re: Energy Storage Solutions Program – Upfront Incentive Notification and Approvals

The Energy Storage Solutions (ESS) Program was established by the Public Utilities Regulatory Authority (PURA) in Docket No. 17-12-03RE03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Electric Storage. In its Final Decision¹ in this docket, issued July 28, 2021, PURA appointed The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource), The United Illuminating Company (UI), and the Connecticut Green Bank (Green Bank) as co-administrators of the Program.²

The Green Bank's responsibilities include customer enrollment, administration of the upfront incentive, marketing and promotion, and data aggregation and publication to support evaluation, measurement, and verification, among others.

A. Upfront Incentive Approval Process

In its June 24, 2022 Board meeting, the Green Bank Board approved a process for the approval of upfront incentives for projects participating in the ESS Program by which projects with estimated upfront incentives greater than \$500,000 would follow a process similar to the one used by C-PACE.

Within the existing Board of Directors (BOD or Board) and Deployment Committee regular meeting schedule, the Green Bank staff will seek BOD approval of these upfront incentives via consent agenda, and only after the upfront incentives are approved by the BOD, Green Bank staff will issue Reservation of Funds (ROF) letters.

The Board approved that Green Bank staff shall obtain Board approval of estimated upfront incentive payments via consent agenda utilizing the Tear Sheet process described in the

¹ <https://tinyurl.com/2p8v4cwa>

² It should also be noted that with the passage of Public Act 21-53 "An Act Concerning Energy Storage," that PURA shall solicit input from DEEP, OCC, EDC's, and the Green Bank in developing energy storage system programs, and may select DEEP, EDC's, Green Bank, a third party, or any combination thereof to implement one or more programs for electric storage resources as directed by PURA.

Memorandum to the Board dated June 24, 2022. Only after securing Board approval, will Green Bank Staff issue ROF letters to project developers and/or owners.

After projects are fully operational, Green Bank staff will notify the BOD of their intent to issue Confirmation of Funds (COF) letters, highlighting any differences between the Board-approved incentive and the final incentive amount, and the reason for the difference.

B. Notice of Approval of New Upfront Incentives Below \$500,000

At the October 20, 2017 BOD meeting of the Green Bank, it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve funding requests less than \$500,000 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 a report out and request to clear the queue on funding requests below \$500,000 that were evaluated and approved by Green Bank Staff via Project Approval Forms (PAFs).

Two ESS projects with upfront incentives below \$500,000 received Green Bank staff approval via Project Approval Forms (PAF). Table 1 below shows the two projects approved by Green Bank staff with estimated upfront incentives for a total amount of \$625,000. The two projects have a total capacity of 2.0 MW, which accounts for 2.0% of the 100 MW of non-residential capacity available for Tranche 2 of the ESS Program.

Project Number	Contractor Account	Staff Approval Date	Customer City	Battery Manufacturer	Battery Model	Total System Power (kW)	Total System Energy Capacity (kWh)	Estimated Upfront Incentive	Total Project Cost
ESS-00239	Siemens	06/16/2023	Windham	ELM Fieldsight	MG100	1,000.0	2,500.0	\$312,500	\$1,625,000
ESS-00240	Siemens	06/16/2023	Bridgeport	ELM Fieldsight	MG100	1,000.0	2,500.0	\$312,500	\$1,625,000
						2,000.0	5,000.0	\$625,000	

Table 1. List of projects with incentives under \$500K approved by Green Bank Staff via Project Approval Forms (PAFs)

Both projects will use a battery system manufactured by ELM Fieldsight, have been identified as critical facilities³, and will participate in forward capacity markets (FCM). The projects will be located at a Hartford Healthcare facility, project ESS-00239 in Windham, and project ESS-00240 in Bridgeport. The battery energy storage systems (BESS) will be owned by the customer.

Last, both projects will help to reduce electric bills and provide backup power to healthcare facilities during power outages. These projects are expected to be completed in 2025 after the completion of interconnection studies, which can be lengthy and costly.

³ According to the ESS [Program Manual](#), “Critical Facilities shall be defined according to Conn. Gen. Stat. § 16-243y(a)(2), as well as known facilities that were designated essential by the DECD pursuant to Governor Lamont’s [Executive Order 7H](#).” ESS Program Manual, pp. 41-42.

C. Request for Approval of New Upfront Incentives Under \$500,000

Table 2 below shows the three (3) projects seeking approval of estimated upfront incentives under \$500K, and above a million dollars on an aggregate basis, for a total amount of \$1,057,500, and aggregate capacity 3.855 MW. Green Bank staff has not issued Reservation of Fund (ROF) letters as the amount of Projects is above the aggregate amount of one million dollars. As part of this request to the Board, we are seeking authorization to issue ROFs for the projects listed below.

Project Number	Contractor Account	Application Date	Customer City	Battery Manufacturer	Battery Model	Total System Power (kW)	Total System Energy Capacity (kWh)	Estimated Upfront Incentive	Total Project Cost
ESS-00377	CPower	07/13/2022	Meriden	Tesla	Megapack	964.0	1,928.0	\$241,000	\$819,400
ESS-00522	CPower	11/18/2022	Thompson	Tesla	Megapack	964.0	1,928.0	\$334,750	\$819,400
ESS-00525	CPower	11/22/2022	Milford	Tesla	Megapack	1,927.0	3,854.0	\$481,750	\$1,637,952
						3,855.0	7,710.0	\$1,057,500	

Table 2. List of projects with incentives under \$500K seeking Board approval

These projects are medium, and large commercial and industrial projects, and are expected to come online in 2024 and 2025, due to their complexity and distribution and transmission interconnection studies triggered by the size of the batteries being proposed.

The attached Tear Sheets provide these and other details pertaining to the four new projects seeking estimated upfront incentives in the ESS Program.

D. Request for Approval of New Upfront Incentives Above \$500,000

Table 3 below shows the three (3) projects seeking estimated upfront incentives for a total amount of \$5,779,813 and total capacity of 22.718 MW, which account for 22.7% of the 100 MW of non-residential capacity available for Tranche 2 of the ESS Program.

Project Number	Contractor Account	Application Date	Customer City	Battery Manufacturer	Battery Model	Total System Power (kW)	Total System Energy Capacity (kWh)	Estimated Upfront Incentive	Total Project Cost
ESS-00309	CPower	05/27/2022	Suffield	Tesla	Megapack	17,985.0	35,970.0	\$4,496,250	\$15,287,252
ESS-00376	CPower	07/13/2022	Meriden	Tesla	Megapack	2,408.0	4,816.0	\$500,000	\$2,046,800
ESS-00637	CPower	03/27/2023	Newington	Tesla	Megapack	2,325.0	6,975.0	\$783,563	\$2,964,376
						22,718.0	47,761.0	\$5,779,813	

Table 3. Estimated Upfront Incentives Above \$1,000,000

The first project, ESS-00309, is the largest application we have received to date. It's a large manufacturing facility owned by Linde Industrial Gases. The proposed project includes a battery system with power rating of almost 18 MW (17,985 kW) and will require distribution and transmission impact studies. The estimated upfront incentive of this project is \$4,496,250. This project qualifies as a critical facility, and is expected to participate in FCM.

The second project, ESS-00376, is a women-owned, food service facility that offers customer food solutions for private labels and restaurants. For this reason, the project qualifies as a critical facility. The project includes a 2.4 MW battery with 4.8 MWh of energy capacity. The estimated upfront incentive for this project is \$500,000.

The third and last project, ESS-00637, is a large commercial and industrial (C&I) project located at PCX Newington, a critical facility. The battery energy storage system (BESS) will be owned by CPower, and the project is not eligible to participate in FCM. Additionally, the project's battery model is a Tesla Megapack, which is preapproved for the Program. The upfront incentive for this project is \$783,563.

The attached Tear Sheets provide these and other details pertaining to the two new projects seeking estimated upfront incentives in the ESS Program.

With the approval of these six (6) new projects, the total approved capacity for commercial and industrial projects in ESS will be 76.2 MW, 41.3 MW in the first tranche, and 34.9 MW in tranche 2. All of these projects are in the process of seeking approval for interconnection by the EDCs.

Resolution

WHEREAS, in its June 24, 2022 meeting the Connecticut Green Bank Board of Directors (Board) approved the implementation of an Upfront Incentive Project Approval procedures ("Procedures") for non-residential projects under the Energy Storage Solutions Program (Program) with an estimated upfront incentive payment greater than \$500,000 and procedures for less than \$500,000;

WHEREAS, as part of the approved Procedures, Green Bank staff shall present Program projects via the consent agenda utilizing a standard form Tear Sheet process described in the memorandum to the Board dated June 24, 2022;

WHEREAS, in its December 9, 2022 meeting the Board approved updated Procedures to better align with the Program process;

WHEREAS, Green Bank Staff reviewed funding requests for projects with incentives below \$500,000, and approved them via Project Approval Forms for a total amount of \$625,000 and intends to issue Reservation of Fund letters upon Board of Directors review and authorization.

NOW, therefore be it:

RESOLVED, that the Board hereby approves the estimated upfront incentives sought by three(3) non-residential projects above \$500,000 totaling \$5,779,813 consistent with the approved Procedures;

RESOLVED, that the Board hereby approves the estimated upfront incentives sought by three (3) non-residential projects individually under \$500,000, totaling \$1,057,500 consistent with the approved Procedures; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver any and all documents and regulatory filings as they shall deem

necessary and desirable to effect the above-mentioned incentives consistent with the Procedures.

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 17,985 kW of power capacity, and with 35,970 kWh of energy capacity, to reduce electric bills and provide backup power to a manufacturing facility during power outages.
----------------------------	---

Customer / Site information

Customer Name	Linde Industrial Gases (Praxair)
Address	1 U Car St., Suffield, CT 06078
Business Purpose	Manufacturing
Incentive Application No.	ESS-00309
Incentive Application Date	5/27/2022
Customer Peak Annual Demand (kW)	24,154
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	Yes
Participation in FCM Declared	Yes
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	17,985
BESS Energy Capacity (kWh)	35,970
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Distribution and transmission study needed
Estimated Project Cost	\$15,287,252



Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	1.07
PCT – Participant Cost Test	1.21
PACT – Program Administrator Cost Test	1.14
SCT – Societal Cost Test	0.83
TRC – Total Resource Cost Test	0.84

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none"> ▪ Application Submitted ▪ Approved Reservation of Funds Letter (ROF) ▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$4,496,250

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 2,408 kW of power capacity, and with 4,816 kWh of energy capacity, to reduce electric bills and provide backup power to a food services facility during power outages.
----------------------------	---

Customer / Site information

Customer Name	Ragozzino Foods, Inc.
Address	71 Chamberlain Hwy., Meriden, CT 06451
Business Purpose	Accommodation and Food Services
Incentive Application No.	ESS-00376
Incentive Application Date	7/13/2022
Customer Peak Annual Demand (kW)	885
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	Yes
Participation in FCM Declared	No
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	2,408
BESS Energy Capacity (kWh)	4,816
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Distribution study needed
Estimated Project Cost	\$2,046,800

Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	1.07
PCT – Participant Cost Test	1.06
PACT – Program Administrator Cost Test	1.14
SCT – Societal Cost Test	0.71
TRC – Total Resource Cost Test	0.72

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none">▪ Application Submitted▪ Approved Reservation of Funds Letter (ROF)▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$500,000

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 964 kW of power capacity, and with 1,928 kWh of energy capacity, to reduce electric bills and provide backup power to a food services facility during power outages.
----------------------------	---

Customer / Site information

Customer Name	Ragozzino Foods, Inc.
Address	10 Ames Ave., Meriden, CT 06451
Business Purpose	Accommodation and Food Services
Incentive Application No.	ESS-00377
Incentive Application Date	7/13/2022
Customer Peak Annual Demand (kW)	531
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	Yes
Participation in FCM Declared	No
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	964
BESS Energy Capacity (kWh)	1,928
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Fast Track study needed
Estimated Project Cost	\$819,400



Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	1.07
PCT – Participant Cost Test	1.21
PACT – Program Administrator Cost Test	1.14
SCT – Societal Cost Test	0.83
TRC – Total Resource Cost Test	0.84

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none"> ▪ Application Submitted ▪ Approved Reservation of Funds Letter (ROF) ▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$241,000

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 964 kW of power capacity, and with 1,928 kWh of energy capacity, to reduce electric bills and provide backup power to a manufacturing facility during power outages.
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Customer / Site information

Customer Name	Numa Tools
Address	646 Thompson Rd., Thompson, CT, 06277
Business Purpose	Educational Services
Incentive Application No.	ESS-00522
Incentive Application Date	12/14/2022
Customer Peak Annual Demand (kW)	262.10
Customer Class (S / M / L)	Medium
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	No
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	Yes
Participation in FCM Allowed	Yes
Participation in FCM Declared	Yes
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	964
BESS Energy Capacity (kWh)	1,928
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Fast Track study needed
Estimated Project Cost	\$819,400

Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	0.97
PCT – Participant Cost Test	1.27
PACT – Program Administrator Cost Test	1.05
SCT – Societal Cost Test	0.83
TRC – Total Resource Cost Test	0.84

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none">▪ Application Submitted▪ Approved Reservation of Funds Letter (ROF)▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$334,750

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with a nameplate power rating of 1,927 kW, and with a nameplate energy capacity of 3,854 kWh, to reduce electric bills and provide backup power to a manufacturing facility during power outages.
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Customer / Site information

Customer Name	Colonial Coatings
Address	66 Erna Ave., Milford, CT 06461
Business Purpose	Manufacturing
Incentive Application No.	ESS-00525
Incentive Application Date	12/14/2022
Customer Annual Peak Demand (kW)	696.60
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower / Endurant Energy

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	Yes
Participation in FCM Declared	No
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	1,927
BESS Energy Capacity (kWh)	3,854
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Fast Track study needed
Estimated Project Cost	\$1,637,952



Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	0.83
PCT – Participant Cost Test	1.20
PACT – Program Administrator Cost Test	0.86
SCT – Societal Cost Test	0.67
TRC – Total Resource Cost Test	0.67

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none"> ▪ Application Submitted ▪ Approved Reservation of Funds Letter (ROF) ▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$481,750

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 2,325 kW of power capacity, and with 6,975 kWh of energy capacity, to reduce electric bills and provide backup power to a manufacturing facility during power outages.
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Customer / Site information

Customer Name	PCX Newington
Address	300 Fenn Rd., Newington, CT 06111
Business Purpose	Manufacturing
Incentive Application No.	ESS-00637
Incentive Application Date	5/11/2023
Customer Peak Annual Demand (kW)	1,393
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	No
Participation in FCM Declared	No
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	2,325
BESS Energy Capacity (kWh)	6,975
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Distribution study needed
Estimated Project Cost	\$2,964,376.00



Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	2.28
PCT – Participant Cost Test	1.09
PACT – Program Administrator Cost Test	2.94
SCT – Societal Cost Test	2.25
TRC – Total Resource Cost Test	2.25

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none"> ▪ Application Submitted ▪ Approved Reservation of Funds Letter (ROF) ▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$783,562.50

Memo

To: Board of Directors of the Connecticut Green Bank

From: Sergio Carrillo (Managing Director of Incentive Programs), Bryan Garcia (President and CEO)

Cc: Mackey Dykes, Brian Farnen, Bert Hunter, Jane Murphy, and Eric Shrago

Date: July 14, 2023

Re: Energy Storage Solutions Program – Upfront Incentive Notification and Approvals

The Energy Storage Solutions (ESS) Program was established by the Public Utilities Regulatory Authority (PURA) in Docket No. 17-12-03RE03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Electric Storage. In its Final Decision¹ in this docket, issued July 28, 2021, PURA appointed The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource), The United Illuminating Company (UI), and the Connecticut Green Bank (Green Bank) as co-administrators of the Program.²

The Green Bank's responsibilities include customer enrollment, administration of the upfront incentive, marketing and promotion, and data aggregation and publication to support evaluation, measurement, and verification, among others.

A. Upfront Incentive Approval Process

In its June 24, 2022 Board meeting, the Green Bank Board approved a process for the approval of upfront incentives for projects participating in the ESS Program by which projects with estimated upfront incentives greater than \$500,000 would follow a process similar to the one used by C-PACE.

Within the existing Board of Directors (BOD or Board) and Deployment Committee regular meeting schedule, the Green Bank staff will seek BOD approval of these upfront incentives via consent agenda, and only after the upfront incentives are approved by the BOD, Green Bank staff will issue Reservation of Funds (ROF) letters.

The Board approved that Green Bank staff shall obtain Board approval of estimated upfront incentive payments via consent agenda utilizing the Tear Sheet process described in the

¹ <https://tinyurl.com/2p8v4cwa>

² It should also be noted that with the passage of Public Act 21-53 "An Act Concerning Energy Storage," that PURA shall solicit input from DEEP, OCC, EDC's, and the Green Bank in developing energy storage system programs, and may select DEEP, EDC's, Green Bank, a third party, or any combination thereof to implement one or more programs for electric storage resources as directed by PURA.

Memorandum to the Board dated June 24, 2022. Only after securing Board approval, will Green Bank Staff issue ROF letters to project developers and/or owners.

After projects are fully operational, Green Bank staff will notify the BOD of their intent to issue Confirmation of Funds (COF) letters, highlighting any differences between the Board-approved incentive and the final incentive amount, and the reason for the difference.

B. Notice of Approval of New Upfront Incentives Below \$500,000

At the October 20, 2017 BOD meeting of the Green Bank, it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve funding requests less than \$500,000 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 a report out and request to clear the queue on funding requests below \$500,000 that were evaluated and approved by Green Bank Staff via Project Approval Forms (PAFs).

Two ESS projects with upfront incentives below \$500,000 received Green Bank staff approval via Project Approval Forms (PAF). Table 1 below shows the two projects approved by Green Bank staff with estimated upfront incentives for a total amount of \$625,000. The two projects have a total capacity of 2.0 MW, which accounts for 2.0% of the 100 MW of non-residential capacity available for Tranche 2 of the ESS Program.

Project Number	Contractor Account	Staff Approval Date	Customer City	Battery Manufacturer	Battery Model	Total System Power (kW)	Total System Energy Capacity (kWh)	Estimated Upfront Incentive	Total Project Cost
ESS-00239	Siemens	06/16/2023	Windham	ELM Fieldsight	MG100	1,000.0	2,500.0	\$312,500	\$1,625,000
ESS-00240	Siemens	06/16/2023	Bridgeport	ELM Fieldsight	MG100	1,000.0	2,500.0	\$312,500	\$1,625,000
						2,000.0	5,000.0	\$625,000	

Table 1. List of projects with incentives under \$500K approved by Green Bank Staff via Project Approval Forms (PAFs)

Both projects will use a battery system manufactured by ELM Fieldsight, have been identified as critical facilities³, and will participate in forward capacity markets (FCM). The projects will be located at a Hartford Healthcare facility, project ESS-00239 in Windham, and project ESS-00240 in Bridgeport. The battery energy storage systems (BESS) will be owned by the customer.

Last, both projects will help to reduce electric bills and provide backup power to healthcare facilities during power outages. These projects are expected to be completed in 2025 after the completion of interconnection studies, which can be lengthy and costly.

³ According to the ESS [Program Manual](#), “Critical Facilities shall be defined according to Conn. Gen. Stat. § 16-243y(a)(2), as well as known facilities that were designated essential by the DECD pursuant to Governor Lamont’s [Executive Order 7H](#).” ESS Program Manual, pp. 41-42.

C. Request for Approval of New Upfront Incentives Under \$500,000

Table 342 below shows the ~~four (4)~~ three (3) projects seeking approval of estimated upfront incentives under \$500K, and above a million dollars on an aggregate basis, for a total amount of ~~\$1,246,000~~ \$1,057,500, and aggregate capacity ~~6.263~~ 3.855 MW. Green Bank staff has not issued Reservation of Fund (ROF) letters as the amount of Projects is above the aggregate amount of one million dollars. As part of this request to the Board, we are seeking authorization to issue ROFs for the projects listed below.

Project Number	Contractor Account	Application Date	Customer City	Battery Manufacturer	Battery Model	Total System Power (kW)	Total System Energy Capacity (kWh)	Estimated Upfront Incentive	Total Project Cost
ESS-00376	CPower	07/13/2022	Meriden	Tesla	Megapack	2,408.0	4,816.0	\$400,000	\$2,046,800
ESS-00377	CPower	07/13/2022	Meriden	Tesla	Megapack	964.0	1,928.0	\$192,800	\$819,400
ESS-00522	CPower	11/18/2022	Thompson	Tesla	Megapack	964.0	1,928.0	\$267,800	\$819,400
ESS-00525	CPower	11/22/2022	Milford	Tesla	Megapack	1,927.0	3,854.0	\$385,400	\$1,637,952
						6,263.0	12,526.0	\$1,246,000	

Project Number	Contractor Account	Application Date	Customer City	Battery Manufacturer	Battery Model	Total System Power (kW)	Total System Energy Capacity (kWh)	Estimated Upfront Incentive	Total Project Cost
ESS-00377	CPower	07/13/2022	Meriden	Tesla	Megapack	964.0	1,928.0	\$241,000	\$819,400
ESS-00522	CPower	11/18/2022	Thompson	Tesla	Megapack	964.0	1,928.0	\$334,750	\$819,400
ESS-00525	CPower	11/22/2022	Milford	Tesla	Megapack	1,927.0	3,854.0	\$481,750	\$1,637,952
						3,855.0	7,710.0	\$1,057,500	

Table 32. List of projects with incentives under \$500K seeking Board approval

These projects are medium, and large commercial and industrial projects, and are expected to come online in 2024 and 2025, due to their complexity and distribution and transmission interconnection studies triggered by the size of the batteries being proposed.

The attached Tear Sheets provide these and other details pertaining to the four new projects seeking estimated upfront incentives in the ESS Program.

D. Request for Approval of New Upfront Incentives Above \$500,000

Table 32 below shows the ~~two~~ three (3) projects seeking estimated upfront incentives for a total amount of ~~\$4,380,563~~ \$5,779,813 and total capacity of ~~20.322~~ 7.18 MW, which account for ~~20.322.7~~ % of the 100 MW of non-residential capacity available for Tranche 2 of the ESS Program.

Project Number	Contractor Account	Application Date	Customer City	Battery Manufacturer	Battery Model	Total System Power (kW)	Total System Energy Capacity (kWh)	Estimated Upfront Incentive	Total Project Cost
ESS-00309	CPower	05/27/2022	Suffield	Tesla	Megapack	17,985.0	35,970.0	\$3,597,000	\$15,287,252
ESS-00637	CPower	03/27/2023	Newington	Tesla	Megapack	2,325.0	6,975.0	\$783,563	\$2,964,376
						20,310.0	42,945.0	\$4,380,563	

Project Number	Contractor Account	Application Date	Customer City	Battery Manufacturer	Battery Model	Total System Power (kW)	Total System Energy Capacity (kWh)	Estimated Upfront Incentive	Total Project Cost
ESS-00309	CPower	05/27/2022	Suffield	Tesla	Megapack	17,985.0	35,970.0	\$4,496,250	\$15,287,252
ESS-00376	CPower	07/13/2022	Meriden	Tesla	Megapack	2,408.0	4,816.0	\$500,000	\$2,046,800
ESS-00637	CPower	03/27/2023	Newington	Tesla	Megapack	2,325.0	6,975.0	\$783,563	\$2,964,376
						22,718.0	47,761.0	\$5,779,813	

Table 32. Estimated Upfront Incentives Above \$1,000,000

The first project, ESS-00309, is the largest application we have received to date. It’s a large manufacturing facility owned by Linde Industrial Gases. The proposed project includes a battery system with power rating of almost 18 MW (17,985 kW) and will require distribution and transmission impact studies. The estimated upfront incentive of this project is ~~\$3,597,000~~\$4,496,250. This project qualifies as a critical facility, and is expected to participate in FCM.

The second project, ESS-00376, is a women-owned, food service facility that offers customer food solutions for private labels and restaurants. For this reason, the project qualifies as a critical facility. The project includes a 2.4 MW battery with 4.8 MWh of energy capacity. The estimated upfront incentive for this project is \$500,000.

The ~~second~~third and last project, ESS-00637, is a large commercial and industrial (C&I) project located at PCX Newington, a critical facility. The battery energy storage system (BESS) will be owned by CPower, and the project is not eligible to participate in FCM. Additionally, the project’s battery model is a Tesla Megapack, which is preapproved for the Program. The upfront incentive for this project is \$783,563.

The attached Tear Sheets provide these and other details pertaining to the two new projects seeking estimated upfront incentives in the ESS Program.

With the approval of these six (6) new projects, the total approved capacity for commercial and industrial projects in ESS will be 76.2 MW, 41.3 MW in the first tranche, and 34.9 MW in tranche 2. All of these projects are in the process of seeking approval for interconnection by the EDCs.

Resolution

WHEREAS, in its June 24, 2022 meeting the Connecticut Green Bank Board of Directors (Board) approved the implementation of an Upfront Incentive Project Approval procedures (“Procedures”) for non-residential projects under the Energy Storage Solutions Program

(Program) with an estimated upfront incentive payment greater than \$500,000 and procedures for less than \$500,000;

WHEREAS, as part of the approved Procedures, Green Bank staff shall present Program projects via the consent agenda utilizing a standard form Tear Sheet process described in the memorandum to the Board dated June 24, 2022;

WHEREAS, in its December 9, 2022 meeting the Board approved updated Procedures to better align with the Program process;

WHEREAS, Green Bank Staff reviewed funding requests for projects with incentives below \$500,000, and approved them via Project Approval Forms for a total amount of \$625,000 and intends to issue Reservation of Fund letters upon Board of Directors review and authorization.

NOW, therefore be it:

RESOLVED, that the Board hereby approves the estimated upfront incentives sought by ~~three(3)~~ non-residential projects above \$500,000 totaling ~~\$4,380,563~~ \$5,779,813 consistent with the approved Procedures;

RESOLVED, that the Board hereby approves the estimated upfront incentives sought by ~~four~~ three (3) non-residential projects individually under \$500,000, totaling ~~\$1,246,000~~ \$1,057,500 consistent with the approved Procedures; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver any and all documents and regulatory filings as they shall deem necessary and desirable to effect the above-mentioned incentives consistent with the Procedures.

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 17,985 kW of power capacity, and with 35,970 kWh of energy capacity, to reduce electric bills and provide backup power to a manufacturing facility during power outages.
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Customer / Site information

Customer Name	Linde Industrial Gases (Praxair)
Address	1 U Car St., Suffield, CT 06078
Business Purpose	Manufacturing
Incentive Application No.	ESS-00309
Incentive Application Date	5/27/2022
Customer Peak Annual Demand (kW)	24,154
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	Yes
Participation in FCM Declared	Yes
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	17,985
BESS Energy Capacity (kWh)	35,970
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Distribution and transmission study needed
Estimated Project Cost	\$15,287,252

Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	1.07
PCT – Participant Cost Test	1.21
PACT – Program Administrator Cost Test	1.14
SCT – Societal Cost Test	0.83
TRC – Total Resource Cost Test	0.84

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none">▪ Application Submitted▪ Approved Reservation of Funds Letter (ROF)▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$4,496,250

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 2,408 kW of power capacity, and with 4,816 kWh of energy capacity, to reduce electric bills and provide backup power to a food services facility during power outages.
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Customer / Site information

Customer Name	Ragozzino Foods, Inc.
Address	71 Chamberlain Hwy., Meriden, CT 06451
Business Purpose	Accommodation and Food Services
Incentive Application No.	ESS-00376
Incentive Application Date	7/13/2022
Customer Peak Annual Demand (kW)	885
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	Yes
Participation in FCM Declared	No
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	2,408
BESS Energy Capacity (kWh)	4,816
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Distribution study needed
Estimated Project Cost	\$2,046,800



Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	1.07
PCT – Participant Cost Test	1.06
PACT – Program Administrator Cost Test	1.14
SCT – Societal Cost Test	0.71
TRC – Total Resource Cost Test	0.72

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none">▪ Application Submitted▪ Approved Reservation of Funds Letter (ROF)▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$500,000

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 964 kW of power capacity, and with 1,928 kWh of energy capacity, to reduce electric bills and provide backup power to a food services facility during power outages.
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Customer / Site information

Customer Name	Ragozzino Foods, Inc.
Address	10 Ames Ave., Meriden, CT 06451
Business Purpose	Accommodation and Food Services
Incentive Application No.	ESS-00377
Incentive Application Date	7/13/2022
Customer Peak Annual Demand (kW)	531
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	Yes
Participation in FCM Declared	No
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	964
BESS Energy Capacity (kWh)	1,928
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Fast Track study needed
Estimated Project Cost	\$819,400

Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	1.07
PCT – Participant Cost Test	1.21
PACT – Program Administrator Cost Test	1.14
SCT – Societal Cost Test	0.83
TRC – Total Resource Cost Test	0.84

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none">▪ Application Submitted▪ Approved Reservation of Funds Letter (ROF)▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$241,000

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 964 kW of power capacity, and with 1,928 kWh of energy capacity, to reduce electric bills and provide backup power to a manufacturing facility during power outages.
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Customer / Site information

Customer Name	Numa Tools
Address	646 Thompson Rd., Thompson, CT, 06277
Business Purpose	Educational Services
Incentive Application No.	ESS-00522
Incentive Application Date	12/14/2022
Customer Peak Annual Demand (kW)	262.10
Customer Class (S / M / L)	Medium
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	No
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	Yes
Participation in FCM Allowed	Yes
Participation in FCM Declared	Yes
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	964
BESS Energy Capacity (kWh)	1,928
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Fast Track study needed
Estimated Project Cost	\$819,400

Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	0.97
PCT – Participant Cost Test	1.27
PACT – Program Administrator Cost Test	1.05
SCT – Societal Cost Test	0.83
TRC – Total Resource Cost Test	0.84

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none">▪ Application Submitted▪ Approved Reservation of Funds Letter (ROF)▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$334,750

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with a nameplate power rating of 1,927 kW, and with a nameplate energy capacity of 3,854 kWh, to reduce electric bills and provide backup power to a manufacturing facility during power outages.
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Customer / Site information

Customer Name	Colonial Coatings
Address	66 Erna Ave., Milford, CT 06461
Business Purpose	Manufacturing
Incentive Application No.	ESS-00525
Incentive Application Date	12/14/2022
Customer Annual Peak Demand (kW)	696.60
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower / Endurant Energy

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	Yes
Participation in FCM Declared	No
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	1,927
BESS Energy Capacity (kWh)	3,854
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Fast Track study needed
Estimated Project Cost	\$1,637,952

Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	0.83
PCT – Participant Cost Test	1.20
PACT – Program Administrator Cost Test	0.86
SCT – Societal Cost Test	0.67
TRC – Total Resource Cost Test	0.67

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none">▪ Application Submitted▪ Approved Reservation of Funds Letter (ROF)▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$481,750

Energy Storage Solution Program Upfront Incentive Application

Project Description	Installation of a Tesla Megapack battery storage system with 2,325 kW of power capacity, and with 6,975 kWh of energy capacity, to reduce electric bills and provide backup power to a manufacturing facility during power outages.
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Customer / Site information

Customer Name	PCX Newington
Address	300 Fenn Rd., Newington, CT 06111
Business Purpose	Manufacturing
Incentive Application No.	ESS-00637
Incentive Application Date	5/11/2023
Customer Peak Annual Demand (kW)	1,393
Customer Class (S / M / L)	Large
Project Developer / Installer	CPower

Program Eligibility

Critical Facility	Yes
Small Business	No
Onsite Fossil Fuel Generator	No
Grid Edge Customer	No
Participation in FCM Allowed	No
Participation in FCM Declared	No
Resiliency Plan on File (N/A if Grid Edge Customer)	Yes

Battery Energy Storage System (BESS) Characteristics

System Configuration	Standalone
Expected Program Participation	Passive and Active Dispatch
BESS Make / Model	Tesla Megapack
BESS Power Rating (kW)	2,325
BESS Energy Capacity (kWh)	6,975
BESS Technology Approval Status	Pre-Approved
Interconnection Application Filed	Yes
Interconnection Study Required	Distribution study needed
Estimated Project Cost	\$2,964,376.00



Benefit / Cost Ratios

RIM – Ratepayer Impact Measure	2.28
PCT – Participant Cost Test	1.09
PACT – Program Administrator Cost Test	2.94
SCT – Societal Cost Test	2.25
TRC – Total Resource Cost Test	2.25

Upfront Incentive Information

Incentive Application Status	<ul style="list-style-type: none"> ▪ Application Submitted ▪ Approved Reservation of Funds Letter (ROF) ▪ Approved Confirmation of Funds Letter (COF)
Incentive Calculation Method	Tiered Rate using Peak Demand
Estimated Upfront Incentive	\$783,562.50

Memo

To: Board of Directors, Connecticut Green Bank

From: Louise Della Pesca, Consultant, Clean Energy Investments and Bert Hunter, EVP & CIO

CC: Bryan Garcia, President and CEO; Brian Farnen, General Counsel and CLO; Jane Murphy, EVP Finance and Administration

Date: July 14, 2023

Re: Skyview Ventures debt facility amendment to enable lending to new special purpose vehicle

Introduction

In 2020, Connecticut Green Bank (the “Green Bank”) arranged a senior secured term loan facility (“Loan Facility”) to finance the development, longer term financing and refinancing of commercial solar PV projects (“Solar Projects”) owned by a special purpose vehicle of Skyview Ventures LLC (“Skyview Pequonnock”). After multiple amendments approved by the Green Bank Board of Directors (the “Board”), including an expansion of the remit to include construction financing, the Loan Facility commitment now stands at \$10M. Forty-one (41) Solar Projects, deploying \$6.6M of the commitment, have been financed to date (see Appendix 1).

To date, Skyview Ventures LLC (“Skyview”) has funded its investments in solar – in part – with a combination of their own equity (retaining federal investment tax credit (“ITC”) benefits) as well as with tax equity (with the ITC benefits assumed by a third-party investor). Skyview has now entered a new phase in its role as a solar developer and as such is seeking new ways to monetize the ITC available to solar developers as is now made possible under the Inflation Reduction Act of 2022 (the “IRA”). Accordingly, in order to sustain its support of solar PV development in Connecticut by Skyview, which has benefitted several public facilities, moving forward Green Bank staff seeks to modify the way Green Bank provides some of the credit capacity made available to Skyview. This memorandum makes a request for the Board to approve the Green Bank lending to a new special purpose vehicle (“Skyview New SPV”) using separate financing documentation, without changing the Loan Facility commitment.

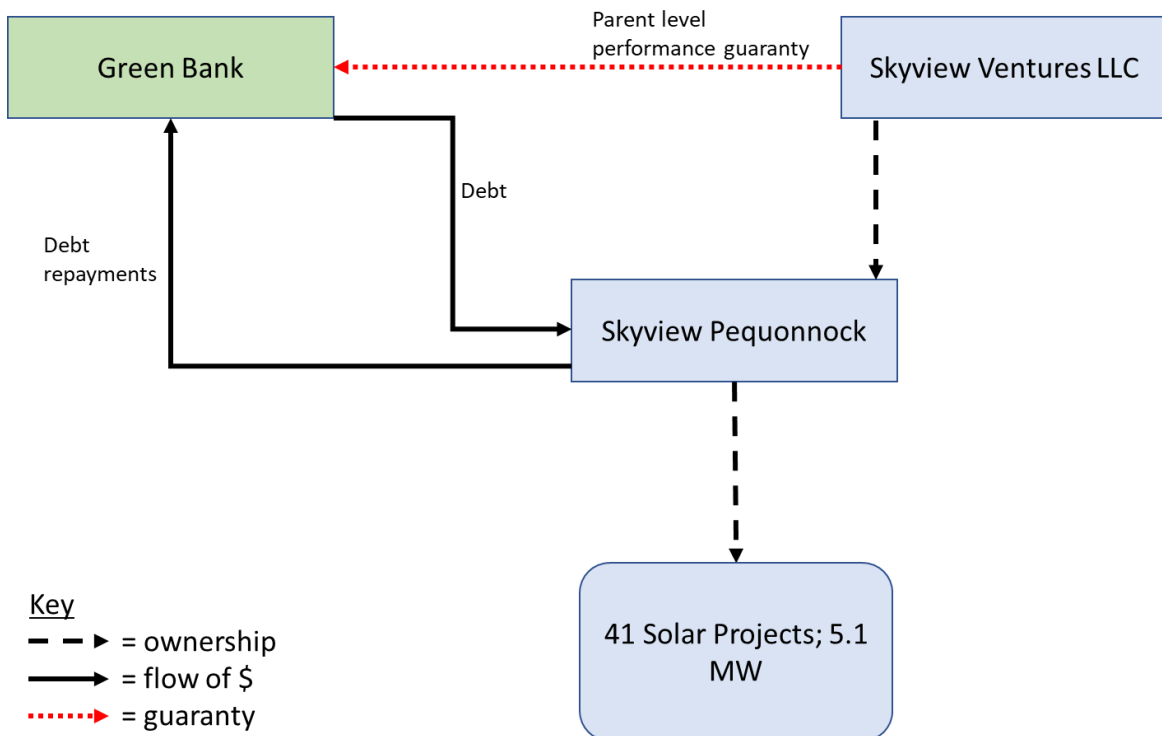
Background

Since its approval in March of 2020, the existing Loan Facility with Skyview Pequonnock has expanded from \$2.3M to \$10M. Through 11 separate advances, the Green Bank has deployed \$6.6M against 41 Solar Projects, representing a total of 5.1MW capacity. As of June 2023 month end, approximately \$5.8M is outstanding under the Loan Facility, i.e., ~\$800k has already been repaid.

The most recent memorandum to the Board concerning the Loan Facility, dated April 2023, is included at Appendix 2. At its meeting held April 21, 2023, the Board resolved that the Loan Facility could be amended to allow for financing the *construction* of Solar Projects (in addition to term financing). The construction financing aspect of the Loan Facility has not yet been effected because it is more efficient to wait until any new arrangements for term financing, with respect to Skyview's move toward new ways to monetize the ITC, are finalized before entering into documentation for construction financing.

Figure 1 represents the existing financing structure between the Green Bank and Skyview and its subsidiary, Skyview Pequonnock. Please note that there is no external tax equity investor/arrangement, as all tax benefits associated with the Solar Projects have been monetized by Skyview's own tax equity.

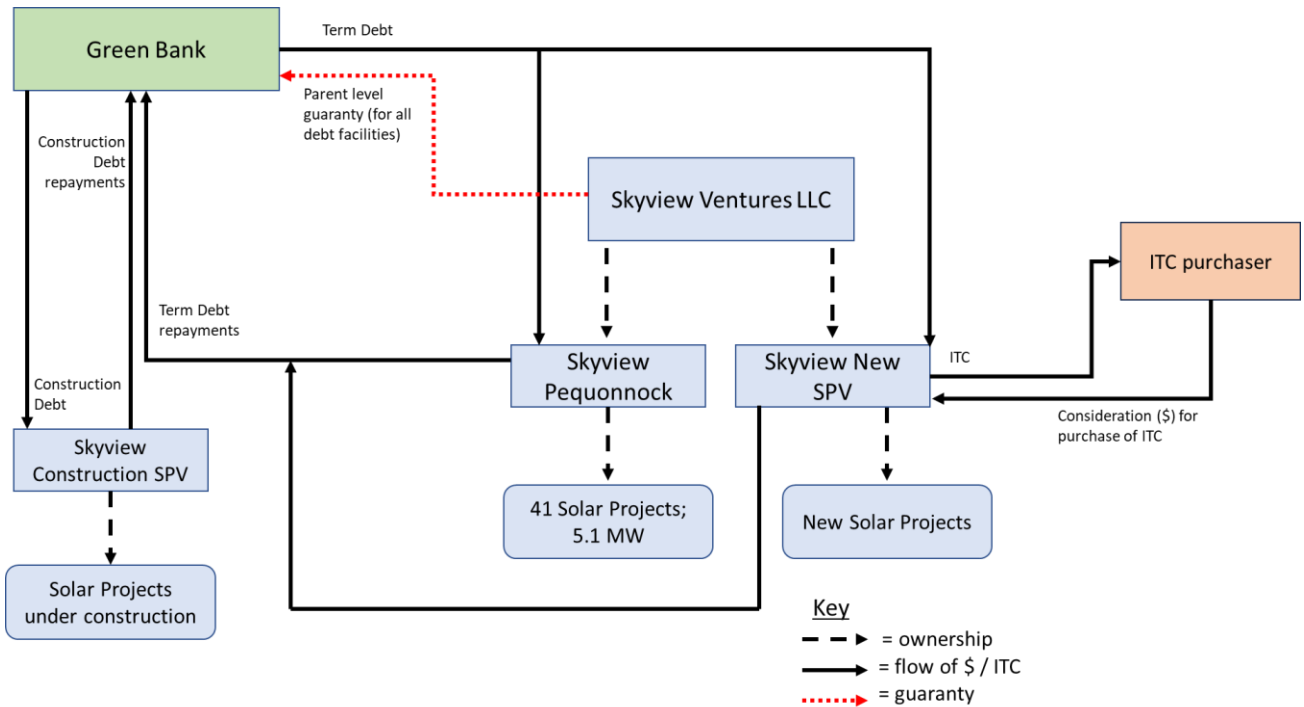
Figure 1.



Amendment to the Financing Structure

Figure 2 represents the proposed additions to the existing structure, to allow for construction financing and for term financing to be directed to Skyview New SPV.

Figure 2.



Skyview New SPV will be monetizing the ITC in a different way to Skyview Pequonnock, namely by selling ITC to a third party (as made possible by the IRA), hence the need for new and separate financing documentation. There would be no change to the underwriting criteria, already established under the Loan Facility, and diligence on Solar Projects developed and owned by Skyview New SPV. Any changes required to the financing documentation, as compared to the documentation entered into between the Green Bank and Skyview Pequonnock, will be taken under the advice of external legal counsel and will be to account for the difference in monetizing ITC through a sale or transfer agreement.

Skyview seeks Green Bank capital, as opposed to private sector financing, because the Green Bank has a deep understanding of the commercial solar market in Connecticut and a strong existing relationship with our organization. The Green Bank has its own ~20MW portfolio of Solar Projects and therefore has a firm grasp of the policy environment, development process and risks associated with Skyview's Solar Project business. This knowledge results in an agile underwriting process and commercial terms, such as 15 to 18 year debt terms, that better suit Skyview's needs than private sector financing. The partnership between the Green Bank and Skyview allows Skyview to continue to develop small/medium Solar Projects that bring savings to their customers, such as municipalities and schools.

Table 1 shows the pipeline of projects under consideration for financing with Skyview New SPV.

Table 1.

#	Location and size (kW)	Major contract counterparty	Approx. construction cost	Target construction start
1	Windsor; 270 kW	Utility	\$500k	Q3, 2023
2	Washington; 300 kW	Investment grade counterparty and Utility	\$650k	Q4 2023
3	Ridgefield; 1,000 kW	Town of Ridgefield and Utility	\$3M	Q2, 2024

There is \$4.2M available to advance under the Loan Facility, which would be sufficient to finance the projects in Table 1, assuming a ~60% advance rate. Should Skyview continue its progress with deployment of solar PV in the state, it is likely Green Bank will give positive consideration to an expansion of these facilities during FY2024.

Ratepayer Payback

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

Based on the assumption that the full \$10M Loan Facility commitment could be used to finance Solar Projects, the forecast kWh over the projects' lifetime is 180,000,000 kWh of energy. The kWh / \$ ratepayer funders at risk is forecast to be 18.3.

Capital Extended

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

The Loan Facility will not exceed \$10.0M in outstanding principal as of the end of the availability period, however due to principal repayments during the availability period, actual advances may exceed \$10 million somewhat.

Recommendation

In conclusion, staff recommends that the Board approve the financing of Solar Projects owned by Skyview New SPV, under the existing \$10M Loan Facility commitment.

Resolutions

WHEREAS, the Connecticut Green Bank (“Green Bank”) Board of Directors approved at its meeting held on March 25, 2020 a senior secured loan facility (“Original Term Loan”) transaction with a Skyview Ventures special purpose vehicle (“Skyview”) in an amount not to exceed \$2.3M as a Strategic Selection and Award pursuant to the Green Bank Operating Procedures Section XII given the special capabilities, uniqueness, strategic importance, urgency and timeliness, and multi-phase characteristics of the Original Term Loan transaction. The Original Term Loan was first expanded to \$3.5M, then to \$7M and then to \$10M with a provision for funding commercial solar project construction activities (the “Existing Loan”), as approved by the Board at its meetings on April 24 and October 23, 2020, December 17, 2021, and April 21, 2023 respectively;

WHEREAS, Skyview has drawn \$6.6M of the Existing Loan commitment as of June 30, 2023 and now seeks a new ways to monetize the federal investment tax credit (“ITC”), meaning that a new special purpose vehicle (“New SPV”) will be established for the purpose of owning any solar projects it develops in the future;

WHEREAS, given the rate of utilization of the Existing Loan by Skyview for longer term financing of commercial solar projects, and the opportunity to provide construction financing for Skyview’s pipeline, following diligence of Green Bank staff, Green Bank staff proposes providing financing to the new SPV that Skyview will establish to monetize the ITC and staff requests Board approval.

NOW, therefore be it:

RESOLVED, that the Board approves staff’s request to modify the Existing Loan transaction consistent with the memorandum to the Board dated July 14, 2023 (“Board Memo”), to provide financing to New SPV;

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of the Existing Loan transaction on such terms and conditions as are materially consistent with the Board Memo; 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: Louise Della Pesca, Consultant, Clean Energy Finance and Bert Hunter, EVP & CIO

Appendix 1: Projects Financed to Date using Loan Facility

#	Project Name (host)	Location	Size	Year placed in service
1	Reef Fire Department (Town of Fairfield)	Fairfield	25.50	2014
2	Operation Hope (Town of Fairfield)	Fairfield	20.60	2014
3	Fairfield Theater Company (Town of Fairfield)	Fairfield	63.20	2014
4	Fairfield Public Library (Town of Fairfield)	Fairfield	66.65	2015
5	Fairfield REC Center (Town of Fairfield)	Fairfield	84.40	2015
6	Fairfield Animal Shelter (Town of Fairfield)	Fairfield	53.90	2016
7	Jennings Beach (Town of Fairfield)	Fairfield	25.17	2016
8	Woods Middle School 1 (Town of Fairfield)	Fairfield	113.78	2016
9	Jennings Firehouse (Town of Fairfield)	Fairfield	38.50	2017
10	Fairfield Animal Shelter 2 (Town of Fairfield)	Fairfield	28.60	2017
11	Transfer Station Roof (Town of Fairfield)	Fairfield	10.40	2017
12	Penfield Pavilion (Town of Fairfield)	Fairfield	54.75	2019
13	Fairfield Regional Fire School (Town of Fairfield)	Fairfield	75.19	2019
14	Senior Center (Town of Fairfield)	Fairfield	87.80	2019
15	Transfer Station (Town of Fairfield)	Fairfield	37.44	2019
16	South School (New Canaan Public Schools Board of Education)	New Canaan	305.00	2019
17	West Shore School (Milford Board of Education)	Milford	223.04	2019
18	Goshen Center School (Regional School District No. 6)	Goshen	88.90	2019
19	Margaret Egan Center (City of Milford)	Milford	76.38	2020
20	Duncaster Retirement Center (Duncaster, Inc.)	Bloomfield	76.73	2020
21	The Unquowa School (Unquowa School, Inc.)	Fairfield	56.00	2020
22	Roger Ludlowe Middle School (Town of Fairfield)	Fairfield	196.00	2020
23	Burr Elementary School (Town of Fairfield)	Fairfield	82.10	2020
24	Holland Hill School (Town of Fairfield)	Fairfield	83.90	2020
25	Newtown Community Center (Town of Newtown)	Newtown	130.00	2021
26	Newtown Police (Town of Newtown)	Newtown	130.00	2021
27	Warren School (Regional School District No. 6)	Warren	70.50	2021
28	East School (New Canaan Public Schools Board of Education)	New Canaan	268.00	2021
29	Metro Storage (Metro WH Storage LLC)	West Haven	115.00	2021
30	Scotland Elementary School (Town of Ridgefield)	Ridgefield	130.00	2021
31	Kingswood Condominiums (The Kingswood Association, Inc.)	Stamford	229.20	2021

32	Athletic Center (Marvelwood School)	Kent	72.495	2021
33	Dining Hall (Marvelwood School)	Kent	114.21	2021
34	Education Building (Marvelwood School)	Kent	175.365	2021
35	Ridgebury Elementary School (Town of Ridgefield)	Ridgefield	130.1	2021
36	Fairfield County Hospice (Fairfield County Hospice House)	Fairfield	30.6	2022
37	Waveny Care Center (Waveny LifeCare Network, Inc.)	New Canaan	260.58	2022
38	Maloney High School 1 (City of Meriden)	Meriden	314.88	2022
39	Maloney High School 2 (City of Meriden)	Meriden	315.29	2022
40	Maloney High School 1 (City of Meriden)	Meriden	314.88	2022
41	Maloney High School 2 (City of Meriden)	Meriden	315.29	2022
			5,090.32	

Appendix 2: Memo to Board for approval of amendment of loan facility to include ability to finance construction activities (Note: excludes Appendices to this appended Memo)

Memo

To: Board of Directors, Connecticut Green Bank

From: Louise Della Pesca, Consultant, Clean Energy Investments and Bert Hunter, EVP & CIO

CC: Bryan Garcia, President and CEO; Brian Farnen, General Counsel and CLO; Jane Murphy, EVP Finance and Administration

Date: April 14, 2023

Re: Skyview Ventures debt facility amendment to enable construction financing

Introduction

In 2020, Connecticut Green Bank (“CGB”) arranged a senior secured term loan facility (“Term Loan Facility”) to finance the development, longer term financing and refinancing of solar PV projects owned by a special purpose vehicle of Skyview Ventures LLC (“Skyview SPV”). After multiple amendments approved by the CGB Board of Directors (the “Board”), the Term Loan Facility commitment now stands at \$10M. Forty-one (41) projects, deploying \$6.6M of the commitment, have been financed to date (see Appendix 1). This memorandum makes a request for the Board to approve an amendment to the Term Loan Facility documentation to (1) finance the construction of commercial solar PV projects in Connecticut (“Solar Projects”) and (2) increase the interest rate charged on debt advances that are used specifically to finance the construction of Solar Projects.

Background

Since its approval in March of 2020, the existing Term Loan Facility with Skyview SPV has expanded from \$2.3M to \$10M. Through 11 separate advances, CGB has deployed \$6.6M against 41 Solar Projects, representing a total of 5.1MW capacity. Sixty-six percent (66%) of the facility has been deployed in approximately three years and Skyview SPV has a healthy pipeline of projects in development (refer to Appendix 1). As of March 2023 month end, approximately \$5.9M is outstanding under the Term Loan Facility, i.e., ~\$700k has already been repaid.

The most recent memorandum to the Board concerning the Term Loan Facility, dated December 2021, is included as Appendix 3. At its meeting held December 17, 2021, the Board resolved that the Term Loan Facility could be deployed to finance battery energy storage systems (“BESS”) projects. The pipeline of BESS projects that Skyview SPV was

developing at that time did not progress due to (a) over subscription of the CT Energy Storage Solutions incentive program for commercial projects and (b) the rising cost of BESS technology for smaller-scale commercial systems making the BESS projects unfeasible. However, Skyview SPV continues to develop a pipeline of Solar Projects that is currently over 6MW in capacity. By amending the Term Loan Facility to allow for the financing of construction activities, CGB will be able to support the deployment of clean energy in Connecticut while earning interest income that contributes to the financial stability of CGB. Every Solar Project in the Skyview SPV pipeline that is 'contracted', i.e., an off-take arrangement has been secured, will benefit schools and municipalities in CT. The uncontracted portion of the pipeline, which makes up ~80% of the pipeline, will benefit businesses through providing lease income to the site hosts. Once the Solar Projects are constructed, the construction loans will convert to term loans, thereby providing long term interest income to CGB.

Response to Capital Solutions Request for Proposals

Skyview Ventures LLC, acting on behalf of its wholly owned subsidiary Skyview SPV, submitted a response to the CGB Capital Solutions Request for Proposals in a bid to expand the Green Bank's overall commitment beyond the existing \$10 million. Staff anticipates returning to the Board with this request later in 2023, pending further diligence.

Underwriting Summary

CGB staff performed the following underwriting activities to support this memorandum to the Board:

- Analysis of four years (2019 to 2022) of financial statements of Skyview Ventures LLC
- Analysis of the 2022 unaudited financial statements of Skyview SPV

The underwriting results are included as Appendix 2. In summary:

Skyview Ventures LLC

- Skyview Ventures LLC experienced a significant (93%) decrease in profitability between 2021 and 2022 as (a) its core business, which is renewable energy credit trading, became less lucrative and (b) certain long term REC contracts were revalued at a loss (see below).
- Skyview Ventures LLC remained profitable, with Net Income of \$1.9M in 2022 as compared to \$27.2M in 2021.
- The decrease in Net Income is driven by:
 - o An investment loss of \$2.2M in 2022, as compared to an investment gain of \$13.6M in 2021. This is an unrecognized loss related to the valuation of certain RECs. The RECs are valued quarterly with respect to the current market value.

- A tightening of the REC trading market that saw gross profit margin decrease from 12% to 9% as Cost of Revenues increased at a greater rate than Revenues.
- A \$1.7M increase in depreciation in 2022 as compared to 2021, due to the acquisition of an electric vehicle fast-charging network of chargers that depreciate over 3 years
- A \$1.5M increase in payroll expense due to higher headcount
- A \$3M increase in interest expense due to increased borrowing, and increased interest rates
- On the balance sheet, liquidity deteriorated as the current ratio decreased from 1.08x to 0.29x.
 - A significant driver of the reduced current ratio was an increase in short term debts (from \$33M at 12/31/21 to \$72M at 12/31/22). Skyview Ventures LLC entered into a debt facility with AB CarVal¹ that is secured by 'in the money' REC contracts. The income from these REC contracts is being swept to repay AB CarVal and the debt matures in summer 2024. The proceeds of the debt were used to develop 30 MW of community solar in upstate New York, half of which was energized in 2022, with the remainder due to come online in 2023.
- The combination of increased Total Liabilities (from \$83.5M at 12/31/21 to \$108.9M at 12/31/22), increased interest rates on debt, and decreased Net Income, means that interest coverage ratios have deteriorated.
 - The ratio of earnings before interest and tax to interest expense decreased from 9.9x in 2021 to 1.3x in 2022.

CGB staff underwrote Skyview Ventures LLC because the company acts as a performance guarantor for the Term Loan Facility. This does not mean that the company is providing a payment guaranty, however it is ensuring that it contributes resources to ensure that the projects owned by Skyview SPV continue to operate. For example, while Skyview SPV does not employ staff, the projects require asset management and monitoring, and Skyview Ventures LLC provides the requisite resources.

CGB staff continues to view Skyview Ventures LLC as being of sufficient financial strength to act as performance guarantor to Skyview SPV. In light of the results in 2022, instead of annual analysis of its financial statements, staff will obtain and analyze Skyview Ventures LLC's financial statements on a quarterly basis.

Skyview SPV

- Staff obtained quarterly (unaudited) financial statements for 2022 to calculate the debt service coverage ratio ("DSCR"). Note that the only debt held by Skyview SPV is the Term Loan Facility.
- The DSCR for 2022 was 1.31x. This is lower than 1.35x, which is the forecast DSCR used when sizing Term Loan Facility debt advances.

¹ <https://carvalinvestors.com/>

- The cause of the lower than expected DSCR was less energy production in 2022 than expected, driven mainly by unfavorable weather conditions in summer 2022. This resulted in 7% less production than forecast. This performance is consistent with CGB's own portfolio of commercial solar projects in 2022.

Staff considers 1.31x a healthy debt coverage margin. However, a way to minimize the impact of future underperformance would be to size future debt advances using a higher DSCR, for example, 1.40x. Staff will continue to monitor the DSCR per Skyview SPV quarterly financial statements and adjust the sizing of future debt advances accordingly.

Notwithstanding the deterioration in financial performance, staff and Skyview have a long, consistent and positive performance relationship across the 41 projects financed to date (two of which CGB developed). Staff also takes comfort in the ringfenced security structure in place which firewalls CGB's security from the rest of Skyview in the event Skyview for any reason should become unable to perform. Staff reminds the Board of the capability Staff has to manage a portfolio of solar PV assets, which it does actively with a large, CGB-owned portfolio. Accordingly, CGB supports the modification of the existing facility to Skyview and, if the need should arise, could manage this incremental portfolio of solar PV assets which provide direct benefit to several communities across the state alongside CGB's existing portfolio.

Amendment to Term Loan Facility documentation

An amendment to the Term Loan Facility (hereinafter referred to as the "Loan Facility") documentation is required to enable construction financing for Solar Projects. The amendment would cover:

- Conditions precedent to making construction loan advances, including but not limited to:
 - o Definition of construction milestones that must be attained before an advance is made
 - o Clarification, if required after discussion with legal counsel, of the ring fencing protection such that CGB could step in and complete construction and own the assets if borrower failed to complete construction (bearing in mind that these projects are considered essential community assets in the municipalities where they are located).
- Maturity date of construction advances: the date that the Solar Project in question commences commercial operations
- Interest rate for construction debt advances: to be set at one hundred basis points above the term loan interest rate for the Solar Project in question
- Reporting covenants: requiring financial statements on a quarterly, rather than annual basis
- DSCR: option to increase to from current 1.35x to 1.40x when sizing term debt advances, at lender discretion

Ratepayer Payback

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

Based on the assumption that the full \$10M Loan Facility commitment could be used to finance Solar Projects, the forecast kWh over the projects' lifetime is 180,000,000 kWh of energy. The kWh / \$ ratepayer funders at risk is forecast to be 18.3.

Capital Extended

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

The Loan Facility will not exceed \$10.0M in outstanding principal as of the end of the availability period, however due to principal repayments during the availability period, actual advances may exceed \$10 million somewhat.

Recommendation

In conclusion, staff recommends that the Board approve an amendment to the Loan Facility to enable financing the construction of Solar Projects by Skyview SPV under the existing \$10m funding facility.

Resolutions

WHEREAS, the Connecticut Green Bank ("Green Bank") Board of Directors approved at its meeting held on March 25, 2020 a senior secured loan facility ("Original Term Loan") transaction with a Skyview Ventures special purpose vehicle ("Skyview") in an amount not to exceed \$2.3M as a Strategic Selection and Award pursuant to the Green Bank Operating Procedures Section XII given the special capabilities, uniqueness, strategic importance, urgency and timeliness, and multi-phase characteristics of the Original Term Loan transaction. The Original Term Loan was first expanded to \$3.5M, then to \$7M and then to \$10M (the Existing Term Loan"), as approved by the Board at its meetings on April 24 and October 23, 2020, and December 17, 2021 respectively;

WHEREAS, Skyview has drawn \$6.6M of the Existing Term Loan commitment at March 31, 2023 and has a contracted pipeline of commercial solar projects in development with a value that exceeds the remaining commitment of the Existing Term Loan;

WHEREAS, given the rate of utilization of the Existing Term Loan by Skyview for longer term financing of commercial solar projects, and the new opportunity to provide construction financing for Skyview's pipeline, following diligence of Green Bank staff, Green Bank staff proposes amending the terms of the Existing Term Loan to allow for commercial solar project construction financing, and requests Board approval.

NOW, therefore be it:

RESOLVED, that the Board approves staff's request to modify the Existing Term Loan transaction consistent with the memorandum to the Board dated April 14, 2023, to enable the financing of the construction of commercial solar projects.

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the modification of Existing Term Loan on such terms and conditions as are materially consistent with the Board Memo; 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: Louise Della Pesca, Consultant, Clean Energy Finance and Bert Hunter,
EVP & CIO

Memo

To: Connecticut Green Bank (“Green Bank”) Smart-E Team

From: Bert Hunter, EVP & CIO; Eric Shrago, VP of Operations & Ralph Mesite, Inclusive Prosperity Capital (Smart-E Loan Program Manager)

CC: Bryan Garcia, President and CEO; Sergio Carrillo, Managing Director of Incentive Programs, Brian Farnen, General Counsel and CLO; Jane Murphy, EVP of Finance & Administration

Date: July 14, 2023

Re: Smart-E Loan Program: Interest Rate Review and Proposal for Certain Increases

As a result of multiple increases in the federal funds interest rate by the Federal Reserve Board which has resulted in increases in interest rates generally (for example, 30-year mortgages approximately 7% vs ~3% 18 months ago, 5-year auto loans 7.50% vs 5% 18 months ago and 24-month personal loans 11.5% vs 9.5% 18 months ago¹), the Smart-E team has completed a thorough review of the current Smart-E interest rates. As a result of this review, a few items were brought to our attention:

- For most lenders, the Smart-E loan rate is lower than ALL other loan products in their organization (as referenced above)
- The increase in interest rates paid on deposit (savings accounts, CDs, time deposits, etc.) has put significant pressure on loan rate margins
 - This is particularly true of the 5 and 7 year terms where the lender’s cost of funds actually exceeds the yield on these Smart-E loans
- With the current volatile rate environment, many lenders believe there is significant risk involved with longer term Smart-E loans – 10+ years
 - Some lenders are considering removing the 15 and 20 year term options
 - At the same time, home mortgage rates are roughly 6.75% to 7.25% and lenders are adding home mortgages to their portfolios – and these yields are comparable to Smart-E rates for 12 years and higher (6.99%)
- Feedback solicited from our most active and financially strong lenders echo these statements

¹ Source: Federal Reserve Board Statistical Release G-19 July 10, 2023

- Without an increase in Smart-E loan interest rates, some lenders may need to consider leaving the program

After carefully reviewing the above information, we believe it is in the best interests of the program to increase our Smart-E “not to exceed” interest rates while we are in the current elevated interest rate environment with a view towards a review at least every 6 months. The new rate proposal is as follows:

Term	Current Smart-E Rate	Proposed Smart-E Rate
5 Years	4.49%	5.99% (+1.50%)
7 Years	4.99%	5.99% (+1.00%)
10 Years	5.99%	6.99% (+1.00%)
12 Years	6.99%	7.49% (+0.50%)
15 Years	6.99%	7.49% (+0.50%)
20 Years	6.99%	7.49% (+0.50%)

The proposal elevates the shorter maturity loans more than the longer maturities due to the greater pressure on lender cost of funds, particularly for these maturities.

The Smart-E program has prided itself on having affordable interest rates. While these interest rates are higher, they compare favorably to interest rates for secured transactions (such as 5-year auto loans at 7.50% and 30-year mortgages at ~7.00%).

Also – with the Federal Reserve maintaining a stance on interest rates which is “higher for longer” and with expectations for at least one more increase in the federal funds rate (if not more), the program needs to respond somewhat to these market forces.

At the same time, these increases over time, as market interest rates fall, will enable Smart-E lenders to compete for incremental business by offering lower interest rates as interest rate levels subside.

If interest rates do subside for a prolonged period of time after the Federal Reserve changes its tight monetary policy stance, staff will consider adjustments to its not-to-exceed interest rate levels. Also, if the linked deposit pilot demonstrates measurable results, then depending upon capital availability, we will consider a full program rollout to keep interest rates low.

RESOLUTIONS

WHEREAS, the Deployment Committee of the Board of Directors (the “Board”) of the Green Bank (then known as the “Clean Energy Finance and Investment Authority”) on November

30, 2012 approved the establishment of the Smart-E Loan product (then called “CT HELPs”, the “Smart-E Program”);

WHEREAS, since approval by the Deployment Committee, the Smart-E Loan program has been expanded by the Board in partnership with Connecticut community banks and credit unions (the “Program Lenders”);

WHEREAS, as a condition to participation in the Smart-E Program, Program Lenders enter into a financing program agreement (the “Program Agreement”) with the Green Bank concerning terms, conditions, roles and responsibilities of the Program Lenders and the Green Bank;

WHEREAS, one of the terms in the Program Agreement is the establishment of “not to exceed” loan rates (“Program Loan Interest Rates”), whereby the Program Lenders agree to not exceed the interest rates established pursuant to the Program Agreement for Smart-E Loans they provide for their customers;

WHEREAS, the Program Agreement establishes that such Program Loan Interest Rates can be changed by the Board of Directors of the Green Bank;

WHEREAS, after many years of low and stable interest rates, the Federal Reserve Board of the United States has materially increased interest rates for federal funds and instituted other restrictive monetary policies which have resulted in substantial increases in interest rates for loans to households and businesses as well as interest rates on deposits by which Program Lenders obtain funding for their loans, including Smart-E Loans;

WHEREAS, without an increase in Program Loan Interest Rates, Program Lenders have advised the Green Bank they will need to withdraw from the Smart-E Program or otherwise suspend or curtail their participation in the Smart-E Program;

WHEREAS, such withdrawal, suspension or curtailment would be detrimental to the Smart-E Program goals to make available funding for households seeking to undertake clean energy investments for their homes;

WHEREAS, after considerable discussion with Program Lenders, Green Bank staff has determined that it is appropriate to recommend to the Board for approval modification of the Program Loan Interest Rates as set forth in a memorandum to the Board dated July 14, 2023;

NOW THEREFORE IT IS HEREBY

RESOLVED, that the Board approves the recommendation by the staff to increase Smart-E Loan Program Loan Interest Rates as set forth in a memorandum to the Board dated July 14, 2023 (the “Board Memo”);

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument

necessary to effect the modification of the Smart-E Loan Program Loan Interest Rates materially consistent with the Board Memo; 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: Bert Hunter, EVP & CIO, Eric Shrago, VP of Operations & Ralph Mesite, Inclusive Prosperity Capital (Smart-E Loan Program Manager)

Memo

To: Connecticut Green Bank Board of Directors
From: Ashley Stewart, Manager of Community Engagement; Bryan Garcia, President and CEO
CC: Bert Hunter, EVP and CIO; Eric Shrago, Vice President of Operations
Date: July 18, 2023
Re: Grant Agreement with Sustainable CT Program – Community Engagement

Background & Purpose

Per the Comprehensive Plan of the Connecticut Green Bank (“Green Bank”), this memo seeks approval from the Green Bank Board of Directors (the “Board”) for it to enter into a grant agreement with Sustainable CT.¹ This grant enables the continued support of Sustainable CT to engage communities throughout the state to improve their sustainability, explore environmental infrastructure needs, and to drive participation in incentive and financing programs administered by the Green Bank and promoted through Sustainable CT.

As highlighted in the Green Bank’s Comprehensive Plan for Fiscal Years 2023 through 2024, Sustainable CT and the Green Bank are working together to provide individuals, families, and businesses with investment opportunities to make an impact on sustainability in their communities.² The partnership between Sustainable CT and the Green Bank has focused on the following key priorities:

- Driving investment in projects in our communities, with a goal to accelerate over time;
- Community-level engagement, from project origination through financing, that is inclusive, diverse, and “knitted”;
- Creating a structure that harnesses all types of capital for impact – from donations (e.g., through grant-providing platforms such as Patronicity,³ administered by Sustainable

¹ It should be noted that the staff of the Green Bank were actively involved in assisting and setting up Sustainable CT since 2016 and its subsequent formation as a 501(c)3 nonprofit organization in 2019. Bryan Garcia serves on its Board of Directors as its Co-Chair and many members of the Green Bank staff provide support to the organization’s efforts.

² It should be noted that the Green Bank and Sustainable CT have had a strategic relationship since the FY 2020 Comprehensive Plan

³ Patronicity is a civic crowdfunding platform to support people doing great things in their community, from large initiatives like creating a green alley to small ones, like funding a neighborhood block party

CT) to investment (e.g., through approaches such as green bonds, issued by the Green Bank);

- Developing a business model that covers the cost of the program; and
- Creating a measurable impact, both qualitative and quantitative.

Since 2019, the partnership has been successful in meeting its objectives to support Sustainable CT's capabilities to engage communities throughout the state and work with the Green Bank to provide citizens, families, and businesses with investment opportunities. This engagement has laid a rich foundation of collaboration between the organizations to build awareness of and engagement in Green Bank programs. As the Green Bank expands our scope beyond clean energy to include environmental infrastructure, municipalities are a key stakeholder in identifying priority areas for Green Bank's program development. With the continuation of grant support, Sustainable CT can leverage their strong relationship with towns to get input on Green Bank strategic planning and program build-out for environmental infrastructure.

The Green Bank's new goal of no less than 40% of investment and benefits be directed to vulnerable communities by 2025 captures and furthers our longstanding efforts to bring clean energy and environmental infrastructure to more communities in coordination with partners like Sustainable CT. Sustainable CT provides significant support and has built higher engagement in distressed communities statewide, providing an excellent opportunity to funnel new climate actions and support tools into these communities. With new Green Bank programs and goals, future grant work can focus on targeted community engagement and action alignment needed to support new and existing Green Bank programs, particularly Energy Storage Solutions and environmental infrastructure.

The Green Bank's FY2024 Budget, Marketing Expenditures, allocates \$150,000 in funding for the purposes of supporting Sustainable CT with its community engagement efforts, while enabling the Green Bank to access potential end-use customers to achieve its incentive and financing programs and environmental infrastructure program targets for FY 2024. Presented for consideration by the Board is a grant to allocate \$150,000 to Sustainable CT to further increase the Green Bank's impact, more specifically, through:

- **Awareness-** as more communities come into the Sustainable CT program, continuing to build awareness of the Green Bank from stakeholders across the state through increased community engagement on our existing incentive and financing (e.g., Solar MAP, C-PACE, Energy Storage Solutions) programs and services and future initiatives (e.g., Environmental Infrastructure);
- **Engagement-** engaging Sustainable CT's network of partners, local municipalities, businesses, and their citizens with incentive and financing programs and environmental infrastructure that will help them achieve their sustainability goals including Sustainable CT's online crowdfunding campaign (i.e., Community Match Fund) and its Sustainable CT Fellows program;

- **Action-** moving the local municipalities, businesses, and citizens beyond awareness and engagement to action, leading to the purchase and installation of more clean energy and environmental infrastructure through support from the Green Bank

This grant agreement will leverage the existing partnership with Sustainable CT to guide inclusive program development and participation with a focus on environmental infrastructure. The partnership connects the Green Bank with local advocates to help understand local needs, while eventually developing a pipeline of project leads for programs—creating more opportunities for local projects with municipalities, nonprofits, businesses, and families through Sustainable CT and its various citizen engagement approaches.

Increasing Green Bank’s Impact in Connecticut through Sustainable CT

Since 2018, Sustainable CT has been the primary platform supporting Connecticut’s 169 cities and towns become more sustainable through a voluntary certification program. Currently, 131 cities and towns are registered and 66 of them certified. This program includes numerous actions where the Green Bank can increase its impact through its programs and services, including participating and promoting the C-PACE program, installing solar on municipal buildings through the Green Bank Solar PPA, streamlining solar permitting, supporting zero emission vehicle deployment, increasing renewable energy use in municipal buildings, implementing community energy campaigns, and supporting the development of environmental infrastructure projects. Currently, municipalities that take advantage of all the Green Bank’s clean energy incentive and financing programs can earn up to 120 sustainability points, more than halfway to the 200 points needed for Bronze certification. As the Green Bank works with Sustainable CT on environmental infrastructure, there will be greater opportunities for investment and deployment of such infrastructure.

Previous grant activity focused on increasing the Green Bank’s impact in communities by “offering up” its line of clean energy incentive and financing programs to help municipalities implement Sustainable CT’s sustainability actions. Funding was purposed for various programmatic purposes, including matching grant dollars for Sustainable CT’s Community Match Fund, an online crowdfunding platform where citizen leaders access financial resources they need for local sustainability projects, and matching grant dollars for municipal outreach through the Sustainable CT Fellows program. The Community Match Fund enabled the Green Bank’s support to match various projects outside of our programs but aligned with our mission of democratizing investment in sustainability projects, including, but not limited to:

- New Haven Climathon: A city-wide community gathering to raise awareness on the local impacts of climate change and to spark action.
- Rosette Neighborhood Villager Energy Efficiency: New Haven project to fund solar panels and advanced insulation for unhoused residents.
- West Hartford Youth Baseball Wolcott ark Lights Campaign: Replacing inefficient and aging lighting for local youth baseball field.

- Massaro Community Farm Learning Garden Solar Pavilion: Woodbridge community project to include solar on a pavilion used for youth farm education and community events.

Through the Sustainable Fellows program of Sustainable CT, students from colleges and universities in Connecticut work directly with community leaders and volunteers to create much-needed capacity at the local level. Since 2018, the Fellows Program has funded 77 students, providing 30,000+ hours of direct support full-time to local communities. Green Bank staff participated in the onboarding process to train four cohorts of Fellows on Green Bank resources to better support municipalities pursuing our programs. Continued sponsorship of the Fellows Program will further:

- Enhance commitment to sustainability by supporting communities where employees and customers live, work, and play
- Increase local capacity to make progress: The 2018 and 2019 Fellows produced open space maps and inventories, developed housing needs assessments, and designed and created buy-local campaigns, among many other projects
- Support the development of Connecticut's future workforce and accelerate Connecticut's low-carbon economy
- Create connections with community leaders across Connecticut
- Build partnership with Sustainable CT and support the Green Bank's development of environmental infrastructure programs and initiatives

To date, Sustainable CT has expanded their certification actions to further align with Green Bank programs, developed online resources to increase awareness of the partnership, and facilitated municipal outreach to participating municipalities and stakeholders. Sustainable CT has become a significant outreach channel for the Green Bank's community engagement efforts and underpins the outreach strategy for the Solar Marketplace Assistance Program (Solar MAP) for Towns & Cities providing project development support for the Green Bank PPA, as well as the C-PACE and Solar for All programs. Through these efforts the partnership met the goals outlined in the previous grant agreement for support of Green Bank Solar PPA, C-PACE, and Energy Storage Solutions.

Overall, grant support has been successful at increasing the impact of the green bank model by supporting our marketing efforts and increasing awareness of and enrollment in Green Bank programs through the support and promotion of Sustainable CT. Continued support would allow the partnership to capitalize on the opportunities currently being harnessed and accelerate activity in our programs, especially with a focus on environmental infrastructure development.

Grant Allocation

In order to further engage communities to improve sustainability and focus investment opportunities on participation in Green Bank incentive and financing programs and the development of environmental infrastructure program, the grant funds will be used per the following:

1. \$30,000 matching grant for Sustainable CT Fellows Program
2. \$30,000 matching grants for projects submitted through the Patronicity online crowdfunding platform
3. \$90,000 organizational support to Sustainable CT

Increase in grant allocation has been made to accommodate changes in hourly pay for Fellows, increased alignment in areas of environmental infrastructure and to support the organization through program growth.

Desired Outcomes

- **Awareness-** more citizen engagement and cities and towns becoming registered and certified by Sustainable CT as sustainable communities given their progress on implementing clean energy and environmental infrastructure projects and recognizing the benefits to them for doing so; and
- **Community-level Engagement and Impact-** significant community-level engagement leads to activity in the Green Bank's incentive and financing programs and critical to garnering feedback needed to shape future environmental infrastructure programs and products. To deliver this impact, in partnership with Sustainable CT, the Green Bank will:
 - **Environmental Infrastructure-** develop a community-based engagement strategy that includes Sustainable CT as a mechanism to solicit municipal feedback in Green Bank's planning strategy and program development. Seek program alignment in areas of nature-based solutions for stormwater management, supporting local agriculture and land conservation, and creating job opportunities; and
 - **Battery Storage** – develop a community-based marketing strategy that includes Sustainable CT as a mechanism to increase the deployment of battery storage for residential customers, especially deployment in vulnerable communities to make them more resilient to the impacts of climate change.
 - **Solar PPA** – engage all target towns for the program to achieve the program goals;
 - **C-PACE** – engage no less than 3 Sustainable CT communities that generate no less than 10 leads for the C-PACE program in Sustainable CT communities;
- **Lessons Learned-** continuously sharing best practices and lessons learned with other municipalities and states in order for the Green Bank to transfer knowledge that increases and accelerates the uptake of clean energy and environmental infrastructure through the adaptation and adoption of the green bank model and its line of incentive and financing programs.

Strategic Selection

Green Bank is pursuing this arrangement and approval from the Board on the basis of a Strategic Selection. The proposed impact investment satisfies all criteria of the Strategic

Selection and Award process of Green Bank operating procedures, namely: (1) special capabilities, (2) uniqueness, (3) strategic importance, (4) multiphase project; follow-on investment, and (5) urgency and timeliness:

(1) Special Capabilities

Evolving in large part from the Connecticut Clean Energy Communities Program,⁴⁵ Sustainable CT is a 501(c)3 nonprofit organization focused on providing local cities and towns with the resources they need to achieve sustainability. It has demonstrated, exceptional experience and expertise in community engagement, and a strong platform to help the Green Bank achieve its objectives, including rewarding municipalities for supporting and participating in Green Bank programs.

(2) Uniqueness

The highly successful engagement presents a unique opportunity to leverage the momentum and heightened awareness of Green Bank resources to further drive program activity through a highly visible community-based initiative across Connecticut.

(3) Strategic Importance

At the strategic retreat of the Green Bank in 2019⁶, it was determined that by creating a public awareness and engagement program in partnership with Sustainable CT, the Green Bank could enlist local citizens to take action on clean energy – deploy it, invest in it, and defend it (e.g., build citizen support for the Green Bank). The Green Bank was very active in the formation of Sustainable CT and currently serves as its co-chair. Sustainable CT will match the Green Bank’s contribution (e.g., through community match fund contributions, etc.) and its programs will have broad reach and deliver exceptional education value of strategic importance to the Green Bank.

(4) Multiphase; Follow-on Investment

Green Bank recognized the ability of Sustainable CT to drive sustainable action and investment in communities at its inception. Through early participation in Sustainable CT’s working groups, Green Bank has integrated its programs and products into Sustainable CT’s menu of coordinated, voluntary sustainability actions for municipalities. The Green Bank looks to continue to integrate new programs and initiatives into the menu of actions, especially a focus on environmental infrastructure. Under previously awarded grants, Sustainable CT has demonstrated its leadership in driving sustainable actions in communities while deepening the Green Bank’s engagement with municipalities. The proposed grant builds on these connections and bolsters the human resources available to municipalities through the Sustainable CT Fellows program and operational support to provide the capacity needed to participate in Green Bank incentive and financing programs and achieve certification.

⁴ Created in 2005 by the predecessor of the Connecticut Green Bank – the Connecticut Clean Energy Fund

⁵ “Climate Policy and Voluntary Market Initiatives: An Evaluation of the Connecticut Clean Energy Communities Program” by Matthew Kotchen as Working Paper 16117 of the National Bureau of Economic Research.

⁶ Connecticut Green Bank 2.0 – From 1 to 2 Orders of Magnitude ([click here](#))

As highlighted in the Green Bank’s Comprehensive Plan for Fiscal Year 2023 through 2024, Sustainable CT and the Green Bank are working together to provide individuals, families, and businesses with investment opportunities to make an impact on sustainability in their communities from grants through the Community Match Fund to bonds through the Green Liberty Bonds.

(5) Urgency and Timeliness

The previously awarded grant to Sustainable CT expired at the end of the Fiscal Year, while our engagement with Sustainable CT communities is still underway. It is important to renew our grant support in a timely fashion so that our partnership and the community engagement that our programs are relying on is uninterrupted.

Conclusion & Recommendation

Sustainable CT offers strategic importance for the Green Bank to increase its impact by applying the green bank model through its incentive and financing programs to help municipalities improve their sustainability and take action on clean energy and environmental infrastructure. The proposed grant agreement is necessary to expand upon the existing partnership between Sustainable CT and the Green Bank. As a result of the Green Bank’s scope increase on environmental infrastructure, we continue to seek ways evolve our partnership with Sustainable CT that is reflective of our response to climate change and support of communities across the State. With Board approval, the partnership will continue to engage communities through providing input on program development, driving investment in projects in our communities, supporting communities from project origination through financing, and creating a measurable impact.

Staff recommend this grant agreement to the Board for approval.

Strategic Plan

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

Yes – the proposed grant agreement underpins the partnership between the Green Bank and Sustainable CT that is highlighted and specified in Green Bank’s Comprehensive Plan for Fiscal Years 2023 through 2024 as well as the FY24 budget allocation of \$150,000.

Ratepayer Payback

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

An additional 5 Green Bank Solar PPA projects (i.e., 863 kW and \$2.2 MM in investment) produce an average 69,000 MWh over the lifetime⁷ of the projects. A \$150,000 grant to Sustainable CT will generate nearly \$1.3MM of Green Bank investment through the Green Bank Solar PPA product.

With respect to Environmental Infrastructure, metrics to track outcomes of this grant support will be through municipal participation in programs being developed. Sustainable CT has an

⁷ Green Bank average PPA system size is 172.65 kW

established market that supports municipal infrastructure investment across all the Green Bank's key environmental infrastructure areas, including many nature-based solutions like agriculture, land conservation, and stormwater management, to name a few.

Terms and Conditions

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

As a result of the expected increase in interest revenues from 5 additional Green Bank Solar PV projects, derived from approximately \$1.3 MM investment of Green Bank funds through the Green Bank Solar PPA (i.e., each project on average is a \$432,500 investment of which 60% of the capital is from the Green Bank)⁸ generating approximately \$85,000 in present value interest income per project (i.e., from \$110,000 in interest income over the life of the PPA), for a total of \$425,000 present value interest income for 5 projects, the costs of the grant as well as personnel and non-personnel related expenses will be covered 3 times over.

While raising funding is a top priority for the development of environmental infrastructure programs, partnering with Sustainable CT to support municipal access to and development of environmental infrastructure initiatives are enabled through increasing grant support. As new programs are developed under environmental infrastructure, (e.g. Smart-E's expansion into climate adaptation and resilience and water measures, C-PACE inclusion of resilience) having established connections with towns for marketing these programs will be important.

Capital Expended

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

The full \$150,000 grant amount is coming from earned revenues from the Green Bank's financing programs.

Risk

What is the maximum risk exposure of ratepayer funds for the program?

The maximum risk exposure is \$150,000 of Green Bank funds.

Financial Statements

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

When funds are paid:

\$150,000 Credit: Cash [Sustainable CT Grant – Marketing Expense]

Target Market

Who are the end-users of the engagement?

⁸ Of the total investment of \$13.4 MM of investment on the Green Bank Solar PPA in FY 2019, \$8.1 MM was from the Green Bank.

There are multiple end-users who will benefit from this engagement, including:

- Participating Sustainable CT Communities – those cities and towns that utilize the Green Bank’s incentive and financing programs to reduce the burden of energy costs through the deployment of clean energy, and those supporting the development of environmental infrastructure initiatives;
- Sustainable CT Fellows – Connecticut college and university students supporting Sustainable CT cities and towns across the state; and
- Citizens – local citizens who use the Patronicity platform to match contributions through an online citizen engagement platform in support of local sustainability projects in their communities.

Green Bank Role, Financial Assistance & Selection/Award Process

The Green Bank will award the grant.

Risks and Mitigation Strategies

The following is the key risk and mitigation strategy:

Loss of the Grant – the \$150,000 grant to Sustainable CT is intended to create new opportunities (i.e., new marketing channels for environmental infrastructure) for the Green Bank to offer its incentive and financing programs. If there is not enough origination of transactions from the Green Bank’s programs (e.g., closed Solar PPA’s), then the likelihood of interest income paying for the grant over time is lessened. It should be noted that on average \$85,000 of present value of interest income (i.e., earned revenues) is generated from a solar PPA project through the Sustainable CT channel. In order to cover the \$150,000 grant, only 2 of the target 5 projects would be required to cover the cost of the grant. The mitigation strategy is to develop and track measurable performance targets to ensure that grant proceeds towards community-based marketing strategies are resulting in increased deal flow to the Green Bank to achieve the 5 project target.

Market Development – Sustainable CT has incentivized sustainable actions through a voluntary certification program that has expanded to include more than 75% of municipalities in Connecticut. Through this work they have developed a market for municipal and community led action towards environmental stewardship, climate change mitigation and planning. This partnership, with respect to environmental infrastructure, will focus on working with Sustainable CT to expand its support of modernized environmental infrastructure through community and municipal projects.

Resolutions

WHEREAS, the Comprehensive Plan and FY 2024 budget identify Sustainable CT as a partner of the Connecticut Green Bank (“Green Bank”), including an allocation of \$150,000 from the FY 2024 Marketing budget;

WHEREAS, the Green Bank staff has submitted to the Green Bank Board of Directors (the “Board”) a proposal for Green Bank to enter into a grant agreement with Sustainable CT for

\$150,000 for programmatic purposes in order to increase our impact by applying the green bank model through Sustainable CT's programs as explained in a memorandum to the Board dated July 18, 2023;

WHEREAS, Sustainable CT satisfies all criteria of the Strategic Selection and Award process of Green Bank operating procedures, namely: (1) special capabilities, (2) uniqueness, (3) strategic selection, (4) multiphase, follow-on investment and (5) urgency and timeliness;

WHEREAS, Green Bank staff recommends that the Board approve a grant between the Green Bank and Sustainable CT, generally in accordance with memorandum summarizing the grant to the Board in a memorandum dated July 18, 2023; and

WHEREAS, Green Bank would benefit from Sustainable CT's public awareness and engagement program to increase participation in and development of Green Bank's incentive and financing programs, especially those in development for environmental infrastructure. Through the partnership, Green Bank and Sustainable CT are driving investment in projects in communities throughout the state.

NOW, therefore be it:

RESOLVED, that the Board approves Green Bank staff to enter into a grant agreement with Sustainable CT as a strategic selection;

RESOLVED, that the President, Chief Investment Officer and General Counsel of Green Bank, and any other duly authorized officer of Green Bank, is authorized to execute and deliver on behalf of Green Bank any of the definitive agreements related to the Sustainable CT grant agreement and any other agreement, contract, legal instrument or document as he or she shall deem necessary or appropriate and in the interests of Green Bank and the ratepayers in order to carry out the intent and accomplish the purpose of the foregoing resolutions.

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

Submitted by: Ashley Stewart, Manager of Community Engagement, and Bryan Garcia, President & CEO



CONNECTICUT
GREEN BANKSM

75 Charter Oak Ave
Suite 1 - 103
Hartford, CT 06106

700 Canal Street, 5th Floor
Stamford, CT 06902