

### **Board of Directors**

### **Meeting Date**

July 23, 2021

### **Board of Directors**

Lonnie Reed Chair **Binu Chandy** Deputy Director DECD

Michael Li Connecticut Department of Energy and Environmental Protection (DEEP) Shawn Wooden Treasurer State of Connecticut

**Matthew Ranelli** 

Shipman & Goodwin

Partner

Thomas Flynn Managing Member Coral Drive Partners

Adrienne Farrar Houel President and CEO Greater Bridgeport Community Enterprises, Inc. **Kevin Walsh** Senior Operating Partner Stonepeak Infrastructure Partners

John Harrity Chair CT Roundtable on Climate and Jobs

Claire Coleman Office of Policy and Management (OPM) **Brenda Watson** Executive Director Operation Fuel

CONNECTICUT GREEN BANK

75 Charter Oak Avenue, Suite 1 - 103, Hartford, CT 06106 T 860.563.0015 ctgreenbank.com

July 16, 2021

Dear Connecticut Green Bank Board of Directors:

We have a meeting of the Board of Directors scheduled for Friday, July 23, 2021 from 9:00-11:00 a.m.

Please take note that this will be an online meeting. For those interested in joining the meeting in person, we will hold it in the Colonel Albert Pope Conference Room at our new headquarters in Hartford.

For the agenda, we have the following:

- <u>Consent Agenda</u> we have an extensive consent agenda including the following documents for review and approval:
  - Meeting Minutes for June 25, 2021
  - Incentive Programs Progress to Targets FY 2021
  - Financing Programs Progress to Targets FY 2021
  - Investments Progress to Targets FY 2021
  - Green Bank Progress to Targets FY 2021
  - Board of Directors and Committees Report for FY 2021
  - FY 2022 Comprehensive Plan Redline Revisions
  - Equity Methodology
  - Energy Burden Methodology

I will provide a detailed overview of these documents as context for new members to the Board. Also included in the materials is a report-out on Requests for Approvals for PSAs Over \$75,000 for FY 2021 per Operating Procedures and an FY 2022 Budget Clarification given the discussion at the June 25, 2021 meeting.

- Incentive Program Updates and Recommendations we will provide an overview of the FY 2021 progress to targets, a significant development in the battery storage program based on a Proposed Final Decision by PURA in Docket No. 17-12-03RE03, and a recommendation for approval to update our residential solar PV meters for SHREC given the 3G issues spoken about in past meetings.
- Financing Program Updates and Recommendations we will provide an overview of the FY 2021 progress to targets and the strategic investment in Sustainable CT as noted in the FY 2022 budget approved by the BOD on June 25, 2021.
- <u>Investment Updates and Recommendations</u> we will provide an overview of the FY 2021 progress to targets, investment in Raise Green through the Green Bank Capital Solutions RFP to support smaller denomination green bonds (i.e., \$100), extension of the SHREC funding

warehouse, restructuring to the investment in PosiGen, and update and extension to the Groton Subbase fuel cell project.

- **Environmental Infrastructure Program Updates and Recommendations** given the recent expansion of the scope of the Green Bank beyond "clean energy" to include "environmental infrastructure," we will provide an overview of the process to develop a Comprehensive Plan for environmental infrastructure to be completed for FY 2023.
- <u>Executive Session</u> based on past discussions with the BOD, we will go into executive session on matters relating to Polamer Precision and Cargill Falls.

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

Until then, enjoy the 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 23, 2021 9:00 a.m.- 11:00 a.m.

Dial (872) 240-3212 Access Code: 440-082-165

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. Incentive Programs Updates and Recommendations 20 minutes
  - a. FY 2021 Report Out Incentive Programs
  - b. Battery Storage Program Update
  - c. RSIP Update and SHREC Metering RFP
- 5. Financing Programs Updates and Recommendations 10 minutes
  - a. FY 2021 Report Out Financing Programs
  - b. Sustainable CT
- 6. Investment Updates and Recommendations 45 minutes
  - a. FY 2021 Report Out Investments
  - b. Raise Green
  - c. Funding Warehouse
  - d. PosiGen Restructuring
  - e. Groton Subbase Fuel Cell Project (Update and Extension Request)
- 7. Environmental Infrastructure Programs Updates and Recommendations 5 minutes
  - a. Environmental Infrastructure Comprehensive Plan Process

- 8. Executive Session 30 Minutes
  - a. Polamer Precision
  - b. Cargill Falls
- 9. Adjourn

Join the meeting online at <u>https://global.gotomeeting.com/join/440082165</u>

Or call in using your telephone: Dial (872) 240-3212 Access Code: 440-082-165

### Next Regular Meeting: Friday, October 22, 2021 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 23, 2021 9:00 a.m.- 11:00 a.m.

Dial (872) 240-3212 Access Code: 440-082-165

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 25, 2021.

#### 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,** the Act directs the Green Bank to 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;

**WHEREAS**, the Board of Directors of the Connecticut Green Bank approved a Comprehensive Plan for FY 2021 including approving annual budgets and targets for FY 2021.

NOW, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Program Performance towards Targets for FY 2021 memos dated July 23, 2021, which provide an overview of the performance of the Incentive Programs, Financing Programs, and Investments with respect to their FY 2021 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 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 2021 memo dated July 23, 2021 prepared by staff, which provides a summary report of the FY 2021 governance of the Board of Directors and its Committees of the Connecticut Green Bank.

### Resolution #4

**WHEREAS**, on June 25, 2021, the Board of Directors ("Board") of the Connecticut Green Bank ("Green Bank") approved of the annual budgets, targets, and investments for FY 2022.

**WHEREAS**, per Connecticut General Statutes 16-1245n, 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 redline edits to the Comprehensive Plan presented to the Board on July 23, 2021.

### Resolution #5

**WHEREAS**, the Connecticut Green Bank ("Green Bank") has long sought to gage and assess the reach of its programs in terms of their equity and inclusion;

**WHEREAS,** the State of Connecticut has adopted the definition set forth in Public Act 20-05 of Vulnerable Communities;

**WHEREAS**, the Green Bank established Incentive and Financing Program goals for investment and benefits in these Vulnerable Communities by 2025;

**WHEREAS**, pursuant to Section 5.2.1 of the Green Bank Bylaws, the Audit, Compliance, & Governance (ACG) Committee is charged with the review and approval of, and in its discretion recommendations to the Board of Directors (Board) regarding organizational policies and procedures, and on May 18, 2021 made such a recommendation to the Board of Directors;

NOW, therefore be it:

**RESOLVED**, that the Board of the Green Bank approves of the above methodology for assessing the equity and inclusion of the organization's Incentive and Financing Programs including, but not limited to, the number of projects, investment, and deployment in Vulnerable Communities.

### Resolution #6

**WHEREAS**, the Connecticut Green Bank (Green Bank) has long sought to gage and assess the reach of its programs in terms of their financial impact for their customers; and

**WHEREAS,** the Green Bank has implemented a generation monitoring platform that provides real-time and historical insight into solar system performance; and

**WHEREAS**, the Green Bank has established internal and external controls to ensure the accuracy of the generation; and

WHEREAS, the Green Bank created a database of electricity rates used to estimate customer expenses; and

**WHEREAS**, the Green Bank sought input from the Connecticut Department of Energy and Environmental Protection and the Public Utilities Regulatory Authority; and

**WHEREAS**, pursuant to Section 5.2.1 of the Green Bank Bylaws, the Audit, Compliance, & Governance (ACG) Committee is charged with the review and approval of, and in its discretion recommendations to the Board of Directors (Board) regarding organizational policies and procedures, and on June 14, 2021 made such a recommendation to the Board;

NOW, therefore be it:

**RESOLVED**, that the Board of Directors of the Green Bank approves of the above methodology for assessing customer savings and reduction of their energy burdens.

4. Incentive Programs Updates and Recommendations – 20 minutes

- a. FY 2021 Report Out Incentive Programs
- b. Battery Storage Program Update
- c. RSIP Update and SHREC Metering RFP

### Resolution #7

**WHEREAS**, cellular service providers will be sunsetting 3G service and the production meters on the 3G network will stop communicating data to the Connecticut Green Bank ("Green Bank") hindering our ability to create and monetize Solar Home Renewable Energy Credits ("SHRECs"); **WHEREAS**, the Terms and Conditions of the Residential Solar Investment Program (RSIP) and the RSIP Extension Program (RSIP-E) require that solar PV systems report production data to the Green Bank;

**WHEREAS**, the Green Bank is entering into negotiations with two down selected applicants ("Applicants") to perform the work outlined in the Request for Proposals ("RFP").

### NOW, therefore be it:

**RESOLVED**, that the Board of Directors of the Green Bank approve entering into Professional Services Agreements (PSAs) with the Applicants to complete the replacement of Revenue Grade Meters (RGM) specified in the RFP, with a not-to-exceed amount of \$\$2,500,000.

**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 memo submitted to the Board of Directors on July 23, 2021 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.

- 5. Financing Programs Updates and Recommendations 10 minutes
  - a. FY 2021 Report Out Financing Programs
  - b. Sustainable CT

#### Resolution #8

**WHEREAS**, the Comprehensive Plan and FY 2022 budget identify Sustainable CT as a partner of the Connecticut Green Bank ("Green Bank"), including an allocation of \$125,000 from the FY 2021 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 \$125,000 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 16, 2021;

**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 16, 2021; and

**WHEREAS**, Green Bank would benefit from Sustainable CT's public awareness and engagement program to increase participation in Green Bank's incentive and financing

programs. 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 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.

- 6. Investment Updates and Recommendations 45 minutes
  - a. FY 2021 Report Out Investments
  - b. Raise Green

### Resolution #9

**BE IT RESOLVED,** that the Green Bank is authorized 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 (the "Bonds"). 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 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.

c. Funding Warehouse

### Resolution #10

All of the members of the Board of Directors (the "**Board**") of the Connecticut Green Bank, a quasi-governmental agency of the State of Connecticut (the "**Green Bank**"), which is the sole member of SHREC Warehouse 1 LLC, Connecticut limited liability company (the "**Company**"), hereby consent to and adopt the following resolutions for and on behalf of the Green Bank and, in the Green Bank's capacity as the sole member of the Company, for and on behalf of the Company:

WHEREAS, the Company intends to enter into a Second Amendment to Credit Agreement (the "Second 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 (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 Ten Million and 00/100 Dollar (\$10,000,000) secured revolving line of credit, with a Four Million and 00/100 Dollar (\$4,000,000) uncommitted accordion feature ("Loan") for the purpose of financing the Tranche 5-2021 (as defined in the Credit Agreement) Solar Home Renewable Energy Credit program ("Tranche 5-2021 SHRECs"); 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 Second Amendment, in order to, among other things, secure the Loan with the Tranche 5-2021 SHRECs as collateral and extend the term of the Loan; and

**WHEREAS**, in connection with the modification of the Loan, the Company and Green Bank, as applicable, shall also enter into those documents listed on <u>Exhibit A</u> attached hereto (collectively, the "**Modification Documents**"); 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 52021 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 "**MPA's**"), which collateral assignment and security interest shall include any and all rights to payment of money under the MPA's with respect to Tranche 5-2021 SHRECs and those other attributes and rights associated with the Tranche 5-2021 SHRECs, (iii) a collateral assignment 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 Second 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 Second Amendment and the Modification Documents and authorizes, ratifies, directs and approves the Company's and the Green Bank's entering into the Second Amendment and the Modification Documents 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 Second 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 Second Amendment and the other Modification Documents and all of the Green Bank's and the Company's obligations under the Second Amendment and the other Modification Documents; 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 Second Amendment and the other Modification Documents 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 Second 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 effect the above-mentioned legal instrument or instruments.

d. PosiGen Restructuring

### Resolution #11

**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 and energy efficiency financing offering to LMI households in Connecticut;

**WHEREAS**, the Green Bank Board of Directors ("Board) previously authorized and later amended the Green Bank's participation in a credit facility (the "BL Facility") encompassing all of PosiGen's solar PV system and energy efficiency leases in the United States as part of the company's strategic growth plan, as well as the company's PBI cash flows received under the Residential Solar Investment Program, in amounts not to exceed \$14 million and \$5 million, respectively;

**WHEREAS**, Congressional Bank ("Congressional") has provided a term sheet for a new BL Facility for the company, as explained in the memorandum to the Board dated July 16, 2021 (the "Board Memo");

**WHEREAS**, the Congressional term sheet contemplates an ongoing role for the Green Bank as a 2<sup>nd</sup> lien lender against PosiGen lease cash flows and as 1<sup>st</sup> lien lender against PBI cash flows, as further explained in the "Board Memo";

**NOW**, therefore be it:

**RESOLVED,** that the Board authorizes the Green Bank to amend its existing 2<sup>nd</sup> lien facility to allow for the new Congressional 1<sup>st</sup> lien facility, as set forth in the Board Memo;

**RESOLVED**, that the Green Bank may advance up to \$6.4 million in 2<sup>nd</sup> lien financing associated with the Congressional facility, in addition to serving as an agent for third-party participation to increase that total as available;

**RESOLVED,** that the Green Bank may further advance up to \$10 million in 1<sup>st</sup> lien financing associated with PBI cash flows; and

**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 effect the above-mentioned legal instruments.

e. Groton Subbase Fuel Cell Project (Update and Extension Request)

### Resolution #12

**WHEREAS**, in accordance with (1) the statutory mandate of the Connecticut Green Bank ("Green Bank") to foster the growth, development, and deployment of clean energy sources that serve end-use customers in the State of Connecticut, (2) the State's Comprehensive Energy Strategy ("CES") and Integrated Resources Plan ("IRP"), and (3) Green Bank's Comprehensive Plan (the "Comprehensive Plan") in reference to the CES and IRP, Green Bank continuously aims to develop financing tools to further drive private capital investment into clean energy projects;

**WHEREAS**, FuelCell Energy, Inc., of Danbury, Connecticut ("FCE") has used previously committed funding (the "Bridgeport Loan") from Green Bank to successfully develop a 15 megawatt fuel cell facility in Bridgeport, Connecticut (the "Bridgeport Project"), and FCE has operated and maintained the Bridgeport Project without material incident, is current on payments under the Bridgeport Loan;

**WHEREAS**, FCE has requested financing support from the Green Bank to develop a 7.4 megawatt fuel cell project in Groton, Connecticut located on the U.S. Navy submarine base and supported by a power purchase agreement ("PPA") with the Connecticut Municipal Electric Energy Cooperative ("CMEEC") (the "Navy Project");

**WHEREAS**, staff has considered the merits of the Navy Project and the ability of FCE to construct, operate and maintain the facility, support the obligations under the Loan throughout its 20-year term, and as set forth in the due diligence memorandum (the "Board Memo") dated December 18, 2020, recommended this support be in the form of a term loan not to exceed \$8,000,000, secured by all project assets, contracts and revenues as well as a pledge of revenues from an unencumbered project as explained in the Board Memo (the "Credit Facility");

**WHEREAS**, on the basis of that recommendation, the Green Bank Board of Directors ("Board") approved of the Credit Facility, in an amount not to exceed \$8,000,000 with the provision that the Credit Facility be executed no later than 180 days from the date of authorization by the Board (June 16, 2021);

**WHEREAS**, Green Bank has further advised the Board that the Credit Facility is expected to close within the next 90 days and to accommodate the additional time needed to execute the Credit Facility requests the permitted time to execute the credit facility be increased from not later than 180 days from the original date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (October 29, 2021);

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board hereby approves the extension of time for the execution of the Credit Facility to not later than 315 days from the original date of authorization by the Board (i.e., not later than October 29, 2021); and

RESOLVED, that the President of the Green Bank and any other duly authorized officer is

authorized to take appropriate actions to provide the Credit Facility to FCE (or a special purpose entity wholly-owned by FCE) in an amount not to exceed \$8,000,000 with terms and conditions consistent with the memorandum submitted to the Board dated December 18, 2020 (the "Memorandum"), and as he or she shall deem to be in the interests of the Green Bank and the ratepayers; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the Term Loan and participation as set forth in the Memorandum.

- 7. Environmental Infrastructure Programs Updates and Recommendations 5 minutes
  - a. Environmental Infrastructure Comprehensive Plan Process

### Resolution #13

**WHEREAS,** in July of 2021, the Connecticut General Assembly passed Public Act 21-115 (the Act), "AN ACT CONCERNING CLIMATE CHANGE ADAPTATION," which expands the scope of the Green Bank to develop programs to finance and otherwise support environmental infrastructure investment per the definition of environmental infrastructure in Connecticut General Statutes Section 16-245n(a)(4);

**WHEREAS**, the Act directs the Green Bank to 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 memo dated July 23, 2021 entitled "Environmental Infrastructure – Comprehensive Plan Process," which provides an overview of the process to be undertaken in FY 2022 to incorporate environmental infrastructure within its comprehensive plan.

- 8. Executive Session 15 Minutes
  - a. Polamer Precision

### Resolution #14

WHEREAS, pursuant to Connecticut General Statutes Section 16a-40g, 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 Board of Directors ("Board") of the Green Bank approved in April 2014 a construction and term loan secured by a C-PACE benefit assessment for Polamer Precision Inc. ("Polamer") New Britain, Connecticut, to finance the construction of specified clean energy and energy conservation measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

WHEREAS, as a result of COVID-19, Polamer has requested repayment modification (the "C-

PACE Modification") and staff has recommended to the Board approval of Polamer's requested modification, pursuant to the Board approved Loan Loss Decision Framework and Process for managing assets requiring restructuring or write-off from the Green Bank's balance sheet as modified by the Board's approval of a COVID-19 pandemic response to enable restructuring of transactions.

**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 documentation to effect the C-PACE Modification consistent with the memorandum submitted to the Board dated July 19, 2021; and

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

b. Cargill Falls

### Resolution #15

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

**WHEREAS**, the Board of Directors ("Board") of the Green Bank previously approved a construction and term loan, secured by a C-PACE benefit assessment, not-to-exceed amount of \$7,100,000 (the "Current Loan") 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 as part of a larger property redevelopment effort (the "Mill Redevelopment") requires additional gap financing from the Green Bank in the amount of \$1,000,000 to supplement additional funds being provided by the Connecticut Department of Housing of approximately \$1,800,000 in order to complete the financing requirements for this project that will result in 82 units of housing for Putnam, CT including 4 additional affordable units as a result of the additional gap financing (for a total of 34) of which 9 would be set aside for prospective tenants at or below 50% of area median income;

**WHEREAS**, the Mill Redevelopment includes numerous energy conservation measures that align with the goals and priorities of the Green Bank's multifamily housing program;

**WHEREAS**, the Green Bank now seeks approval to amend the Current Loan to HCFM to provide up to \$1,000,000 in additional funding (the "Loan Amendment") for the Mill Redevelopment effort, inclusive of finalizing the existing Project work.

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 Amendment in a total amount not to exceed the sum of (i) the Current Loan being secured by a C-PACE benefit assessment (inclusive of \$300,000 and \$600,000 in additional funding approved at meetings of the Board January 24, 2020 and January 22, 2021, respectively), plus (ii) \$1,000,000, with terms and conditions consistent with the memorandum submitted to the Board dated July 19, 2021, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 180 days from July 23, 2021; and

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

9. Adjourn

Join the meeting online at <u>https://global.gotomeeting.com/join/440082165</u>

Or call in using your telephone: Dial (872) 240-3212 Access Code: 440-082-165

Next Regular Meeting: Friday, October 22, 2021 from 9:00-11:00 a.m. Colonel Albert Pope Room at the Connecticut Green Bank, 75 Charter Oak Avenue, Hartford

# **ANNOUNCEMENTS**

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



# **Board of Directors Meeting**

July 23, 2021 Online and In-Person Meeting



## Board of Directors Agenda Item #1 Call to Order



## Board of Directors Agenda Item #2 Public Comments

## Welcome Board of Directors





### **Claire Coleman**

Office of Policy and Management Secretary Melissa McCaw (Designee)



## Board of Directors Agenda Item #3 Consent Agenda

## **Consent Agenda** Resolutions #1 through #6



- 1. <u>Meeting Minutes</u> approve meeting minutes of June 25, 2021
- 2. <u>FY 2021 Progress to Targets</u> draft memos of year-end performance for merit review process (final in October with CAFR)
- **3.** <u>Governance Compliance Reporting</u> board and committee meeting and other ethics compliance reporting items for FY 2021
- **4.** <u>**Comprehensive Plan**</u> updates for FY 2022, including introduction of environmental infrastructure, acronym glossary, and other edits
- 5. <u>Equity Methodology</u> ACG Committee recommendation "vulnerable communities"
- 6. <u>Energy Burden Methodology</u> ACG Committee recommendation on energy savings from solar financing products (e.g., PosiGen)
- PSA's Over \$75,000 report out on Operating Procedures
- <u>FY 2022 Budget Clarification</u> revenue (↑6.3%) and expense (↓2.7%) variance presentation less meter replacement (i.e., \$2.5 MM) and environmental infrastructure (i.e., \$0.3 MM) expenses



# Board of Directors

### Agenda Item #4a Incentive Programs Updates and Recommendations FY 2021 Report Out

## Incentive Programs FY 2021 Update



	Projects			Capital Deployed			Capacity (MW)		
Product/ Program	Closed	Target	% to Target	Closed (\$ MM)	Target (\$ MM)	% to Target	Closed	Target	% to Target
RSIP + RSIP-E	5,785	3,177	182%	\$184.8	\$96.6	191%	52.1	27.0	193%
Smart-E	989	740	134%	\$14.9	\$9.8	153%	0.8	1.0	85%
Solar for All	1,004	416	241%	\$26.7	\$10.1	265%	6.8	2.7	252%
Total	7,104	3,913	182%	\$206.0	\$105.9	194%	54.8	27.5	199%

Incentive Program targets for all programs, **RSIP and RSIP-E, Smart-E and Solar for All**, were exceeded for # of projects, as well as capital deployed and MW capacity, with the exception of capacity deployed in Smart-E.



## **Board of Directors**

## Agenda Item #4b Incentive Programs Updates and Recommendations Battery Storage Program Update

### CONNECTICUT GREEN BANK

## Battery Storage Public Policy

- Energy Storage Public Act 21-53 establishes 1000 MW target by 2030
  - PURA establishes and oversees program
  - Sets interim targets (e.g., 300 MW by 2024)
  - Allows PURA to determine administrators, including EDCs, Green Bank, DEEP, or other third-party
  - Allows behind the meter residential, commercial, and industrial end-use customers, as well as front of the meter grid tied systems
- <u>Electric Storage</u> Docket No. 17-12-03RE03 Electric Storage in the Equitable Modern Grid Proceeding (Proposed Final Decision)
  - Green Bank and EDCs co-administering 580 MW residential (i.e., 290 MW), and C&I (i.e., 290 MW) BTM battery storage incentive program by 2030 – Green Bank lead on program marketing
  - Stand alone or paired with solar PV battery storage systems
  - Priority from PURA for deploying in vulnerable communities for residential (e.g., low income, EJ) and commercial and industrial (e.g., critical facilities)

# Battery Storage Key Highlights



- Green Bank to be co-administrators of the Program
- Deployment Targets 580 MW deployment over 9 years
  - 100 MW by 2024,
  - Additional 200 MW by 2027, and
  - Additional 280 MW by 2030.
- Upfront incentive administered by CGB
  - Declining incentive block structure for residential customers
  - Flat incentive for C&I customers over the first three years of the Program
- Incentive Caps
  - \$7,500 for residential customers
  - 50% of total system costs for C&I customers



# Battery Storage Key Highlights

- To be eligible for the upfront incentive, system owner will be required to opt-in to the default settings (set-it-and-forget-it)
- Additional adders for underserved communities, front of the meter storage, grid edge customers, critical facilities, and C&I customers with fossil-fueled onsite generators
- Performance-Based Incentive administered by the EDCs
- CGB responsible for Program Marketing
- EM&V will be the responsibility of both CGB and EDCs
- Proposed Final Decision includes 26 Orders
  - Program design, guidelines and documentation, Incentive design, BCA Analysis, Marketing plan, Draft RFP to secure an EM&V contractor, and others.



## **Board of Directors**

## Agenda Item #4c Incentive Programs Updates and Recommendations RSIP Update and SHREC Metering RFP

## **RGM Upgrade Provider RFP** Background



- In 2020, mobile cellular providers across the country announced plans to retire their 3G networks (running CDMA technology) in favor of 4G LTE networks
  - T-Mobile/Sprint retirement will occur in October 2021,
  - AT&T 3G network will sunset in February 2022,
  - Verizon plans to retire its 3G network by December 2022.
- Most RSIP and RSIP-E system RGMs transmit solar production data to the CGB monitoring platform via cellular networks, either through T-Mobile/Sprint, AT&T, or Verizon.
- This reporting is important for reporting system production to NEPOOL GIS so that renewable energy credits (RECs) can be registered and monetized by the Green Bank.

## **RGM Upgrade Provider RFP** Number of Affected RGMs



- There are currently about 38,341 of 45,134 of approved residential solar PV systems have an RGM registered on CGB's monitoring platform (Locus) to transmit production/monitoring data.
- The number of homeowner owned and SL-2 RGMs that will be replaced or upgraded through the RFP

Meter PMP	Cellular Service Provider	3G Sunset Date	Homeowner Owned Systems	SL-2 Systems	Total
Locus	AT&T	Feb-2022	2,330	1,076	3,406
Enphase	AT&T	Feb-2022	476		476
Solar-Log	AT&T	Feb-2022	432		432
Solar-Log	T-Mobile	Oct-2021	91		91
SolarEdge	T-Mobile	Oct-2021	559		559
Total			3,888	1,076	4,964

# **RGM Upgrade Provider RFP**



RGM Replacement Tentative Timeline

- The CGB's RGM Upgrade Provider Request for Proposals (RFP) is the primary vehicle through which the Green Bank will:
  - Identify a company or companies to procure and replace cellular revenue-grade meters (RGMs).
  - Will screen and evaluate all RFP Responses and will select the Applicant(s) that best meets the RFP requirements.

Description	Date		
RFP Issued	Friday, May 28, 2021		
Due date for Applicant questions	Friday, June 4, 2021		
Q&A webinar	Friday, June 11, 2021		
Applicant Final Responses Submission Due Date	Monday, June 21, 2021		
CGB Decision & Bidder(s) Notification	Wednesday, July 7, 2021		
Professional Services Agreement Signature Due Date	Wednesday, July 14, 2021		

## **Resolution #7**



### NOW, therefore be it:

**RESOLVED**, that the Board of Directors of the Green Bank approve entering into Professional Services Agreements (PSAs) with the Applicants to complete the replacement of Revenue Grade Meters (RGM) specified in the RFP, with a not-to-exceed amount of \$2,500,000.

**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 memo submitted to the Board of Directors on July 23, 2021 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.



### Board of Directors Agenda Item #5a Financing Programs Updates and Recommendations FY 2021 Report Out

# Financing Programs FY21 Report Out



	P	rojects		Capit	Capacity (MW)				
Product/Program	Closed	Target	% to Target	Closed	Target	% to Target	Closed	Target	% to Target
Commercial PPA	39	33	118%	\$26,925,477	\$25,750,000	105%	16.0	15.4	104%
CPACE	33	29	114%	\$39,015,366	\$13,700,000	285%	2.6	4.6	56%
SBEA	438	1,203	36%	\$8,778,001	\$20,440,000	43%	0.0	0.0	0%
Multi-Family Health and Safety	0	0	0%	\$0	\$0	0%	0.0	0.0	0%
Multi-Family Pre-Dev	0	0	0%	\$0	\$0	0%	0.0	0.0	0%
Multi-Family Term	5	2	250%	\$4,195,139	\$225,000	1865 %	0.0	0.1	41%
Strategic Investments	0	0	0%	\$0	\$0	0%	0.0	0.0	0%
Total Financing Programs	513	1,273	40%	\$78,580,077	\$69,215,000	114%	18.6	20.7	90%



### Board of Directors Agenda Item #5b Financing Programs Updates and Recommendations Sustainable CT

# Sustainable CT Grant Citizen Engagement

#### CGB Comprehensive Plan:

Sustainable CT and Green Bank partnership focuses on:

- Driving investment in projects in our communities;
- Community-level engagement that is inclusive, diverse and "knitted";
- 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, both qualitative and quantitative.

#### Sustainable CT

- Launched in 2018 at annual CCM convention
- 122 of 169 CT towns registered and 64 towns certified
- 10 areas of voluntary action areas, includes CGB programs







## Sustainable CT Grant Measurable Impact



#### Key outcomes:

- 48 towns received municipal solar site reviews, 17 closed projects, 3.5MW solar
- 3 town campaigns for Solar for All: 2 campaigns yielded 47 closed projects
- 4 town hosted business webinars for C-PACE program
- Support for 40 Fellows providing 15,000+ hours direct support to communities





S BRANFORD, CT

#### Branford Clean Energy Campaign

To educate Branford residents about Home Energy Solutions, Heat Pumps and Solar

\$6,000	
of \$5,330	Project Cl



Q NEW HAVEN, CT

#### **Green Jobs Corps**

Connecting young people in New Haven to paid jobs. Stewarding natural resources. Building community.

Project Closed

\$15,100 of \$15,000

\* Matching Grant: Sustainable CT



S BRIDGEPORT, CT

#### Bridgeport Art Trail, 2020 Vision During Covid19

Funds support program and artists' stipends for 10 days of Bridgeport art, online presentations include studio tours, interviews, demos, workshops,

\$7,320 of \$7,320 Project Closed

★ Matching Grant: Sustainable CT

★ Matching Grant: Sustainable CT

# Sustainable CT Grant Increasing CGB Impact



#### \$125,000 Grant

- \$50,000 matching grant for Sustainable CT Fellows Program
- \$50,000 matching grants for projects through crowdfunding platform
- \$25,000 organizational support

#### Leveraging existing partnership to increase project leads

- Awareness: as more towns become registered in the SCT program, they learn how CGB programs enable them to take action on sustainability projects
- Measurable Impact
  - Solar PPA: no less than 20 SCT communities, 50 leads, 30% of leads become projects
  - C-PACE: no less than 3 SCT communities, 10 leads
  - Smart-E: no less than two community-based outreach efforts, 5-10 projects
  - Battery Storage: develop community-based marketing strategy including SCT channel
- Lessons Learned: sharing best practices to accelerate clean energy uptake
  - PV interest income from PPA projects can cover cost of the grant

## Sustainable CT Grant Strategic Selection



- **Special Capabilities:** Sustainable CT has exceptional experience and expertise in 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
- **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 #8**



**NOW**, therefore be it:

**RESOLVED**, that the Board approves Green Bank 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.



### Board of Directors Agenda Item #6a Investment Updates and Recommendations FY 2021 Report Out

# **Investments to Target**



### Preliminary

				В	udge	t	Α			Actu	ıal				
											То	tal Interest			
											Inc	come	ΡV	of Interest	
Program	Description	Activity Type	Rate	Term	Prin	cipal	Rate	Term	Pr	incipal	Ge	enerated	Inc	ome	Notes
		Forecast Draws on													
		Existing Revolving													
Multifamily Pgms	C4C Lime facility draws	Loan Facility		10	\$	500,000			\$	-					draws expected to occur in FY 22
CPACE	CGB Portfolio	New CPACE Loans		16	\$	5,000,000		13	\$	2,433,507	\$	913,722	\$	707,571	
		Draws on existing													
		Green Works Lending													Line closed and CGB earned \$150k
CPACE	3rd party lending RFP	LoC		5	\$	3,000,000		5	\$	3,000,000	\$	392,623	\$	392,623	early term fee
	LBE Solar PPA and	New Loans for State													
New Product Dev.	Solar MAP	PPA projects		10	\$	10,000,000			\$	-					Projects Delayed until FY22
		Loans to 3rd party													
	PPA Development 3rd	developers (Skyview													
New Product Dev.	Party Loans	Pequonock)		10	\$	2,500,000		15	\$	1,699,700	\$	758,501	\$	576,763	
	Regular Loan	3 additional purchases													
SBEA/BEA	Purchases	of SBEA loans		4	\$	2,044,000		4	\$	839,926	\$	35,826	\$	34,875	
	PPA Sub Debt into IPC	Inclusive Solar													Line of Credit with 645k drawn a/o
CE Finance Prg	Fund	Manager Line of Credi		15	\$	1,500,000		15	\$	5,000,000	\$	311,031	\$	233,201	6/30
CE Finance Prg	Strategic Investments	Fort Hill Farm		10	\$	750,000		10	\$	618,611.00	\$	175,031	\$	146,087	
															Facility stands (CGB included IPC
CE Finance Prg	Strategic Investments	Groton Fuel Cell		10	\$	2,000,000									participation)
CPACE	Repurchase of Loans	Cleanfund tranche 1						18	\$	5,713,429	\$	3,018,157	\$	2,158,225	
CPACE	Repurchase of Loans	Polamer Precision						20	\$	2,892,647	\$	1,716,639	\$	1,155,765	
	Extension of loan for														Income not included as not yet
CPACE	Cargill Falls							25	\$	600,000					drawn
	Working Capital LoC for	Inclusive Solar			\$	5,000,000									
	PPA development to	Developer Line of													Line of Credit with 89k drawn a/o
CE Finance Prg	IPC	Credit						з	\$	5,000,000	\$	38,566	\$	29,667	6/30
		draw on existing													
Legacy	Nupower	commitment		10				2	\$	161,302.00	\$	10,206	\$	9,457	
					\$	32,294,000			\$	27,959,122	\$	7,370,302	\$	5,444,236	

### Invested \$27M vs a target of \$32M

Will Generate \$7.3M in interest income over the investments

### life!



### Board of Directors Agenda Item #6b Investment Updates and Recommendations Raise Green

# **Raise Green Proposal**



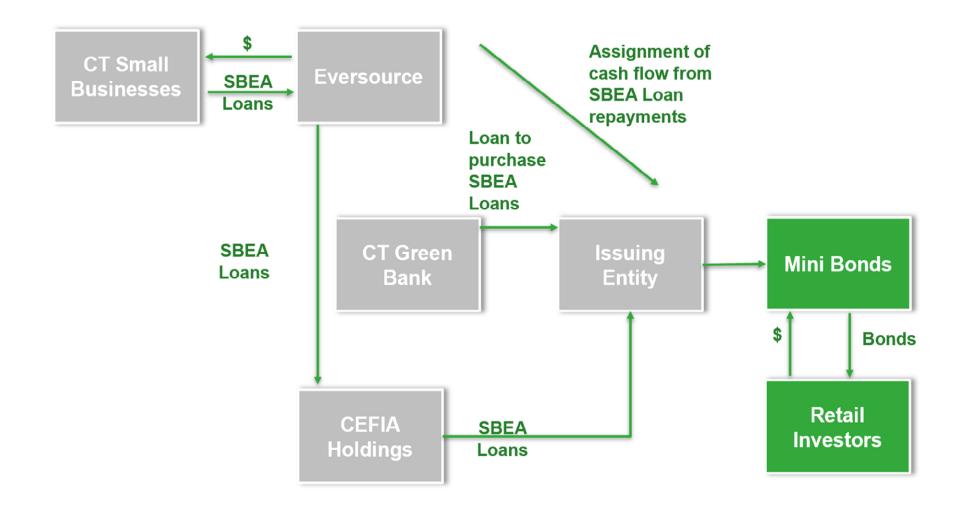
### **Review and Approval**

- Response to an open RFP for Capital Solutions established June 27, 2020:
  - Democratization of investing use of Regulation Crowdfunding<sup>(1)</sup> ("RegCF") to leverage capital from retail investors
  - Up to \$2 million of "mini-bond" instrument with bond offering prices below \$1,000 (min \$100)
    - Up to \$250,000 quarterly for up to 2 years
    - Backed by Green Bank's Small Business Energy Advantage ("SBEA") loan revenues
    - Issued through taxable subsidiary
  - Issuance costs [to be discussed]
- Strategic benefits:
  - Build upon success of Green Liberty Bonds
  - Improve access to green investment opportunities for retail investors
  - Enhance Green Bank brand by being one of the few issuers of short-term, green-certified bonds
  - Establish access to an untapped source of liquidity
  - (1) <u>https://www.sec.gov/smallbusiness/exemptofferings/regcrowdfunding</u>





### Transaction Diagram



# Facility Coverage Ratios



- Analyzed scenarios of expected revenue of SBEA tranches against debt service requirements, assuming \$250k issuance per quarter at % interest rate
  - 1. Future tranches are added to the revenue pool (avg. of tranches 2-5)
  - 2. Future tranches are added but only 50% of previous tranches
  - 3. No future tranches are added

		Debt Service Coverage Ratio								
Revenue Scenario	06/30/22	09/30/22	12/31/22	03/31/23	06/30/23	09/30/23	12/31/23	03/31/24		
SBEA with Future Tranches	5.11	5.42	5.73	6.00	6.27	6.46	6.55	6.54		
SBEA with 50% Future Tranches	4.74	4.79	4.79	4.69	4.53	4.31	3.99	3.58		
SBEA As-Is	4.36	4.17	3.86	3.39	2.80	2.15	1.42	0.61		

- Coverage is comfortable in both scenarios where future tranches are added
- As-is scenario only drops below 2.0x in the last 2 quarters issuance sizes can be adjusted should this scenario materialize

# **Raise Green**



### **Company Background**

- Formed in 2018 and licensed by the SEC in 2019
- Member in good standing with the Financial Industry Regulatory Authority ("FINRA")
- First issuance in 2020 and has executed six offerings to date
  - Over \$2.0 million of bonds sold since July 2020, including:

National Energy Improvement Fund	4 Offerings	~\$500,000 raised
Blocpower	2 Offerings	~\$1.5 million raised
Solaris Energy	1 Offering	~\$250,000 raised

- Significant industry experience:
  - 40+ years of combined experience amongst Raise Green senior management team

# **Resolution #9**



**BE IT RESOLVED,** that the Green Bank is authorized 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 (the "Bonds"). 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 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.



### Board of Directors Agenda Item #6c Investment Updates and Recommendations Funding Warehouse

# **SHREC Warehouse**



### **Review and Approval**

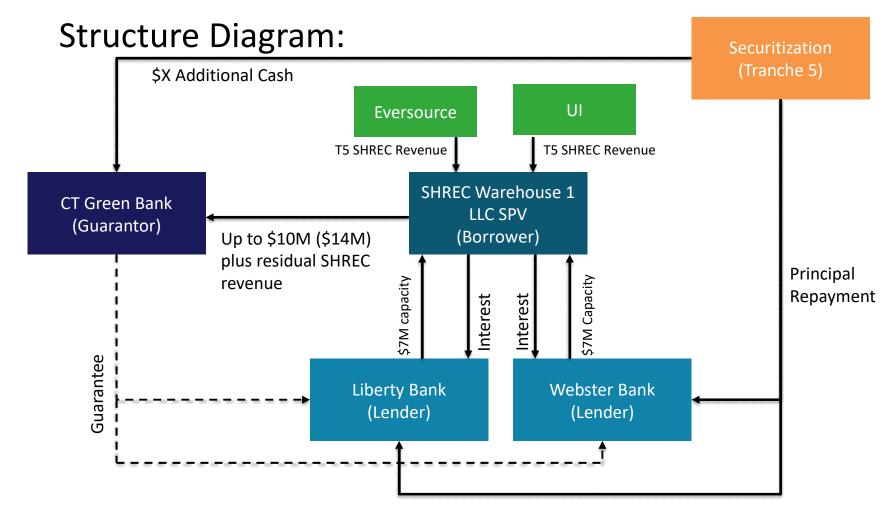
- Renewal of Revolving Credit Facility established with Liberty Bank and Webster Bank:
  - Approved at the July 24<sup>th</sup>, 2020 Board Meeting (Original facility: June 2018)
  - Secured by SHREC revenues & CGB Guaranty
  - \$10 million initial sizing plus an additional \$4 million upsizing if needed
  - Interest only
  - Maturity 12 months
  - Interest rate [to be discussed]
  - Upfront fee [to be discussed]
  - Unused fee [to be discussed]

### Strategic benefits:

- Solidify banking relationships within the State
- Improves Green Bank leverage vis-à-vis securitizations (T5, T6)
- Improved liquidity

## SHREC Warehouse Review and Approval





#### 37

# **Resolution #10**



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 Second Amendment and the Modification Documents and authorizes, ratifies, directs and approves the Company's and the Green Bank's entering into the Second Amendment and the Modification Documents 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 Second 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 Second Amendment and the other Modification Documents and all of the Green Bank's and the Company's obligations under the Second Amendment and the other Modification Documents; and be it further

# **Resolution #10 (cont'd)**



**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 Second Amendment and the other Modification Documents 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 Second 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 effect the above-mentioned legal instrument or instruments.



### Board of Directors Agenda Item #6d Investment Updates and Recommendations PosiGen Restructuring

# PosiGen Senior Facility Strong Growth Attracting Capital

- Strong Growth in CT
  - Has now installed over 4,000 residential systems (plus energy efficiency upgrades) in the state; over 60% of those installations serving LMI households
  - On a monthly basis, PosiGen now installs more systems in Connecticut than the rest of the country combined; H1-2021 deployments >800 new projects
  - Sales to exceed 4,600 systems in 2021 vs 4,090 (+14%)
  - PosiGen's Connecticut workforce now has over 100 direct staff members on the ground, all of whom earn a living wage, receive good benefits, and participate in the company's stock option plan.

### Has secured additional capital for growth (existing)



# PosiGen Senior Facility Restructuring



Congressional Bank 1<sup>st</sup> Lien Facility



# PosiGen Senior Facility Restructuring (2)



Green Bank Position

SLCF	Current \$14,000,000	Proposed \$ 4,500,000 (Pre-Accordion) \$ 6,400,000 (full Accordion)
PBI	\$ 7,000,000	\$10,000,000
IPC Participation Max Exposure	<u>( 2,000,000)</u> \$19,000,000	<u>\$0</u> \$14,500,000 (Pre-Accordion) \$16,400,000 (full Accordion)
Exposure @ closing	\$18,100,000	\$10,000,000

# **Resolution #11**



**NOW**, therefore be it:

**RESOLVED,** that the Board authorizes the Green Bank to amend its existing 2nd lien facility to allow for the new Congressional 1st lien facility, as set forth in the Board Memo;

**RESOLVED,** that the Green Bank may advance up to \$6.4 million in 2nd lien financing associated with the Congressional facility, in addition to serving as an agent for third-party participation to increase that total as available;

**RESOLVED,** that the Green Bank may further advance up to \$10 million in 1st lien financing associated with PBI cash flows; and

**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 effect the above-mentioned legal instruments.



### Board of Directors Agenda Item #6e Investment Updates and Recommendations Groton Subbase Fuel Cell Project

# **FCE Groton Project**



### **Project Summary**

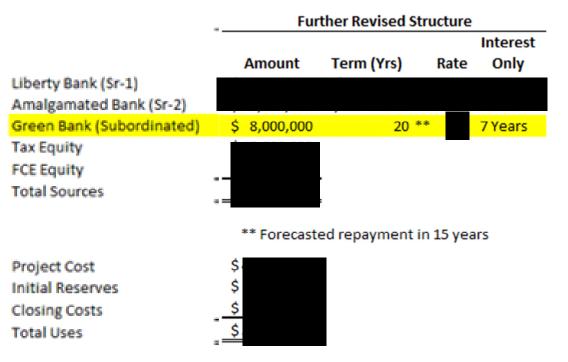
- <u>Project</u>: 7.4 MW FuelCell Energy ("FCE") plant located on U.S. Navy Submarine Base in New London/Groton, CT
- <u>Objective</u>: Energy resiliency for the Submarine Base (follow on development of microgrid – DEEP grant funding)
- Project Cost: \$
- Project Cashflows: 20-year PPA with CMEEC and Class I RECs
- <u>Green Bank Participation</u>: (i.) Advisor on raising 3<sup>rd</sup> party capital (with Inclusive Prosperity Capital "IPC")), and (ii.) Term Lender
- <u>Sr Lenders</u>: Liberty Bank
   Amalgamated Bank



- Green Bank Exposure:
  - \$8 million secured Term Loan (originally \$5 million) subordinated to \$12 million of senior debt, fully amortizing across 20-year Term (with cash sweep – effectively a 15-year term)

# FCE Groton Project Term Financing Summary





- **<u>Signed Term Sheet</u>**: Lenders are in final credit approval stage
- Navy / CMEEC: In a position to close in September
- Microgrid: development of microgrid moves ahead post closing
- Board Approved Execution Limit: Extend to late October

# **Resolution #12**



**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board hereby approves the extension of time for the execution of the Credit Facility to not later than 315 days from the original date of authorization by the Board (i.e., not later than October 29, 2021); and

**RESOLVED,** that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to provide the Credit Facility to FCE (or a special purpose entity wholly-owned by FCE) in an amount not to exceed \$8,000,000 with terms and conditions consistent with the memorandum submitted to the Board dated December 18, 2020 (the "Memorandum"), and as he or she shall deem to be in the interests of the Green Bank and the ratepayers; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the Term Loan and participation as set forth in the Memorandum.

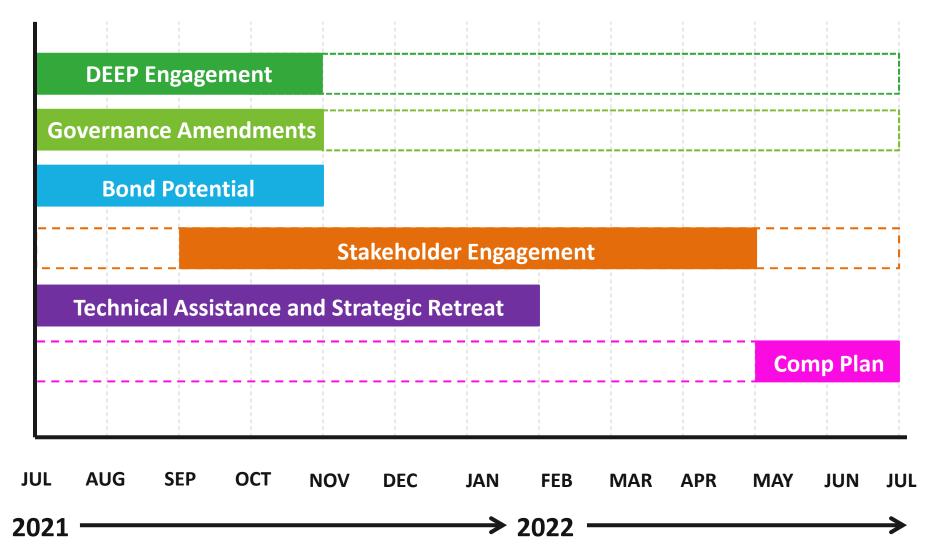


### Board of Directors Agenda Item #7a Environmental Infrastructure Updates and Recommendations Comprehensive Plan Process





**Comprehensive Plan Timeline and Deliverables** 



# **Resolution #13**



**NOW**, therefore be it:

**RESOLVED**, that Board has reviewed and approved the memo dated July 23, 2021 entitled "Environmental Infrastructure – Comprehensive Plan Process," which provides an overview of the process to be undertaken in FY 2022 to incorporate environmental infrastructure within its comprehensive plan.



### Board of Directors Agenda Item #8

### **Executive Session**

### Confidential Matters Relating to Polamer Precision and Cargill Falls



### Board of Directors Agenda Item #8a Executive Session Polamer Precision

# **COVID-19 Restructuring** Polamer Precision





- New Britain CT-based global aerospace manufacturing company specializing in complex aerospace engine components for commercial and military aircraft.
- Commenced as a start-up in 1997 (Newington)

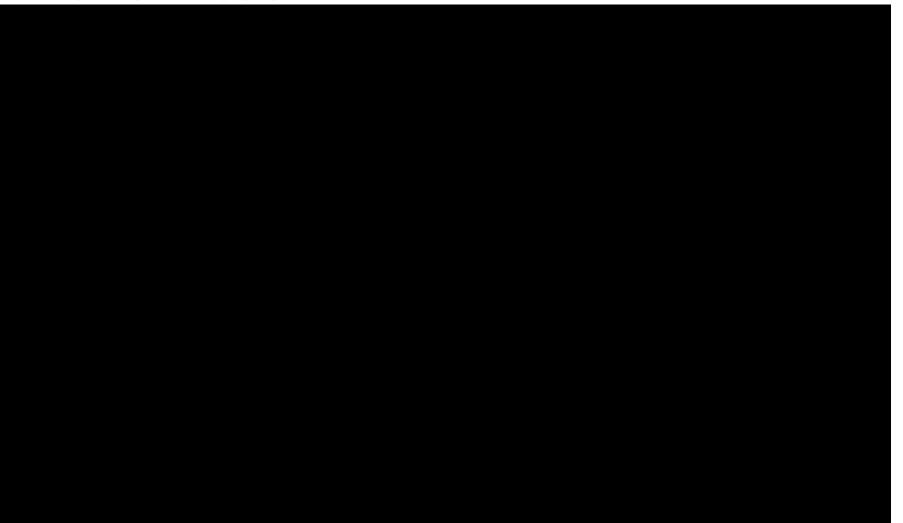
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## **COVID-19 Restructuring** Polamer Precision



## COVID-19 Restructuring Polamer Precision





## **Resolution #14**



**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 documentation to effect the C-PACE Modification consistent with the memorandum submitted to the Board dated July 19, 2021; and

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



### Board of Directors Agenda Item #8b Executive Session Cargill Falls

# Historic Cargill Falls Mill Project Update



- Project Background: Putnam CT mill redevelopment to mixed-use residential (83 units) and commercial space, 2 hydro electric turbines (~900 kW total capacity fed by the Quinebaug River) and energy conservation measures
- Real Estate Update:



## **Historic Cargill Falls Mill**



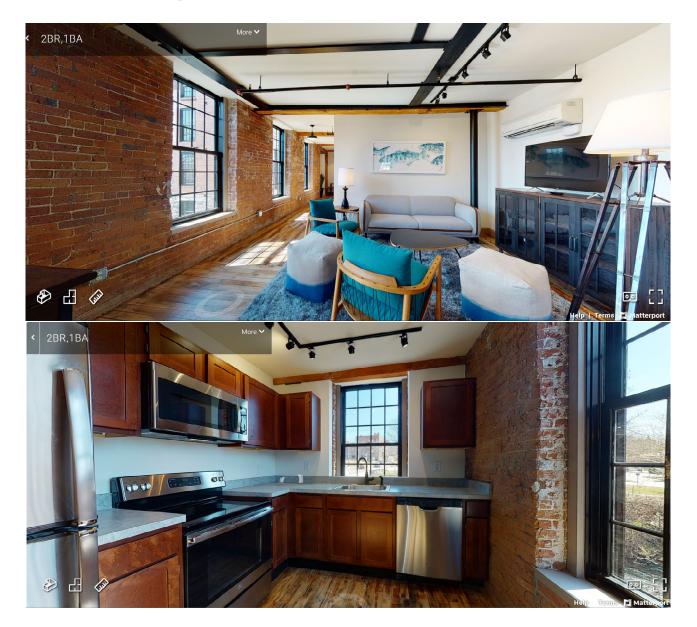
1st place 2021 CT Associated Builders & Contractors Excellence in Construction Award For Historical Restoration/Renovation

1st place 2021 CT Building Congress Award For

Large Multi- Family/ Mixed Use

## **Historic Cargill Falls Mill**





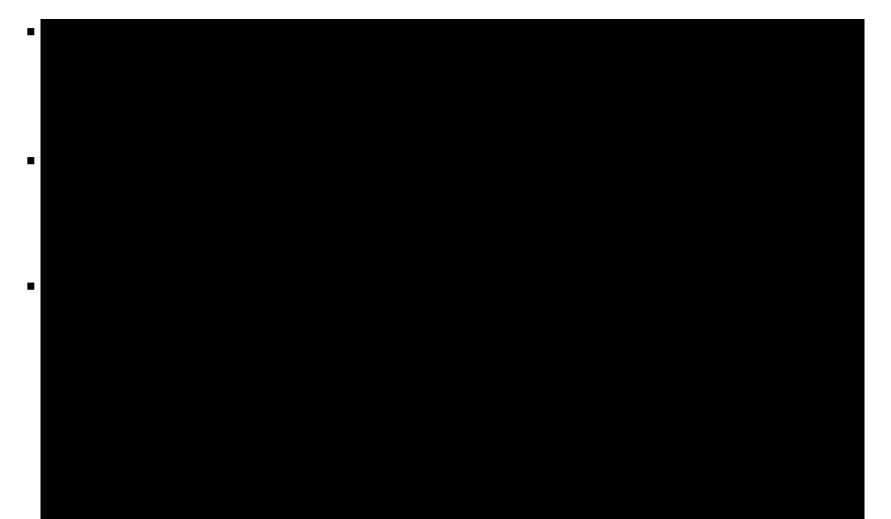
# **Historic Cargill Falls Mill**





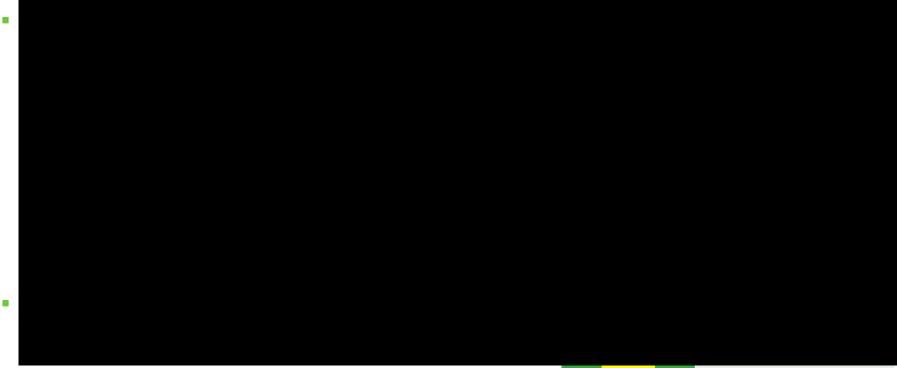
# Historic Cargill Falls Mill Hydro Project Update





# Historic Cargill Falls Mill Capital Stack Update

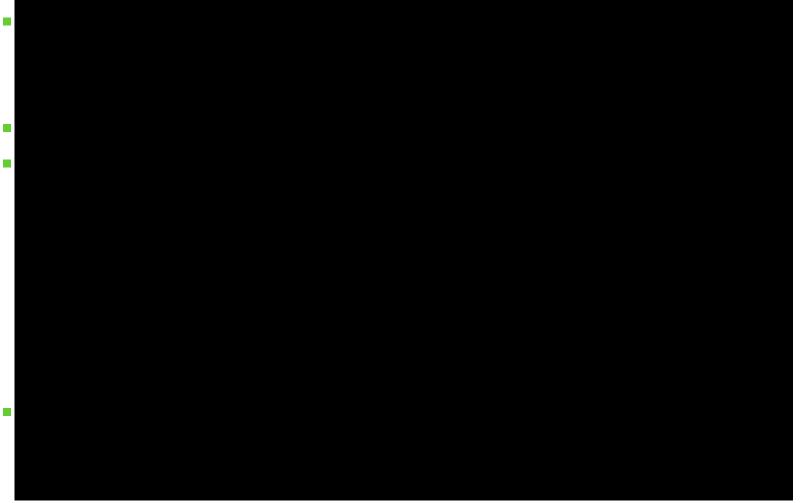




- Funding plan:
  - See chart at right
  - All Parties Are Prepared To Close (subject to documentation)

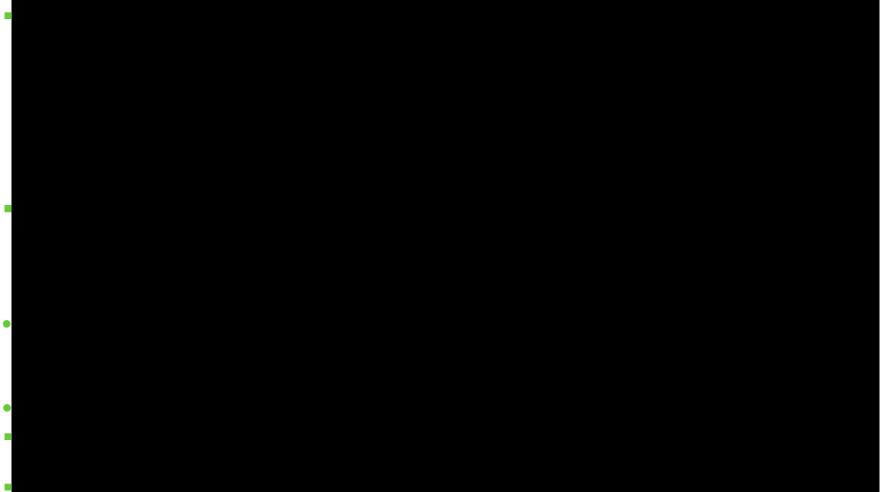
## Historic Cargill Falls Mill Green Bank Loan Terms





## Historic Cargill Falls Mill Green Bank Loan Terms (2)

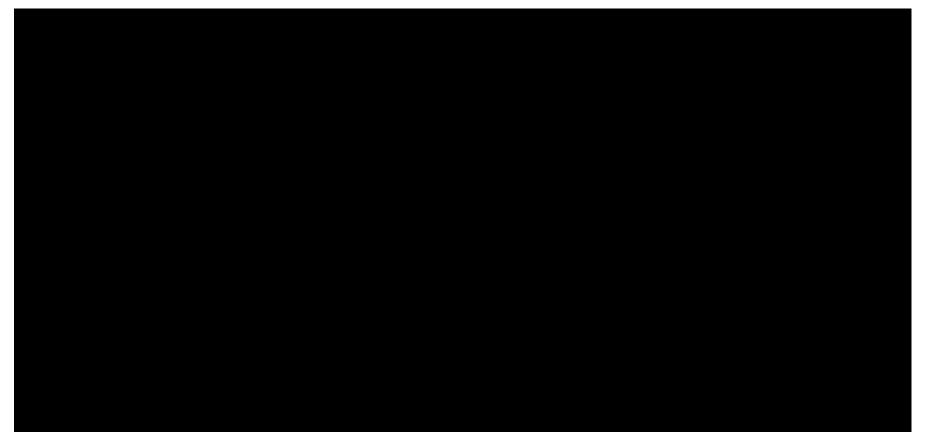




# Historic Cargill Falls Mill Green Bank Loan – Lender Liability, etc?



Murtha Cullina to address in discussion -



## **Resolution #15**



**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 Amendment in a total amount not to exceed the sum of (i) the Current Loan being secured by a C-PACE benefit assessment (inclusive of \$300,000 and \$600,000 in additional funding approved at meetings of the Board January 24, 2020 and January 22, 2021, respectively), plus (ii) \$1,000,000, with terms and conditions consistent with the memorandum submitted to the Board dated July 19, 2021, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 180 days from July 23, 2021; and

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



### Board of Directors Agenda Item #8b Executive Session Cargill Falls

## **Resolution #14**



**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 documentation to effect the C-PACE Modification consistent with the memorandum submitted to the Board dated July 19, 2021; and

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

## **Resolution #15**



**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 Amendment in a total amount not to exceed the sum of (i) the Current Loan being secured by a C-PACE benefit assessment (inclusive of \$300,000 and \$600,000 in additional funding approved at meetings of the Board January 24, 2020 and January 22, 2021, respectively), plus (ii) \$1,000,000, with terms and conditions consistent with the memorandum submitted to the Board dated July 19, 2021, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 180 days from July 23, 2021; and

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



### Board of Directors Agenda Item #9 Adjourn



#### BOARD OF DIRECTORS OF THE CONNECTICUT GREEN BANK Regular Meeting Minutes

Friday, June 25, 2021 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 25, 2021.

#### Due to COVID-19, all participants joined via the conference call.

Board Members Present: Eric Brown, Binu Chandy, Thomas Flynn, John Harrity, Adrienne Houël, Steve Meier, Matthew Ranelli, Lonnie Reed, Brenda Watson

Board Members Absent: Michael Li, Kevin Walsh

Staff Attending: Lindsay Alfano, Sergio Carrillo, Shawne Cartelli, Louise Della Pesca, Mackey Dykes, Brian Farnen, Bryan Garcia, Bert Hunter, Alex Kovtunenko, Matthew Macunas, Jane Murphy, Cheryl Samuels, Ariel Schneider, Eric Shrago, Mike Yu, Nicholas Zuba

Others present: Giulia Bambara on behalf Michael Li

#### 1. Call to Order

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

#### 2. Public Comments

- No public comments.
- 3. Consent Agenda
  - a. Meeting Minutes of April 23, 2021

#### Resolution #1

Motion to approve the meeting minutes of the Board of Directors for April 23, 2021.

Upon a motion made by John Harrity and seconded by Thomas Flynn, the Board of Directors voted to approve Resolution 1. None opposed or abstained. Motion approved unanimously.

• Bryan Garcia explained the IPC amendment to their PSA for the DOE grant funds through Clean Energy States Alliance for years 2 and 3 of the grant.

#### Resolution #2

WHEREAS, the Connecticut Green Bank ("Green Bank") is a subrecipient to the Clean Energy States Alliance for U.S. Department of Energy Award No. DE-EE0008758, in support of Bringing Low and Moderate Income households (LMI) Solar Financing Models to Scale ("Project"); and

WHEREAS, the Project requires the expertise of individuals with experience in the Connecticut Green Bank Model and specifically the Green Bank's LMI single-family solar homes program; and

WHEREAS, certain tasks to be conducted as part of the Initiative and the Project relate to work that is focused outside of the state of Connecticut that the Green Bank is unable to perform; and

WHEREAS, the staff of Inclusive Prosperity Capital, Inc (IPC) are intimately familiar with the Green Bank's model and the Green Bank's initiatives in the LMI market segment and have the capacity and authority to work outside of Connecticut.

**NOW**, therefore be it:

**RESOLVED,** that the Board of Directors approves Green Bank to amend Professional Service Agreement (PSA) 5574 with IPC as a strategic selection and award pursuant to the reasonings set forth in the memorandum to the Board dated June 25, 2021;

**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 PSA 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 affect the above-mentioned legal instrument or instruments.

Upon a motion made by John Harrity and seconded by Matthew Ranelli, the Board of Directors voted to approve Resolution 2. None opposed or abstained. Motion approved unanimously.

#### 4. 2021 Legislative Session in Review

• Brian Farnen reviewed the legislative update with Matthew Macunas. Brian Farnen stated the Environmental Infrastructure bill to expand the Green Bank's mission was approved which is exciting as this allows the Green Bank to make a bigger impact on green energy and beyond. Matthew Macunas reviewed what is now Public Act 21-48

#### Subject to Changes and Deletions

which is the Energy Efficiency Retrofit Grant for Affordable Housing, which the Green Bank may have a consultative role. He also summarized the Energy Storage bill, now PA 21-53. Brian Farnen explained the Property Tax Exemption for Renewable Energy bill, HB 6106, which clarifies that third party-owned systems are tax exempt which will help end the litigation with municipalities. Matt Macunas reviewed several other policies which passed in the recent legislative session.

- Bryan Garcia notes in relation to the environmental infrastructure addition, there
  is an element of adaptation and resiliency which seem the most prominent in
  "confronting climate change," which is the mission of the Green Bank. However,
  he will be working with the staff to develop a Comprehensive Plan for
  Environmental Infrastructure, as one is needed by statute. He also commented
  that the retrofit grant program is also a great benefit to affordable housing as the
  market transitions from net metering to a tariff, it will be treated appropriately as
  residential and not commercial properties.
- Mackey Dykes clarified for the retrofit grant program, to guarantee that tenants actually receive the benefits, PURA will need to develop a system for doing so. It will most likely be virtual net metering or a monetary disbursement separate from any utility subsidies or government subsidies.
- o Thomas Flynn asked when the last time the Green Bank presented to the municipalities what the Green Bank can do and the benefits they could receive from that partnership. Mackey Dykes answered that there has been extensive outreach to many of the towns through the SolarMAP program. Thomas Flynn clarified he meant in a broader sense, when last has the Green Bank done a type of elevator pitch to the municipalities. He stated the Green Bank may be missing an opportunity in that way. Bryan Garcia answered that is a good point and that outreach could be improved. Matt Ranelli expressed that the Green Bank should reach out and connect with CCM. Marketing has been very targeted recently on Solar MAP to deliver measurable impact, but Bryan will follow-up with CCM.

#### 5. Committee Recommendations and Updates

- a. Budget, Operations, and Compensation Committee and the Audit, Compliance, and Governance Committee
  - i. Tuition Reimbursement Benefit
- Eric Shrago presented the Tuition Reimbursement program change into an Educational Assistance program which has been recommended by the ACG Committee and BO&C Committee. The program would take advantage of a provision made possible by the CARES Act to allow employers to pay a portion of an employee's existing student debt without tax implications.
  - Brenda Watson asked about clarification about the tax implications of the change. Eric Shrago stated that the Green Bank would not be paying the FICO tax and the employee would not be paying Income Tax.

#### Resolution #3

WHEREAS, pursuant to Section 5.2.1 of the Connecticut Green Bank (Green Bank) Bylaws, both the Budget, Operations and Compensation Committee and the Audit, Compliance, & Governance Committee are charged with the review and approval of, and in its discretion recommendations to the Board of Directors (Board) regarding employee policies and oversight of the administrative functions of the organization; **WHEREAS,** the Green Bank Budget, Operations, and Compensation Committee made a recommendation of approval to the Board at its May 12, 2021 meeting to approve the proposed revisions to the Tuition Reimbursement Policy consistent with this memorandum dated June 18, 2021;

**WHEREAS,** the Green Bank Audit, Compliance and Governance Committee made a recommendation of approval to the Board at its June 14, 2021 meeting to approve the proposed revisions to the Tuition Reimbursement Policy consistent with this memorandum dated June 18, 2021;

**NOW**, therefore be it:

**RESOLVED,** that the Board of Directors of the Green Bank approve of the revisions to the Tuition Reimbursement Policy in the Green Bank Employee Handbook consistent with this memorandum dated June 18, 2021.

Upon a motion made by Brenda Watson and seconded by Steve Meier, the Board of Directors voted to approve Resolution 3. None opposed. Motion approved.

#### b. Budget and Operations Committee

- i. Proposed FY 2022 Targets, Budget, and Investments
- Eric Shrago summarized the FY 2022 Targets to the Incentive Programs which is 1633 projects for \$36.6 million in investment. This is lower than years past as the RSIP program comes to an end. The battery storage program has a contingency built into the budget, and should PURA make a decision then a revised budget will be presented to the Board. The progress on low-income solar is not expected to wind down as much even with the RSIP program end as there are portions of the new tariff that target low-income solar to keep it going.
  - Bryan Garcia added that there was no extension beyond the 350 MW in legislation. The draft decision by PURA on battery storage is also anticipated to be made soon. As well, much advocacy was done to promote benefits to lowincome solar customers so that the tariff would not become an issue.
  - Matthew Ranelli praised the effort and thanked the Green Bank for working hard to get the tariff bill passed and to continue to support LMI communities.
- Eric Shrago summarized the targets for the Financing Programs. The Green Bank plans to support \$61.9 million in investment through Financing Programs for 902 projects that deploy 19.1 MW of clean energy and should annually avoid 83,017 tons of CO<sub>2</sub>. Bryan Garcia added that there may be a financing program developed if the battery storage program is realized in addition to the incentive program that is a planned part of it with a focus on vulnerable communities to ensure access to solar PV and battery storage incentives.
- Eric Shrago reviewed the budget changes between FY 2021 and FY 2022. This includes a net year-on-year increase of \$2.99 million in revenues, a \$3.1 million increase to operating expenses, a \$31,000 increase to program incentives and grants, and a \$1.6 million increase to non-operating expenses.
- Eric Shrago summarized the FY 2022 Investments. Using primarily CEF and RGGI Proceeds, the Green Bank will invest \$31.8 million that will deliver \$13 million in interest

income over time. This is at a weighted average return of 4.51% over 9 years which exceeds the Green Bank's portfolio target of 4% interest over a 10-year term. The Green Bank is in a good place in its Sustainability Plan.

- Thomas Flynn asked what the percentage of growth in revenue year-over-year is. Eric Shrago answered that is about 6%. Thomas Flynn asked what the percentage growth in operating expenses is. Eric Shrago answered it is about 12%. Thomas Flynn commented that the optics right now are not great because the operating expenses are so high compared to revenue and expressed his concern for that. Bryan Garcia noted the expenses were bundled together across the company as a whole, and the meter replacements may be bumping the expenses this year, which are cost-recovered and without them the ratio is better. Thomas Flynn noted that it may be worth going back to reevaluate that break down. Bert Hunter commented that the complexity of the Green Bank's structure may make presenting things appear less than ideal. The group discussed the expense-to-revenue ratio, accounting methodology, and the budget further.
- John Harrity commented that the Green Bank is not a profit-making company, it is a government entity, which means revenues will never be considerably high. The goal is to provide services and he does not believe the optics are as bad as Thomas Flynn believes them to be. Thomas Flynn respectfully disagreed as having expenses so high is cause for concern regardless of company type. Bryan Garcia asked the Board for a vote on the Resolution with the agreement that an adjusted presentation will be made which clarifies the one-time or otherwise unusual expenses.
- Eric Brown asked if approving now or later would affect the provision, and Bryan Garcia answered that the budget approval is needed for the fiscal year start. John Harrity commented about the importance of the budget approval in order to continue to make progress and that in the end, the transparency is there and that is also key. Lonnie Reed agreed and noted that the Green Bank staff has a good history of responding to Board input like this.
- Eric Brown also commented that over the last few years, quasi-public entities have been under a great deal of scrutiny and that the sensitivity to legislative and media perceptions should be considered.

#### Resolution #4

WHEREAS, Connecticut Green Bank (Green Bank) staff have reviewed with the Budget, Operations, & Compensation (BOC) Committee the Fiscal Year 2020 Targets and Budget; and

WHEREAS, the Budget, Operations, and Compensation Committee discussed staff entering into new or extending existing professional services agreements (PSAs) with the following, contingent upon a competitive bid process having occurred in the last three years (except Sustainable Connecticut, Sustainable Environmental Associates, and Inclusive Prosperity Capital):

- I. Adnet Technologies, LLC
- II. AlsoEnergy LLC
- III. Alter Domus (formerly Cortland)
- IV. Clean Power Research, LLC
- V. CliftonLarsonAllen
- VI. CSW, LLC.
- VII. C-TEC Solar, LLC

- VIII. DNV GL USA Inc. (includes what was formerly ERS)
- IX. Environmental Control, Inc., d.b.a ENCON
- X. Guidehouse (a.k.a. Navigant)
- XI. Inclusive Prosperity Capital
- XII. Stark Raving LLC (d/b/a Stark / Raving Branding + Digital Marketing)
- XIII. Strategic Environmental Associates
- XIV. Sustainable CT

For fiscal year 2022 with the amounts of each PSA not to exceed the applicable approved budget line item

NOW, therefore be it:

**RESOLVED,** that Green Bank Board of Directors hereby approves: (1) the FY 2022 Targets and Budget, and (2) the PSAs with the 14 strategic partners listed above; and.

**RESOLVED,** the Green Bank Board of Directors authorizes and empowers the proper Green Bank officers to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to execute extensions and/or modifications to the agreements with Inclusive Prosperity Capital.

### Upon a motion made by John Harrity and seconded by Brenda Watson, the Board of Directors voted to approve Resolution 4. Steve Meier opposed. Motion approved.

The Green Bank staff is asked to represent the information given the issues brought forward at the next Board of Directors meeting.

### ii. Sustainability Plan Update – Request to Extend PSAs and Modify MOU with Inclusive Prosperity Capital

- Bryan Garcia summarized the history of the Green Bank in relation to the financial sweeps of 2017. He continued to explain the tranches of the Incentive Programs which have help stabilize the Green Bank cash flows since then. He also explained the Financing Program changes over time.
  - Jane Murphy explained some of the reasoning behind the variation to OPEB expenses. Thomas Flynn commented that he would like to know more about the allocations to Pension and OPEB. Bryan Garcia noted that the Green Bank would like to have the Comptroller in to discuss the pension and OPEB situation in the Fall of 2021.
- Bryan Garcia continued by reviewing the Sustainability Ratios, which are making steady improvement. He explained the progress made to the Non-profit Inclusive Prosperity Capital and how they support the Green Bank. He summarized the proposal to extend the PSAs with IPC and the MOU modifications.
  - Matthew Ranelli stated the proposal makes sense given the challenges of COVID-19. John Harrity commented his thanks to the staff which has been a key driver to its success.

#### Resolution #5

**RESOLVED**, that the Board of Directors ("Board") of the Connecticut Green Bank

("Green Bank") hereby approve of the modification and extension of the four Professional Service Agreements and the Memorandum of Understanding dated August 3, 2018 between the Green Bank and Inclusive Prosperity Capital, Inc. ("IPC") as described in the Memorandum to the Board dated June 18, 2021 (the "Memorandum") on terms and conditions substantially consistent with those described in the Memorandum 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 partnership between the Green Bank and IPC; 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 these resolutions.

Upon a motion made by Matthew Ranelli and seconded by Thomas Flynn, the Board of Directors voted to approve Resolution 5. Steve Meier opposed. Motion approved.

#### 6. Investment Updates and Recommendations a. Amalgamated Short Term Line of Credit Annual Renewal

• Louise Della Pesca explained the proposal to renew the Amalgamated Bank line of credit. The amount will be decreasing down to \$3.5million, the interest rate, front end fee, unused fee, and collateral are all unchanged from last year. The goal is to maintain a 2.0x debt service coverage ratio, tested quarterly at the borrower level, which has been maintained.

#### Resolution #6

WHEREAS, the selection of Amalgamated Bank ("Amalgamated") as the provider of an existing secured revolving line of credit in the amount of \$5,000,000 ("Original Revolving Credit Facility") followed the completion of a Request for Proposals ("RFP") process in accordance with the Connecticut Green Bank ("Green Bank") operating procedures that closed October 19, 2018 and was approved by the Green Bank Board of Directors ("Board") at a meeting held December 14, 2018;

**WHEREAS,** the Original Revolving Credit Facility was renewed by Amalgamated in 2020 and approved by the Board at a meeting held June 26, 2020;

WHEREAS, Green Bank staff has submitted to the Board a proposal for Green Bank to enter into an agreement with Amalgamated Bank ("Amalgamated") to amend the Original Revolving Credit Facility in the revised amount of \$3,500,000 ("Amended Revolving Credit Facility") whereby the Amended Revolving Credit Facility would continue to be used in order to meet Green Bank's short-term liquidity and working capital needs; and

WHEREAS, along with a general repayment obligation by Green Bank, Amalgamated would continue to be secured by a Guaranty of two subsidiaries: CT Solar Lease 1 LLC and CT Solar Loan 1 LLC (the "Guarantees"), as well as first priority security interest in, and an absolute assignment of all cash flows associated with, the CT Solar Lease 1 Notes portfolio and the CT Solar Loan 1 Notes portfolio (the "Collateral"); and

WHEREAS, Green Bank staff recommends that the Board approve the proposed

Amended Revolving Credit Facility, generally in accordance with the memorandum presented to the Board, dated June 18, 2021.

**NOW**, therefore be it:

**RESOLVED,** that the Board approves Green Bank to enter into the Amended Revolving Credit Facility with Amalgamated, to issue the Guarantees and pledge the Collateral in a manner materially consistent with the memorandum presented to the Board dated June 18, 2021; and

**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 Amended Revolving Credit Facility, the Guarantees and the Collateral 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 affect the above-mentioned legal instrument or instruments.

Upon a motion made by John Harrity and seconded by Steve Meier, the Board of Directors voted to approve Resolution 6. None opposed. Motion approved unanimously.

#### b. Skyview Facility

- Bert Hunter summarized the Skyview Facility background and history and noted there has been some trouble to maintain the facility's attractiveness in light of interest rates which are considerably lower than when the facility was first agreed, and the proposal is in response to that. It does not affect anything currently outstanding but is a going forward arrangement. Louise Della Pesca summarized the scope of the Skyview Facility, which has had strong portfolio performance across 28 projects financed. The facility interest rate is being asked to be amended however because the debt market has softened, and this would help invigorate the market and the Green Bank's sustainability. She reviewed the changes that would be made, which includes a change to the interest rate dependent on the off-taker, increasing the term length from 15 years to up to 25 years, and an increase to the advance rate from up to 70% to up to 75%.
  - Matthew Ranelli asked for an explanation with interaction of the SolarMAP projects and expressed concern with extending the term length to 25 years as it may cause issues with roofing and rooftop systems. Louise Della Pesca answered that part of the due diligence to finance for rooftop projects is a report on the condition of the roof along with roof warranty documentation. As well, adjustments to the amount of debt would be made for projects where the roof may need repair in the future. She noted that more consideration could be made to the term length for rooftop projects within the facility, however. Matthew Ranelli commented that although he agrees the Green Bank is careful, he is worried about others who may not be thinking so far into the future when extended terms may be on the table. Bert Hunter noted that this Resolution is only in relation to the financing against a PPA contract which will be 20 or 25 years regardless of

the underlying moneys that the Green Bank provides. The PPAs will be written for the longer terms anyway.

 Mackey Dykes contributed that the project are not Green Bank PPAs, they are projects that Skyview is developing or purchasing from other developers. He agreed with Matthew Ranelli's concerns about due diligence, and noted that in the SolarMAP program, the term length is capped at 20 years.

#### Resolution #7

**WHEREAS**, the Connecticut Green Bank ("Green Bank") has significant experience in the development and financing of commercial solar PPA projects in Connecticut;

**WHEREAS**, the Green Bank continually seeks new ways to work with private sector partners to meet the demonstrated need for flexible capital to continue expanding access to financing for commercial-scale customers looking to access solar and savings via a PPA;

WHEREAS, the Green Bank has established a working relationship with a private sector Connecticut-based solar developer, Skyview Ventures LLC ("Skyview"), and through that relationship the Green Bank has an opportunity to deploy capital for the development of clean energy in Connecticut, and specifically toward commercial solar PPA projects developed by Skyview in Connecticut ("Skyview PPA Projects");

WHEREAS, the Green Bank is implementing a Sustainability Plan that invests in various clean energy projects and products to generate a return to support its sustainability in the coming years;

WHEREAS, based on diligence of Green Bank staff for a senior secured loan facility ("Original Term Loan") the Green Bank Deployment Committee (the "Deployment Committee") passed resolutions at its meeting held on February 27, 2020 to recommend to the Green Bank Board of Directors (the "Board") the approval of the Term Loan transaction in an amount not to exceed \$2.3M as a Strategic Selection and Award pursuant to the Green Bank Operating Procedures Section XII;

WHEREAS, the Board passed resolutions at its meeting held on March 25, 2020 to approve the Original Term Loan transaction 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;

**WHEREAS,** the Board passed resolutions at its meeting held on April 24, 2020 to expand the Original Term Loan transaction to an amount not to exceed \$3.5M (the "Modified Term Loan");

WHEREAS, the Board passed resolutions at its meeting held on October 23, 2020 to expand the Modified Term Loan transaction to an amount not to exceed \$7M (the "Existing Term Loan"); and

**WHEREAS**, at its meeting held May 26, 2021, the Green Bank Deployment Committee recommended that the Board approve staff's request to amend and restate the Board's existing approval of the Existing Term Loan transaction on terms and conditions substantially consistent with those described in the memorandum presented to the Deployment Committee.

NOW, therefore be it:

**RESOLVED,** that the Board approves staff's request to amend and restate the Board's existing approval of the Existing Term Loan transaction as described in the memorandum submitted by the staff to the Board and dated June 18, 2021 (the "Memorandum") on terms and conditions substantially consistent with those described in the Memorandum 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 Existing Term Loan transaction.

Upon a motion made John Harrity by and seconded by Adrienne Houël, the Board of Directors voted to approve Resolution 7. None opposed and Matthew Ranelli abstained. Motion approved unanimously.

#### c. EV Recharging Station Carbon Offsets - Strategic Environmental Consultants Strategic Selection

 Matthew Macunas explained the background of the EV Charger Offset program. The program is growing but has slowed inaugural progress due to COVID-19. This Resolution seeks to extend the existing PSA with Strategic Environmental Associates.

#### Resolution #8

WHEREAS, the Connecticut Green Bank ("Green Bank") staff has submitted to the Green Bank Board of Directors (the "Board") a proposal to extend the professional services agreement with Strategic Environmental Associates ("SEA") in a not-to-exceed amount of \$160,000 for program development purposes increase the effectiveness and likelihood of success for creating open market carbon offsets from electric vehicle ("EV") charging to support accelerated deployment of EV chargers;

WHEREAS, SEA 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**, this project has ingratiated the Green Bank into the international conversation on clean transportation, as a provider of valued, innovative solutions;

WHEREAS, Green Bank staff recommends that the Board approve a grant between the Green Bank and Sustainable CT, generally in accordance with memorandum summarizing this request to the Board dated June 18, 2021; and

**NOW**, therefore be it:

**RESOLVED**, that the Board approves Green Bank to extend the professional services agreement with SEA 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 personal services 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 affect the above-mentioned legal instrument or instruments.

Upon a motion made by Matthew Ranelli and seconded by Binu Chandy, the Board of Directors voted to approve Resolution 8. None opposed. Motion approved.

#### 7. Executive Session

Upon a motion made by John Harrity and seconded by Steve Meier, the Board of Directors voted to move to Executive Session. None opposed or abstained, and the Board of Directors Meeting entered Executive Session at 11:03 am.

The Board of Directors Meeting ended Executive Session and resumed publicly at 11:32 am.

• Bryan Garcia highlighted and praised Eric Brown as his term on the Green Bank Board of Directors comes to an end. Lonnie Reed, Matthew Ranelli, and John Harrity also thanked Eric Brown for his hard work, dedication, and passion.

#### 8. Adjourn

Upon a motion made by John Harrity and seconded by Matthew Ranelli, the Board of Directors Meeting adjourned at 11:39 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 23, 2021

**Re:** Incentive Programs – Program Performance towards Targets for FY 2021 – Preliminary

#### Overview

FY 2021 Incentive Program targets and performance are focused on the Residential Solar Investment Program (RSIP), Smart-E and Solar for All. 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 recovering the 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. In addition, this memo will report on RSIP-E, the extension to RSIP approved by the Connecticut Green Bank Board of Directors, and progress in development of a battery storage incentive program.

#### **Performance Targets and Progress**

With respect to the Comprehensive Plan approved by the Board of Directors of the Green Bank on June 26, 2020 and revised on January 22, 2021, the following are the performance targets for FY 2021 and progress made to targets for the Incentive Programs (see Table 1) as of June 30, 2021.

### Table 1. Program Performance Targets and Progress Made to the Comprehensive Plan for FY 2021<sup>1</sup>

Key Metrics	Program Performance Revised Targets (as of 1/22/2021)	Program Progress <sup>2</sup>	% of Goal
Capital Deployed <sup>3</sup>	\$105,923,842	\$206,018,698	194%

<sup>1</sup> Performance data includes RSIP-E projects which accounted for 26.5 MW or 2917 projects, accounting for \$6,388,632 in Connecticut Green Bank investment and \$94,575,073 of total investment.

<sup>&</sup>lt;sup>2</sup> Includes only closed transactions

<sup>&</sup>lt;sup>3</sup> Capital Deployed is used to measure Investment actuals to targets and it includes fees related to financing costs and adjustments for Fair Market Value which are not included in the Gross System Cost. It represents: the Fair Market Value for Commercial/Residential Leases, 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.

Investment at Risk <sup>4</sup>		\$18,198,371	
Private Capital <sup>5</sup>		\$190,913,390	
Deployed (MW)	27.5	54.8	199%
# of Loans/Projects	3,913	7,104	182%
Leverage Ratio		11.5	

In summary, for Incentive Programs in FY 2021, there were 7,104 projects (achieving 182% of the goal) requiring \$206 M of investment (achieving 194% of the goal) that led to the deployment of 54.8 MW of clean energy (achieving 199% of the goal), that delivered a leverage ratio of 11.5 for private to public funds invested.

#### **Executive Summary for the Incentive Programs**

#### Residential Solar Investment Program (RSIP) and RSIP Extension (RSIP-E)

- RSIP submissions dropped significantly in the spring months of 2020 due to the COVID pandemic shut down but recovered in FY21 as pandemic impacts lessened in Connecticut starting in the summer and fall of 2020 and with the implementation of a Green Bank Board-approved extension to RSIP. Volume dropped in November 2020 and into the winter due to the program's largest third-party owner, Sunnova, ceasing participation in RSIP, along with the usual seasonal impact. A mitigating factor in the solar PV market was extension of the federal ITC which has helped stabilize the national market amidst COVID recovery efforts. See Figure 1 for annual RSIP (including RSIP-E) deployment by fiscal year.
- The Green Bank created RSIP-E to support the sustained orderly development of the residential solar market in light of severe COVID impacts in the spring of 2020, including uncertainty as to whether these impacts would persist into 2021. Because the Connecticut General Assembly's (CGA) 2020 session was cut short due to COVID, the opportunity to extend RSIP legislatively had been diminished, motivating the Green Bank to provide its own extension and cost recover these extended incentives through the sale of non-SHREC RECs. RSIP-E consists of Step 16 (up to 10 MW) and Step 17 (up to 22 MW), which began on 10/27/2020 and 1/30/2021, respectively, with both incentive steps also designed to backfill RSIP cancellations and help assure that RSIP reaches its statutory target of 350 MW of completed projects.
- Overall RSIP (plus RSIP-E) milestones as of the end of FY21 are:
  - Nearly 370 MW or 45,624 projects have been approved through RSIP and RSIP-E since FY12, with over 341 MW or 42,783 projects completed. RSIP is fully subscribed at 350 MW with respect to project approvals. RSIP completions will likely continue through the end of calendar year 2021.
  - Approved projects since FY12 to date are approximately 27% EPBB and 73% PBI.
  - Total investment in RSIP has reached \$1.4 billion, with Green Bank leveraging \$1.25 billion in private capital by investing nearly \$154.4 million, a leverage ratio of 9.1 for the program through FY21.

 <sup>&</sup>lt;sup>4</sup> 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
 <sup>5</sup> Private Investment is based on the Gross System Cost and includes adjustments related to financing costs or Fair Market Value.

- In collaboration with its EM&V partner, Guidehouse (formerly Navigant Consulting), the Green Bank team submitted a battery storage incentive program proposal on July 31, 2020 in response to the Request for Program Design Proposals (RFPD) under PURA's Distribution System Planning Docket, 17-12-03RE03. PURA issued a Straw Proposal on January 5, 2021 with an initial program design that included many elements of the Green Bank proposal. PURA issued a Proposed Final Decision on July 1, 2021, taking into consideration Public Act 21-53, An Act Concerning Energy Storage,<sup>6</sup> passed by the Connecticut General Assembly in the 2021 legislative session and signed into law by Governor Lamont on June 16, 2021, setting energy storage deployment targets of 300 MW by 2024, 650 MW by 2027, and 1000 MW by 2030, establishing programs for residential customers, commercial and industrial (C&I) customers, and front of the meter projects. In its Final Decision, PURA issued battery storage program targets totaling 580 MW by 2030, establishing a nine-year statewide Electric Storage Program that leverages the value of electric storage for the net benefit of the electric distribution system.<sup>7</sup> The Green Bank and the utility companies are directed to jointly administer the program, including an upfront incentive administered by the Green Bank and a performancebased incentive administered by the utility companies. The Green Bank is working toward aggressive program development deadlines in collaboration with the utilities and other stakeholders to launch these programs by January 1, 2022.
- Through PURA docket 20-07-01RE01<sup>8</sup>, the Green Bank team has supported the transition from RSIP plus net metering to the new tariff structure, participating in technical meetings, responding to interrogatories, and collaborating with PURA, DEEP, the solar industry, utilities and other stakeholders to assist with policy and program design and development, design of the new tariff structures, development of an updated model to calculate tariff rates, and safeguard the sustained orderly development of the residential solar PV market.
- The Green Bank continues solar PV soft cost reduction efforts through its leadership in Sustainable CT as well as in collaboration with SolarConnecticut (SolarConn), the state's solar PV industry trade group. SolarConn has led the effort to encourage solutions such as remote permitting applications and virtual/video inspections that would enable municipalities to continue operations during the pandemic while continuing these developments post-pandemic, including a pilot project to enroll municipalities in the new SolarAPP permitting platform developed by NREL.
- The federal Department of Energy (DOE) grant, "State Strategies for Solar Adoption in Low-and-Moderate Income Communities," led by the Clean Energy States Alliance (CESA), awarded in FY18 for three years, supported Green Bank efforts to encourage adoption of solar PV among LMI households and communities of color. The grant received a no-cost extension and concluded in December 2020.
- A second DOE-funded grant, "Bringing LMI Solar Financing Models to Scale", also led by CESA, began in FY20 and provides funding for three years to help accelerate widespread adoption of a residential rooftop solar PV deployment model among LMI single-family homes, based on the Green Bank's Solar for All program with PosiGen,

<sup>&</sup>lt;sup>6</sup> https://www.cga.ct.gov/2021/ACT/PA/PDF/2021PA-00053-R00SB-00952-PA.PDF 7

http://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/b30fbb00583d07c0852587050076e5ba/\$FIL E/17-12-03RE03%20PFD.pdf

<sup>&</sup>lt;sup>8</sup> PURA IMPLEMENTATION OF SECTION 3 OF PUBLIC ACT 19-35, RENEWABLE ENERGY TARIFFS AND PROCUREMENT PLANS – RESIDENTIAL TARIFF PROGRAM IMPLEMENTATION.

throughout the country – the Green Bank in partnership with Inclusive Prosperity Capital (IPC) will provide advisory support on this project.

#### Energize CT Smart-E Loan

- Volume: Due to the uncertainty of ongoing COVID-19 impacts on the clean energy industry, Smart-E set two goals for FY21: "best case" of 540 loans and a "best guess" of 50% of that, 270 loans. In a mid-year adjustment, the target was increased to 740. Smart-E ultimately exceeds its closed loan targets with 989 (134%), buoyed by two special offers that spanned the full fiscal year and were intended to support economic development and stimulus coming out of the pandemic.
- Smart-E 2.99% Special Offer: On July 1, 2020, in support of the re-opening of CT's clean energy economy, Smart-E launched its 2.99% special financing offer for heat pumps (air source ducted and ductless, heat pump water heaters, and ground source/geothermal), electrical vehicle charging stations, and battery storage. The campaign launched with numerous e-blasts to contractors, as well as direct outreach to participating lenders and our utility partners (Eversource, UI and Norwich Public Utilities). Marketing flyers were created for the contractors and digital ads were launched on Facebook and Google.
  - Air source heat pump volume (ducted and ductless systems) built steadily, as did interest in geothermal. Under guidance from CGB's Incentives team, a special geothermal offer was created that required data monitors be affixed to the systems. Special contractor applications, program guidelines, and terms and conditions were created for both the geothermal and battery storage special offers, requiring ample staff time and contractor training; however, these should be strong foundations for future offerings CGB might consider in support of these technologies.
  - The 2.99% Special Offer concluded on March 14, 2021 with 127 closed loans for \$1.2M.
- Spring Special Offer: With the focused 2.99% special offer achieving moderate success, program staff received approval from the CGB Deployment Committee on a proposal to transition to an interest rate buydown to 1.99% for 5, 7 and 10-year loan terms, with 0% carveouts for borrowers at or below 80% Area Median Income and for borrowers with crumbling foundations (the latter recommended by Eversource and UI energy efficiency program staff). The list of qualifying special offer measures was expanded to all Smart-E eligible measures, except for solar (due to the winding down of RSIP).
  - The Spring Special Offer launched on March 15, 2021 with a budget of approximately \$1.3M in ARRA funds for interest rate buydowns. The primary goal of the SSO was to assist with the recovery of Connecticut's clean energy economy.
  - Volume was strong right away with significant homeowner and contractor interest. The Spring Special Offer concluded on June 30, 2021 with approximately 600 closed loans for \$9.5M in amount financed.
- Deployment of ARRA-SEP Funds: Across both special offers, program staff anticipate a spend of roughly \$1.5M in ARRA-SEP funds for the over 730 closed loans.
- **Coordination:** The main theme of FY21 for the Smart-E program was coordination with all partners. The year began with continued coordination with lenders to provide support

to energy contractors seeking PPP loans. Program staff worked with contractors, lenders and utility partners to craft two unique special financing offers designed to help stimulate CT's clean energy economy across industries: HVAC, solar battery storage, home performance, and through nearly 200 newly scheduled Home Energy Solutions energy assessments.

#### PosiGen Solar for All

The PosiGen Solar for All partnership successfully adjusted sales and staff to remote operations in response to the COVID pandemic, avoiding the loss of sales and staff incurred by many other companies. Despite major industry and operational delays, the program reached the fiscal year target for closed projects with support from the municipal campaigns in partnership with Sustainable CT. With the added option to combine two of the preset system sizes, more systems were deployed to cover a larger percent of a home's electric load and capture solar savings.

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

<u>Residential Solar Investment Program (RSIP) and RSIP Extension Program (RSIP-E)</u> \$13.2 million in subsidies<sup>9</sup> from the Green Bank has attracted \$171.6 million of funds from other sources.

Program Data	Submitted but not Closed <sup>11</sup>	Closed <sup>12</sup>	Total	
Projects	198	5,785	5,983	
Installed Capacity (MW)	1.8	52.1	53.9	
Lifetime Clean Energy Produced (MWh)	52,149	1,482,088	1,534,237	
Annual Combined Energy Generated & Saved (MMBtu)	7,117	202,275	209,392	
Subsidies (\$'s)	\$418,937	\$13,204,726	\$13,623,663	
Credit Enhancement (\$'s)	\$0	\$0	\$0	
Loans or Leases (\$'s)	\$0	\$0	\$0	
Total Green Bank Investment (\$'s)	\$418,937	\$13,204,726	\$13,623,663	
Private Capital (\$'s)	\$6,238,424	\$171,560,255	\$177,798,679	
Direct Job Years	0	686	686	
Indirect & Induced Job Years	0	896	896	
Lifetime Tons of CO2 Emissions	28,824	819,193	848,017	

#### Table 2. RSIP Overview for FY 2021 (includes RSIP-E)<sup>10</sup>

Figure 1 provides historical perspective on projects incentivized through RSIP from FY 2012 through FY 2021. The average RSIP incentive was reduced steeply as shown by the lower/green portion of the bars in the chart, roughly 86% from \$1.73/W in FY 2012 to \$0.25/W in FY 2021, while the average net cost to the customer shown in the upper/black portion of the bars has stayed roughly stable, from \$3.40/W to \$3.18/W (with some fluctuations) over the same time period. Average installed costs have decreased 33% from \$5.13/W in FY 2012 to

<sup>&</sup>lt;sup>9</sup> Note the distribution of EPBB and PBI and the 6-year payout of the PBI.

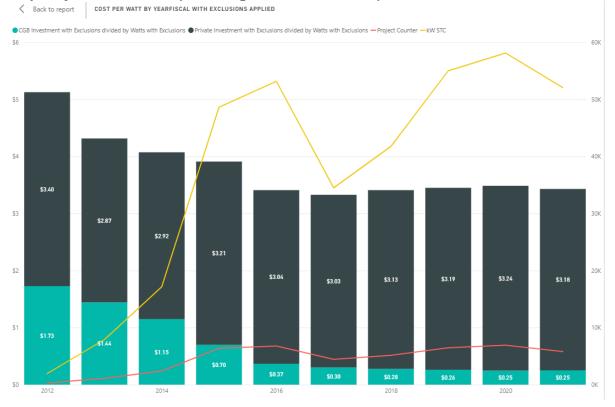
<sup>&</sup>lt;sup>10</sup> FY21 program data includes RSIP-E projects which accounted for 26.5 kW or 2917 projects, accounting for \$6,388,632 in Connecticut Green Bank investment and \$94,575,073 of total investment.

<sup>&</sup>lt;sup>11</sup> This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

<sup>&</sup>lt;sup>12</sup> Approximately 85% of projects approved result in project completions.

\$3.43 in FY 2021 while deployment has increased 2500% from nearly 2 MW in FY 2012 to 52 MW in FY 2021. Over the last few years, installed costs in Connecticut have not decreased as anticipated due to various factors including federal import tariffs, pandemic impacts, supply chain constraints and increasing equipment and raw material costs, rising customer acquisition costs, and increasing costs of doing business, despite ongoing solar PV soft cost reduction efforts at the federal and state levels.

### Figure 1. RSIP Historical Installed Costs, Incentives, Net Customer Cost, Installed Capacity, FY 2012-2021 (including RSIP-E in FY 2021)

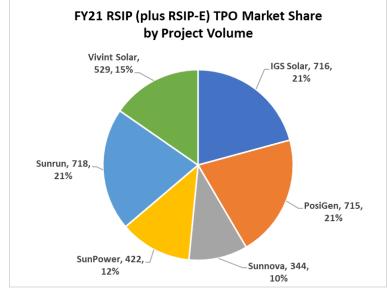


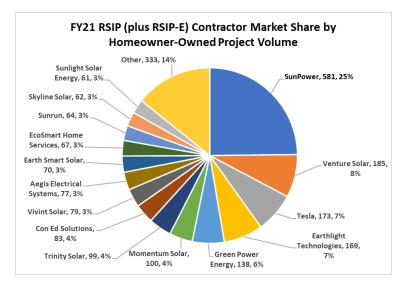
### Table 3. RSIP Historical Installed Costs, Incentives, Net Customer Cost, Installed Capacity, FY 2012-2021

YearFiscal	CGB Investment with Exclusions divided by Watts with Exclusions	Private Investment with Exclusions divided by Watts with Exclusions	Project Counter	kW STC	Total Investment with Exclusions divided by Watts with Exclusions
2012	\$1.73	\$3.40	288	1,940.23	\$5.13
2013	\$1.44	\$2.87	1,109	7,889.85	\$4.32
2014	\$1.15	\$2.92	2,383	17,139.17	\$4.07
2015	\$0.70	\$3.21	6,379	48,623.84	\$3.91
2016	\$0.37	\$3.04	6,780	53,161.25	\$3.41
2017	\$0.30	\$3.03	4,430	34,502.16	\$3.33
2018	\$0.28	\$3.13	5,147	41,752.75	\$3.41
2019	\$0.26	\$3.19	6,474	55,007.51	\$3.45
2020	\$0.25	\$3.24	6,913	58,123.18	\$3.48
2021	\$0.25	\$3.18	5,785	52,057.87	\$3.43

Nearly 60% of FY 2021 RSIP (plus RSIP-E) projects were third party owned (TPO), lower than the 80% TPO share in FY 2020 due to the exit part-way through the fiscal year of the program's highest-volume TPO, Sunnova. As illustrated in Figure 2, TPO volume in FY 2021 was led by Sunrun (21%), IGS Solar (21%), and PosiGen (21%), followed by Vivint (15%), SunPower (12%), and Sunnova (10% in FY 2021 as compared to 53% in FY 2020). The highest volume Contractors of homeowner-owned projects collectively deployed 40% of RSIP (plus RSIP-E) volume in FY 2021, with the top 15 deploying nearly 86% of homeowner-owned projects, including SunPower, Venture Solar, Tesla, Earthlight, Green Power Energy, Momentum Solar, Trinity Solar, Con Ed Solutions, Vivint Solar, Aegis, Earth Smart Solar, EcoSmart, Sunrun and Skyline Solar. Note that Sunrun acquired Vivint in October 2020.

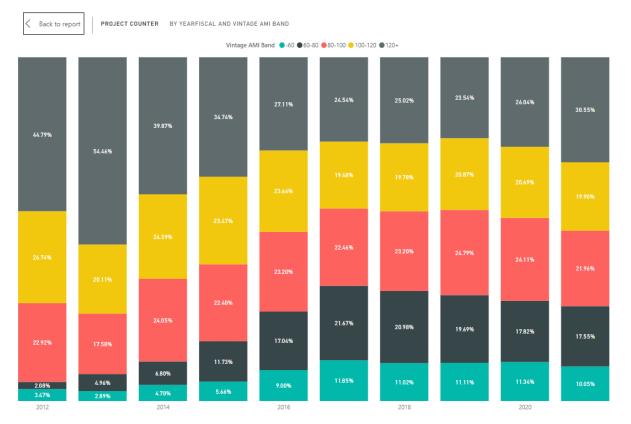






The RSIP continues to be successful in reaching low-and-moderate income (LMI) households. Adoption has largely been driven by the Green Bank's Solar for All partnership with PosiGen

and complemented by efforts supported by two Department of Energy LMI grants described in the Executive Summary of this memo. Of the nearly 45,624 projects approved under RSIP and RSIP-E through FY 2021, the Green Bank has in recent years made progress with respect to increased distribution of projects in LMI census tracks. Figure 3 shows approved projects by FY and Metropolitan Statistical Area (MSA) Area Median Income (AMI) Band. Approximately 50% of projects in FY 2016-2021 were deployed in low-to-moderate income (LMI) census tracts (AMI<100%), having increased from 28.5% in FY 2012. FY 2021 LMI market penetration specifically was 49.6%.



## Figure 3. Distribution of Approved RSIP (plus RSIP-E) Projects by FY and by Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands

For a breakdown of RSIP project volume and investment by census tracts categorized by Area Median Income (AMI) bands and Distressed Communities as designated by DECD, see Tables 4 and 5, respectively. It should be noted that RSIP is not an income targeted program.

Table 4 illustrates that RSIP (plus RSIP-E) was slightly below parity with respect to deployment among LMI census tracts. For example, while the <60% AMI Band represents 10% of 1-4 unit project units or owner-occupied households (OOH), the <60% AMI Band represents 8% of approved RSIP projects. Similarly, 15% of RSIP projects are deployed in the 60-80% AMI Band while 18% of OOH are in the 60-80% band. The 80-100% AMI Band is at parity with about 22% of projects and 22% of OOH, as is the 100-120% AMI Band with 20% of projects and 20% of OOH. The highest income band, 120%+, is slightly overrepresented with 36% of projects and 31% of OOH. Table 5 shows that RSIP (plus RSIP-E) deployment is under-represented in distressed communities in which 25% of all projects installed, while distressed communities account for 31% of project units or OOH.

MSA AMI Band	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
<60%	560	10%	3.6	7%	\$13,531,936	8%
60%-80%	978	18%	7.4	15%	\$26,922,779	15%
80%-100%	1,224	22%	10.8	22%	\$38,429,008	22%
100%-120%	1,109	20%	10.0	20%	\$35,385,950	20%
>120%	1,703	31%	18.1	36%	\$63,614,454	36%
Total	5,574	100%	50.0	100%	\$177,884,127	100%

 Table 4. RSIP (plus RSIP-E) Closed Activity in Metropolitan Statistical Area (MSA) Area

 Median Income (AMI) Bands

#### Table 5. RSIP (plus RSIP-E) Closed Activity in Distressed Communities

Distressed Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Distressed	1,765	31%	1,765	31%	13.0	25%
Not Distressed	4,009	69%	4,009	69%	39.0	75%
Total	5,774	100%	5,774	100%	52.0	100%

While the RSIP has been effective in reaching LMI households, Green Bank has also investigated whether the RSIP has been successful in reaching communities of color (i.e., Black and Hispanic households). When examining solar deployment by the racial and ethnic makeup of the census tract, the analysis demonstrated that RSIP has been very successful in reaching communities of color. As of the study conducted in FY19, on a per OOH basis, there were 86% more RSIP installations in majority Black neighborhoods, 18% more in majority Hispanic neighborhoods, and 20% more in No Majority race neighborhoods as compared to majority White neighborhoods – see Table 6 to compare % OOH vs % of RSIP for AMI Bands of <100%. A report on this analysis titled "Sharing Solar Benefits" was published in May 2019.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> ctgreenbank.com/wp-content/uploads/2019/05/Sharing-Solar-Benefits-May2019.pdf

Census	Majority Hispanic		Majority E	Black	Majority White		No Major	ity Race
Tract Income Level (AMI Band)	% of OO Homes	% of RSIP	% of OO Homes	% of RSIP	% of OO Homes	% of RSIP	% of OO Homes	% of RSIP
<60%	30.3%	24.91%	12.8%	22.41%	18.8%	14.58%	38.0%	38.09%
60%- 80%	10.8%	13.04%	5.7%	7.68%	62.7%	56.04%	20.7%	23.24%
80%- 100%	1.2%	1.57%	2.9%	4.48%	89.7%	87.94%	6.3%	6.01%
100%- 120%					95.0%	95.04%	5.0%	4.96%
>120%					96.1%	95.14%	3.9%	4.86%
Grand Total	3.6%	4.11%	2.1%	3.77%	85.3%	81.81%	9.0%	10.31%

Table 6. Owner-Occupied Housing and RSIP Distribution by Race/Ethnicity and Income

An emerging market is residential battery storage installed with solar PV. Nearly 450 RSIP (plus RSIP-E) projects have included battery storage (without an additional incentive for the battery storage) through FY21, 97% in the past three fiscal years. Approximately 80% of projects use Tesla PowerWall battery storage equipment; other battery technology equipment submitted through RSIP includes Sonnen, Generac, Enphase, SunPower, and SolarEdge. As previously noted, PURA has established a battery storage incentive program which will dramatically increase battery storage deployment beginning in 2022, currently under development with the Green Bank and the utilities as co-administrators.

As a requirement to receive the RSIP incentive, all residential solar PV customers must have an energy audit performed on their home to encourage adoption of energy efficiency measures along with solar PV, preferably the utility-administered Home Energy Solutions (HES) audit, but with other options if needed.<sup>14</sup> RSIP-wide, an estimated 90% of audits performed were either HES audits or DOE Home Energy Scores (HES). In FY 2020, 95% of audits were either HES or DOE HES. In FY 2021, the COVID pandemic resulted in a shutdown of HES services for several months; allowance was provided in RSIP for customers to sign a form that would allow them to have the energy audit performed within six months of HES resuming services. A lag in the timing of HES audits continued throughout FY 2021 due to high demand and scheduling backlogs. For energy audits that have completed in FY 2021 thus far, 77% were HES audits, 15% were RESNET HERS, and 6% were other Building Performance Institute (BPI) rated audits.

An area of ongoing importance is increasing the access and inclusivity of clean energy. While the U.S. Department of Energy (DOE) grant, "State Strategies for Solar Adoption in Low-and-Moderate Income Communities," concluded midyear, the Green Bank continues to be active in initiatives that expand solar PV access in underserved communities through a second DOE grant, "Bringing LMI Solar Financing Models to Scale. "Under the second grant, the Green Bank supports a public-sector learning network in replicating the Solar for All program in additional LMI markets. The model will accelerate the adoption of solar and energy efficiency solutions for

<sup>&</sup>lt;sup>14</sup> Non-HES audits may be performed by Building Performance Institute (BPI) certified auditors, Home Energy Rating System (HERS) raters, other certified energy managers or were exempt due to being new construction or having a health and safety exemption.

single-family LMI homes by providing financing templates, market insights, and development guidance. As part of the grant, Lawrence Berkeley National Laboratory analyzed the financial performance of the program and determined that it has successfully reached underserved customers and has reasonable repayment rates given participants' credit characteristics.

In addition, the Green Bank continues to actively participate in PURA docket 19-07-01 ("Statewide Share Clean Energy Facility Program") to develop a strong, statewide shared solar program to expand access. Although the program is in its second year, PURA continues to open opportunities to shape each year's procurement, where the Green Bank can continue to support preference for projects that serve distressed communities and promote resiliency. Lastly, the Green Bank continues to support the Solar for All program to bring solar and energy efficiency to LMI communities.

#### 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. Two promotional offers ran throughout FY21.

Program Data	Approved <sup>15</sup>	Closed	Total
Projects	436	989	1,425
Installed Capacity (MW)	0.1	0.8	0.9
Lifetime Clean Energy Produced (MWh)	292,574	1,159,015	1,451,589
Annual Combined Energy Generated & Saved (MMBtu)	40,872	94,240	135,112
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)	\$6,538,234	\$16,701,210	\$23,239,444
Direct Job Years	5	89	94
Indirect & Induced Job Years	6	116	122
Lifetime Tons of CO2 Emissions	158,000	620,145	778,145

#### Table 7. Energize CT Smart-E Loan Overview for FY 2021

#### Table 8. Energize CT Smart-E Loans by Channel

Smart-E Loan Channel	Closed	% of All Loans
EV	0	0%
Home Performance	78	8%
HVAC	796	80%
Solar	74	7%
Unknown <sup>16</sup>	2	0%
Total	989	100%

<sup>&</sup>lt;sup>15</sup> This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

<sup>&</sup>lt;sup>16</sup> Channel not known due to trailing documentation/timing of data pull.

	Credit Ranges								
Unknown	580- 599	600-639	640-679	680-699	700-719	720-739	740-779	780+	Grand Total
5	8	37	95	80	123	108	231	302	989
1%	1%	4%	10%	8%	12%	11%	23%	31%	100%

For a breakdown of Smart-E loan volume and investment by census tracts categorized by Area Median Income (AMI) bands and Distressed Communities as designated by DECD, see Tables 10 and 11. 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 10. Smart-E Loan Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands

MSA AMI Band	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
<60%	41	4%	0.0	0%	\$600,039	4%
60%-80%	84	9%	0.1	7%	\$1,191,561	8%
80%-100%	156	17%	0.1	10%	\$2,179,759	14%
100%-120%	212	23%	0.1	18%	\$3,435,923	22%
>120%	437	47%	0.5	65%	\$8,369,165	53%
Total	930	100%	0.8	1 <b>00</b> %	\$15,776,446	100%

Table 11. Smart-E Loan Closed Activity in Distressed Communities
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Distressed Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Distressed	176	18%	0.1	8%	\$2,332,912	14%
Not Distressed	812	82%	0.8	92%	\$14,358,421	86%
Total	988	100%	0.8	100%	\$16,691,333	100%

#### PosiGen Solar for All

A solar PV lease and energy efficiency financing program that focuses on the low to moderate income (LMI) market segment. Supported by \$15 million subordinated debt investment from the Green Bank, into a total fund of \$90 million to support over 4,150 homes, 1,004 homes in FY21 alone, with a focus on the low-to-moderate income market segment utilizing alternative underwriting approaches that examine factors such as bill payment history and bad debt and bank databases (see Table 9). In May 2019, the program updated their offering to combine the solar lease and optional energy efficiency agreement into a single agreement that provides solar installations and energy efficiency services to all customers. With the energy efficiency services no longer optional, more customers are receiving deeper efficiency work, ensuring overall

savings. The Solar for All program has been successful at reaching the LMI market segment with 57% of homes verified as low incomes.

Program Data	Approved <sup>17</sup>	Closed	Total
Projects	257	1,004	1,261
Installed Capacity (MW)	1.7	6.8	8.5
Lifetime Clean Energy Produced (MWh)	77,498	304,094	381,591
Annual Combined Energy Generated & Saved (MMBtu) <sup>18</sup>	10,835	42,369	53,204
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$1,285,000	\$5,020,000	\$6,305,000
Total Green Bank Investment (\$'s)	\$1,285,000	\$5,020,000	\$6,305,000
Private Capital (\$'s)	\$5,350,338	\$21,736,748	\$27,087,086
Direct Job Years	12	101	113
Indirect & Induced Job Years	15	132	148
Lifetime Tons of CO2 Emissions	42,835	168,038	210,873

Table 12. PosiGen Solar for All Overview for FY 2021

For a breakdown of PosiGen Solar for All volume and investment by census tracts categorized by Area Median Income bands and Distressed Communities as designated by DECD, see Tables 13 and 14. As an income-targeted program, this table illustrates the degree to which the goal of serving consumers in lower income communities is being met.

### Table 13. PosiGen Solar for All Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands

MSA AMI Band	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
<60%	221	23%	1.3	20%	\$5,181,232	20%
60%-80%	176	18%	1.1	17%	\$4,569,593	18%
80%-100%	186	19%	1.3	19%	\$4,901,350	19%
100%-120%	208	21%	1.5	22%	\$5,806,071	22%
>120%	187	19%	1.4	21%	\$5,513,720	21%
Total	978	100%	6.6	100%	\$25,971,966	100%

Distressed Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Distressed	484	48%	3.1	45%	\$12,189,037	46%
Not Distressed	520	52%	3.7	55%	\$14,567,711	54%
Total	1,004	100%	6.8	1 <b>00</b> %	\$26,756,748	100%

<sup>&</sup>lt;sup>17</sup> This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

<sup>&</sup>lt;sup>18</sup> Includes an additional 15.0 MMBtu for each project for the HES audit.

For a breakdown of the use of the Green Bank resources for Incentive Programs, see table 15 below.

 Table 15. Distribution of Green Bank Funds Invested in Projects and Programs through

 Subsidies, Credit Enhancements, and Loans and Leases for FY 2021

Program	Subsidie	S		Credit ncements	Loans and L	eases	Total <sup>19</sup>
RSIP (including RSIP-E)	\$13,204,726	100%	\$0	0%	\$0	0%	\$13,204,726
Smart-E Loan	\$0	0%	\$0	0%	\$0	0%	\$0
PosiGen	\$0	0%	\$0	0%	\$5,020,000	100%	\$5,020,000
Total	\$13,178,371	72%	\$0	0%	\$5,020,000	28%	\$18,198,371

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 16):

Key Metrics	RSIP (including RSIP-E)	Smart-E	PosiGen	Total Program Progress <sup>21</sup>
Date of Program Approval	Feb-2012	Nov 2012	Jun 2015	
Date of Program Launch	Mar-2012	Nov 2013	Jul 2015	
Ratepayer Capital at Risk	\$13,204,726	\$0	\$5,020,000	\$18,198,371
Private Capital	\$171,560,255	\$16,701,210	\$21,736,748	\$190,913,390
Deployed (MW)	52.1	0.8	6.8	54.8
# of Loans/Installations	5,785	989	1,004	7,104
Lifetime Production (MWh)	1,482,088	1,159,015	304,094	2,805,462
Annual Combined Energy Generated & Saved (MMBtu)	202,275	94,240	42,369	319,813

#### "Top 5" Headlines

The following are the "Top 5" headlines for the Incentive Programs:

#### <u>Residential Solar Investment Program (RSIP), Smart-E, PosiGen Solar for All, and Battery</u> <u>Storage</u>

 Five takeaways from Connecticut's new residential solar program changes Energy News Network (February 17, 2021) Connecticut utility regulators have reconfigured the state's residential solar program in an effort to ensure its growth and drive innovation. The Public Utilities Regulatory Authority, or PURA, released its final decision on the program last week, drawing praise from an array of stakeholders.

<sup>&</sup>lt;sup>19</sup> Totals are adjusted to remove projects that overlap programs.

<sup>&</sup>lt;sup>20</sup> Includes only closed transactions

<sup>&</sup>lt;sup>21</sup> Totals are adjusted to remove projects that overlap programs.

#### 2. <u>Connecticut Green Bank offering loans</u>

The Register Citizen, Business briefs (March 28, 2021) As part of its Smart-E Loan Spring Special Offer, the Connecticut Green Bank announces zero percent loan rates for Connecticut households that are at or below 80 percent Area Median Income... The Smart-E Loan unlocks financing for homeowners seeking to make home performance and energy upgrades, such as adding insulation, improving windows, updating heating, ventilation, and cooling (HVAC) systems with new boilers, furnaces, or heat pumps (air or ground source), installing electric vehicle charging stations, and adding battery storage to solar PV systems.

3. <u>Bristol Officials highlight new Solar Power and Energy efficient-lead program</u> WTNH.com (November 10, 2020)

Bristol officials highlight the Solar for All Bristol program offering solar power and energy efficiency measures to all homeowners regardless of income or credit score. One family in Bristol had their solar system installed Tuesday.

4. <u>Connecticut regulators want to pay utility customers to sync storage with demand</u> Energy Central (January 15, 2021)

A proposal by the state's Public Utilities Regulatory Authority is designed to drive the deployment of 580 megawatts of energy storage capacity by 2030. Connecticut utility regulators are proposing the state's first electric storage program, hoping to get batteries widely deployed to serve both as emergency backup power in ratepayers' homes and virtual power plants that can feed the grid during times of peak demand.

5. <u>CT low-income families burdened by energy, transit and housing costs, study finds</u> Westfair Communications Online (December 3, 2020)

The combined spending on energy, transportation and housing in Connecticut households exceeds affordable levels and creates a difficult financial burden on low- and moderate-income residents, according to a study released by the Connecticut Green Bank and Operation Fuel. "Mapping Household Energy and Transportation Affordability in Connecticut".

#### **Customer Reviews**

The following is a sampling of customer reviews provided by homeowners who participated in the EnergizeCT Smart-E Loan program in FY21:

- "I found this program to be highly valuable and allowed me to do my project properly without having to cut corners because of costs." – Roberta, Plymouth
  - Project: insulation, central air conditioning, a furnace, and replacement windows
- "The process was extremely easy and quick. I like how it covers a wide range of services." – Shaun, New Britain
  - Project: On-demand tankless water heater
- "Super helpful. And got approved very quick." Juan, New Fairfield
   Project: Air source heat pump and furnace
- "From quote through application, closing and install, everyone was very helpful and supportive. We would highly recommend the process." – Andrea, Fairfield
  - Project: Steam boiler

#### **Lessons Learned**

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

Residential Solar Investment Program (RSIP), RSIP-E, and Battery Storage

- The COVID pandemic taught us that change can happen suddenly, but the clean energy industry is innovative and resilient. The pandemic created uncertainty in the U.S. (and global) economy, and certainly for the clean energy industry. It will be important for the industry to continue to continue to innovate where possible, such as with remote sales, use of satellite and drone technology for site assessment, and remote permitting and virtual/video inspection at the municipal level to be more resilient to unexpected events while also streamlining processes and soft cases to improve the status quo. While the industry successfully adjusted to COVID, it was also important for the Green Bank and other program administrators to provide flexible solutions that would mitigate COVID impacts as well as streamline processes for efficiency and resiliency.
- The Green Bank has experienced how persistence pays off in the policy and regulatory landscape in Connecticut. Major policy uncertainties have resolved in FY 2021 and the beginning of FY 2022 with decisions by PURA on the new tariff policy and the battery storage incentive policy and program. The Green Bank played a very active role in the development of these policies and programs, after many years of participation, assuring that Connecticut clean energy policy supports the sustained orderly development of the residential solar PV market and now the battery storage market. For battery storage development in particular, the Green Bank took an active leadership role starting in 2018 with its incentive program proposal into the Electric Efficiency Partners Program and then a comprehensive battery storage incentive program proposal based on robust program evaluation principles; these long term efforts and persistence have influenced policy development and have enabled the Green Bank to continue to play a significant role in clean energy market development in the state. Growth of the battery storage market is critical to integration of renewable technologies including solar energy on the grid, enabling increasing adoption of these technologies well into the future.
- With the transition from RSIP plus net metering to the new tariff structure, scheduled to begin January 1, 2022, it will be important for the Green Bank to continue productive collaborations with the utility companies to help ensure the success of Connecticut's future solar policy, supporting the sustained orderly development of the residential solar PV industry.
- Working closely with RSIP contractors and system owners, SolarConn, and technology providers has been valuable in proposal development and will continue to be important for program development over the coming years, in particular for battery storage.
- The RSIP team will continue to collaborate with the Green Bank Operations team to improve and standardize program processes. Ongoing collaboration with operations, finance and accounting on REC monetization and RSIP payment processes will continue to improve program administration efficiency.
- Staff growth will continue to be important to achieve program transition and closeout for RSIP and development of the battery storage incentive program. Staff flexibility and growth, supported by training and guidance from senior leadership, will be

important to facilitate program transition and close-out as well as development of new programs.

#### Energize CT Smart-E Loan

- Despite competition in the market, contractors continued using Smart-E.
  - The solar financing market has blossomed in the last few years which has drawn local solar installers away from local products like the Smart-E Loan and to bigger national financing options. Some solar contractors still preferred the Smart-E Loan due to the contractor funded IRB option, no additional contractor fees, and the timeliness and transparency on payments they are owed. HVAC and home performance contractors and their customers prefer that Smart-E has no down payment requirement and that the loan has flexibility in eligible measures and underwriting criteria.

#### COVID-19 had varying impacts on Smart-E

 Despite the pandemic, Smart-E ultimately exceeded its targets in FY21 with the help of two attractive special financing offers. Smart-E's volume was buoyed by the HVAC industry which remained operational in the colder winter and spring months, despite the pandemic stopping or significantly scaling back work like insulation, windows and even some solar. Loan performance also stayed consistent with continued low delinquency and default rates and only about 1% of loans requesting deferrals.

#### Certain technologies will need additional homeowner education

The 2.99% special offer saw moderate success in large part because the measures that qualified (heat pumps, battery storage and EV chargers) are not as familiar to the average homeowner as traditional heating and cooling systems or as recognizable as rooftop solar. Program staff utilized free educational resources from partner organizations like the Northeast Energy Efficiency Partnership <sup>22</sup>("NEEP") and Solar United Neighbors<sup>23</sup> to promote air source heat pumps and battery storage on the program's website and promotional materials, but these efforts will remain necessary until these technologies are more widely adopted.

#### PosiGen Solar for All

 Pandemic brought increased sales interest and new operational challenges, creating hurdles to meet customer expectations. Due to a boom in interest in solar over the COVID year, PosiGen saw record sales numbers, exceeding this fiscal year's targets. However heightened volume came during a number of operational challenges, from equipment delays from manufacturers to permitting stopgaps with office closures. These challenges stressed the standard operating procedures, making it tough to meet customer demand and expectations.

#### Incentive Programs FY 2022 Targets

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

<sup>&</sup>lt;sup>22</sup> NEEP's Air Source Heat Pump Buying Guide: https://neep.org/sites/default/files/resources/ASHP\_buyingguide\_5.pdf

<sup>&</sup>lt;sup>23</sup> Solar United Neighbors' Battery Storage Guide: https://www.solarunitedneighbors.org/storage/

Program	# of Projects	Capital Deployed	Clean Energy Deployed (MW)	Ann. GHG Emissions Avoided (TCO2)
Residential Solar Investment Program	471	\$13.7	4,000	7,049
Solar for All Program	96	\$2.5	660	1,154
Equitable Modern Grid <sup>24</sup>	362	\$11.8	5,000	-
EnergizeCT Smart-E Loan	<u>800</u>	<u>\$11.2</u>	<u>800</u>	<u>15,168</u>
Total <sup>25</sup>	1,633	\$36.6	9,800	22,217

#### Table 17. Number of Projects, Capital Deployed, and Clean Energy Deployed (MW)

For the Incentive Programs, there are 18.34 full time equivalent staff members supporting five (5) different products and programs.

<sup>&</sup>lt;sup>24</sup> The Green Bank will be administering an upfront battery storage incentive beginning January 1, 2022, implementing PURA's Final Decision in Docket No. 17-12-03(RE03) – Electric Storage.

<sup>&</sup>lt;sup>25</sup> The total does not count Solar for All projects separately because all Solar for All projects are also RSIP projects and therefore already counted.

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## 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 23, 2021

Re: Financing Programs – Program Performance towards Targets for FY 2021 – 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 provides capital to building owners to make clean energy improvements on their 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:

- <u>C-PACE</u><sup>1</sup> 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.
- <u>Green Bank Solar PPA</u> 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 PPAs ")to finance projects while reducing energy costs for the host customer.
- <u>Small Business Energy Advantage ("SBEA")</u> Eversource Energy administered onbill 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).
- <u>Multifamily Products</u> 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

<sup>&</sup>lt;sup>1</sup> CGS 16a-40g

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-totime 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 Progress**

With respect to the Comprehensive Plan approved by the Board of Directors of the Green Bank on June 26,2020 and revised on January 22, 2021, the following are the performance targets for FY 2021 and progress made to targets for the Financing Programs (see Table 1) as of June 30, 2021.

### Table 1. Program Performance Targets and Progress Made to the Comprehensive Plan for FY 2021

Key Metrics	Program Performance Revised Targets (as of 1/22/2021)	Program Progress <sup>2</sup>	% of Goal
Capital Deployed <sup>3</sup>	\$69,215,000	\$78,580,077	114%
Investment at Risk <sup>4</sup>		\$19,500,955	
Private Capital <sup>5</sup>		\$59,079,122	
Deployed (MW)	20.7	18.6	90%
# of Loans/Projects	1,273	513	40%
Leverage Ratio		4:1	

In summary, for Financing Programs in FY 2021, there were 513 projects (achieving 40% of the goal) requiring \$78.5M of investment (achieving 114% of the goal) that led to the deployment of 18.6 MW of clean energy (achieving 90% of the goal), that delivered a leverage ratio of 4:1 for private to public funds invested.

<sup>&</sup>lt;sup>2</sup> Includes only closed transactions

<sup>&</sup>lt;sup>3</sup> Capital Deployed is used to measure Investment actuals to targets and it includes fees related to financing costs and adjustments for Fair Market Value which are not included in the Gross System Cost. It represents: the Fair Market Value for Commercial/Residential Leases, 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.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> Private Investment is based on the Gross System Cost and includes adjustments related to financing costs or Fair Market Value.

### **Executive Summary for the Financing Programs**

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

- The national C-PACE market continues to grow as C-PACE becomes more of an established asset, with over \$2 billion in investment around the country. Our program reflects this interest as we have more and more capital providers registering i, currently at 22.
- Nearly tripled the capital deployed target primarily due the new construction program finally yielding projects.
- Met the Green Bank-funded project target but was below the capital deployed target. The average project size for Green Bank funded projects continues to decrease.
- Continued to build the sustainability of the program, with FY21 net income expected to be close to \$1m.

#### Commercial Solar PPA

- In total, closed 39 commercial solar PPA deals with a value of \$16.2M.
- Expanded the commercial solar lending facility with Skyview Ventures in CT by deploying a further \$1.7M against 10 PPA projects
- Closed on a financing with Inclusive Prosperity Capital to set up an on-going, sustainable platform to develop commercial solar PPA projects in Connecticut that will see IPC as the long term asset owner and CGB as lender. This transaction allows for the deployment of \$5M in construction financing and \$5M in term financing.
- Sold four solar PPA projects to IPC (financed with CGB term debt) and advanced construction financing to fund one further 'in development' project.
- The IPC Connecticut solar PPA pipeline, which CGB will finance, consists of 29 projects with a value of 8.1MW of capacity, and \$15.3M construction cost. CGB made steady progress in FY21 on the Lead by Example program to develop onsite solar for state entities:
  - PPAs were signed with three off-takers, covering the first 12 projects (round 1 of the state solar program), comprising 11MW of capacity and \$19.3M of construction cost. It was a multi-year effort to develop this 'form contract' PPA which can now be used for future rounds of the program.
  - Engineering, Procurement and Construction agreements were signed with two contractors to install the 12 projects in 'round 1'. The contractors were selected through a competitive bidding process.
  - Through a competitive process, 5 finalists were selected as potential owners of the round 1 projects. The final round of binding bidding is in process and will be finalized in FY22. The finalists range from financial institutions with a national presence to regional solar asset owners.
  - Building on the precedential processes established in round 1, a further 8.2MW (AC) worth of Renewable Energy Credit contracts were secured for projects identified as round 2, and a competitive process has been launched to identify an installation contractor(s).
- Leveraging the development experience of commercial solar and state solar, CGB has created the Solar Municipal Assistance Program (SolarMAP) to bring PPA projects to CT municipalities.
- In FY21, PPAs were signed with 5 towns as part of SolarMAP, to build 16 projects, comprising 3.4MW capacity, with a construction cost of \$5.5M.
- An installation contractor was selected through a competitive process.
- CGB bid for a further 4.2MW worth of RECs for additional SolarMAP projects; an award decision is expected in early FY22.

Small Business Energy Advantage (SBEA)

 Underperformed utility expectations of program financing volume, primary due to COVID-19 requiring a lengthy shutdown of the program

#### Multifamily Affordable Housing

- Five (5) term loans were funded including 2 CPACE loans, 1 ECT Health & Safety Loan, and follow-on investments from other lenders were made for 2 previously funded predevelopment loans (including DOH/CHFA term funding for adaptive reuse of a school to affordable housing, and a CDFI funded loan for Seabury coop.)
- Two (2) additional ECT H&S loan applications were received and underwritten in FY'21, in the amount of approximately \$1MM. These loans are anticipated to be approved and close in FY'22. Once approved and funded, it is expected that the ECT Health & Safety Loan funds will have been fully deployed. As dollars revolve back in, these will be used to fund future health and safety projects.
- Two (2) LIME loans for condominiums were approved in FY'21. One (1) of these two loans was re-approval of a loan approved in 2018 that was still pulling all the pieces together required for loan closing and project implementation.
- Four (4) of the seven (7) funded and approved term loans were for condos and coops, a continued trend and sectors where the Multifamily Programs to provide significant funding and TA support, because of challenges securing condo and coop funding from other lenders.
- Zero (0) solar PPA loans were closed in FY'21 despite substantial marketing and outreach efforts focused on affordable multifamily housing projects in collaboration with DOH and CHFA. (Projects were too small and economics did not work for most of the prospective projects identified. Several projects are still working through the approval process, which involves the complexities of housing authority and non-profit board approvals. Solar PPA economics are anticipated to improve significantly in FY'22 with the new solar tariff incentives for multifamily housing. We will revisit projects that did not work under the current ZREC incentives.)
- Zero (0) pre-development loans were funded in FY'20.
- COVID-19 continued to strongly impact Multifamily Program activity in FY'21. With many property owners and managers stretched thin dealing with this health crisis as well as uncertainty about rental incomes and financial stability, folks continued to retreat. We expect this situation to begin turning around in FY'21.

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.

Program Data	Approved <sup>6</sup>	Closed	Total
Projects	13	33	46
Installed Capacity (MW)	0.5	2.6	3.1
Lifetime Clean Energy Produced (MWh)	15,012	58,908	73,919
Annual Combined Energy Generated & Saved (MMBtu)	893	97	990
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$581,625	\$2,433,507	\$3,015,132
Total Green Bank Investment (\$'s)	\$581,625	\$2,433,507	\$3,015,132
Private Capital (\$'s)	\$8,354,301	\$36,581,859	\$44,936,160
Direct Job Years	40	185	225
Indirect & Induced Job Years	51	238	289
Lifetime Tons of CO2 Emissions	8,297	32,560	40,857

#### Table 2. C-PACE and C-PACE-backed Commercial Solar PPA Overview for FY 2021

C-PACE has been used to fund projects in economically diverse locations across the state as reflected by Table 3 for Metropolitan Statistical Area (MSA) Area Median Income (AMI) and Table 4 for Distressed Communities as designated by DECD. 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 Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands

MSA AMI Band	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
<60%	8	24%	0.4	14%	\$10,038,478	26%
60%-80%	4	12%	0.3	12%	\$15,281,827	39%
80%-100%	5	15%	0.2	8%	\$5,120,098	13%
100%-120%	4	12%	0.2	9%	\$1,255,053	3%
>120%	12	36%	1.5	57%	\$7,319,909	19%
Total	33	100%	2.6	100%	\$39,015,366	100%

### Table 4. C-PACE and C-PACE-backed Commercial Solar PPA Closed Activity in Distressed Communities

Distressed Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Distressed	10	30%	0.7	27%	\$5,031,085	13%
Not Distressed	23	70%	1.9	73%	\$33,984,281	87%
Total	33	100%	2.6	100%	\$39,015,366	100%

#### **Commercial Solar PPA**

<sup>&</sup>lt;sup>6</sup> This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

A third-party ownership offering that combines public and private funding through the Connecticut Solar Lease Program 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 - 2 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 will continue to serve the market with our PPA product through Inclusive Prosperity Capital.

Program Data	Approved <sup>7</sup>	Closed	Total
Projects	2	39	41
Installed Capacity (MW)	0.0	16.0	16.0
Lifetime Clean Energy Produced (MWh)	0	456,351	456,351
Annual Combined Energy Generated & Saved (MMBtu)	0	62,283	62,283
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
PPAs (\$'s)	\$0	\$16,227,522	\$16,227,522
Total Green Bank Investment (\$'s)	\$0	\$16,227,522	\$16,227,522
Private Capital (\$'s)	\$0	\$10,697,955	\$10,697,955
Direct Job Years	0	74	74
Indirect & Induced Job Years	0	95	95
Lifetime Tons of CO2 Emissions	0	252,238	252,238

#### Table 5. Commercial Solar PPA Overview for FY 2021

The Commercial Solar PPA program has been used to fund projects in economically diverse locations across the state as reflected by Table 6 for Metropolitan Statistical Area (MSA) Area Median Income (AMI) and Table 7 for Distressed Communities as designated by DECD. It should be noted that Commercial Solar PPA is not an income targeted program.

Table 6. Commercial Solar PPA Closed Activity in Metropolitan Statistical Area (MSA	)
Area Median Income (AMI) Bands	

MSA AMI Band	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
<60%	1	3%	0.1	1%	\$0	0%
60%-80%	3	8%	0.6	4%	\$786,121	3%
80%-100%	4	11%	1.6	10%	\$2,533,807	10%
100%-120%	10	27%	3.5	22%	\$6,212,927	24%
>120%	19	51%	9.8	63%	\$16,704,925	64%
Total	37	100%	15.6	100%	\$26,237,780	100%

<sup>&</sup>lt;sup>7</sup> This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

Distressed Designation	# of Project Units	% Project Unit Distribution	Installed Capacity (MW)	% MW Distribution	Total Investment	% Investment Distribution
Distressed	1	3%	1	3%	0.1	1%
Not Distressed	33	97%	33	97%	8.8	99%
Total	34	100%	34	100%	8.9	100%

#### Table 7. Commercial Solar PPA Closed Activity in Distressed Communities

#### 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 4 year (7 in the case of the state) loans at 0% and they are repaid on their electricity bill.

Program Data	Approved	Closed	Total
Projects	0	438	438
Installed Capacity (MW)	\$0	0.0	0.0
Lifetime Clean Energy Produced (MWh)	\$0	147,470	147,470
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	\$839,926	\$839,926
Total Green Bank Investment (\$'s)	\$0	\$839,926	\$839,926
Private Capital (\$'s) <sup>8</sup>	\$0	\$7,938,075	\$7,938,075
Direct Job Years	0	47	47
Indirect & Induced Job Years	0	60	60
Lifetime Tons of CO2 Emissions	0	79,951	79,951

#### Table 8. SBEA Overview for FY 2021

#### **Multifamily**

Offerings for both the affordable and market rate multifamily segments include pre-development and term loan programs that enable property owners to assess, design, fund and implement energy measures and remediate related health and safety measures. Pre-development loan programs were funded by the \$5 million program-related investment from the MacArthur Foundation through the Housing Development Fund (HDF), backed by a Green Bank repayment guaranty. Term 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.

<sup>&</sup>lt;sup>8</sup> This number includes energy and health and safety capital deployed.

#### Table 9. Multifamily Term Financing Overview for FY 2021

Program Data	Approved <sup>9</sup>	Closed	Total
Projects	7	5	12
Installed Capacity (MW)	0.122	0.041	0.163
Lifetime Clean Energy Produced (MWh)	3,473	1,170	4,643
Annual Combined Energy Generated & Saved (MMBtu)	376	1,370	1,746
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$0	\$213,691	\$213,691
Total Green Bank Investment (\$'s)	\$0	\$213,691	\$213,691
Private Capital (\$'s) <sup>10</sup>	\$619,256	\$3,981,449	\$4,600,705
Direct Job Years	3	22	25
Indirect & Induced Job Years	4	29	33
Lifetime Tons of CO2 Emissions	1,920	646	2,566

#### Table 10. Multifamily Pre-Development Financing Overview for FY 2021

Program Data	Approved	Closed	Total
Projects	36	0	36
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)	\$50,925	\$0	\$50,925
Total Green Bank Investment (\$'s)	\$50,925	\$0	\$50,925
Private Capital (\$'s)	\$465,000	\$0	\$465,000
Direct Job Years	3	0	3
Indirect & Induced Job Years	4	0	4
Lifetime Tons of CO2 Emissions	0	0	0

#### Table 11. Multifamily Number of Units

	Approved <sup>11</sup>	Closed	Total
Affordable	1,204	113	1,317
Market Rate	779	0	779
Total # of Units	1,983	113	2,096

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- andmoderate-income residents in communities of opportunity. (Connecticut is the most

<sup>&</sup>lt;sup>9</sup> This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

<sup>&</sup>lt;sup>10</sup> This number includes energy and health and safety capital deployed.

<sup>&</sup>lt;sup>11</sup> This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

geographically segregated state in the nation, with most LMI and people of color concentrated in low-income urban communities.)

#### Strategic Investments

Program Data	Approved <sup>12</sup>	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)	99,531	0	99,531
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) <sup>13</sup>	\$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

 Table 12. Strategic Investment Financing Overview for FY 2021

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 2021

Program	Subsidies		Credit Loans and Le		eases	Total <sup>14</sup>	
Commercial Lease	\$0	0%	\$0	0%	\$16,227,522	100%	\$16,227,522
CPACE	\$0	0%	\$0	0%	\$2,433,507	100%	\$2,433,507
SBEA	\$0	0%	\$0	0%	\$839,926	100%	\$839,926
Multi-Family Health & Safety		0%		0%		0%	\$0
Multi-Family Pre- Dev	\$0	0%	\$0	0%	\$0	0%	\$0
Multi-Family Term	\$0	0%	\$0	0%	\$213,691	100%	\$213,691
Strategic Investments	\$0	0%	\$0	0%	\$0	0%	\$0
Total	\$0	0%	\$0	0%	\$19,500,955	100%	\$19,500,955

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):

<sup>&</sup>lt;sup>12</sup> This represents projects that are currently approved but not closed. It does not include projects that were approved but have since closed.

<sup>&</sup>lt;sup>13</sup> This number includes energy and health and safety capital deployed.

<sup>&</sup>lt;sup>14</sup> Totals are adjusted to remove projects that overlap programs.

Key Metrics	C-PACE	Commercial Lease	SBEA	Multifamily Pre-Dev <sup>16</sup>	Multifamily Term	Strategic	Total Program Progress <sup>17</sup>
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	\$2,433,507	\$16,227,522	\$839,926	\$0	\$213,691	\$0	\$19,500,955
Private Capital	\$36,581,859	\$10,697,955	\$7,938,075	\$0	\$3,981,449	\$0	\$59,079,122
Deployed (MW)	2.6	16.0	0.0	0.0	0.0	0.0	18.6
# of Loans/Installations	33	39	438	0	5	0	513
Lifetime Production (MWh)	58,908	456,351	147,470	0	1,170	0	662,729
Annual Combined Energy Generated & Saved (MMBtu)	97	62,283	0	0	1,370	0	62,380

#### Table 14. Program Progress Made in FY 2021<sup>15</sup>

#### "Top 5" Headlines

The following are the "Top 5" headlines for the Financing Programs:

#### 1. Connecticut C-PACE Program Spurs \$200M in Investments

#### Smart Energy Decisions

In May, the Connecticut Green Bank surpassed \$200 million in clean energy investment in local businesses through the state's Commercial Property Assessed Clean Energy (C-PACE) program. This achievement makes Connecticut's C-PACE program the most successful in per capita development compared to other state programs. The program supported nearly 340 closed projects that account for an estimated lifetime energy cost savings of \$300 million. The projects include energy efficiency upgrades and renewable energy installations, including over 42 MW of installed solar capacity, which in total is expected to reduce energy usage by over 5 million MMBTUs.

#### 2. CastleGreen Finance Closes the Largest C-PACE Project in Connecticut

#### EE Online

In June, CastleGreen Finance announced the closing of One Park Road, West Hartford, CT, a \$13,767,000 Commercial Property Assessed Clean Energy (C-PACE) transaction. In partnership with Lexington Partners LLC, the property developer, and the Connecticut Green Bank, the program administrator for the state of Connecticut C-PACE program, this is the largest C-PACE project to date, and the redevelopment project will add a 292-unit multi-family housing complex on the 22-acre property.

### 3. Solar MAP guides Connecticut munis through project development process

**PV Magazine** 

<sup>&</sup>lt;sup>15</sup> Includes only closed transactions

<sup>&</sup>lt;sup>16</sup> Multifamily is a collection of individual programs, each with their own approval and launch dates.

<sup>&</sup>lt;sup>17</sup> Totals are adjusted to remove projects that overlap programs.

The Connecticut Green Bank announced the first cities in the state to make use of its new Solar Marketplace Assistance Program, or Solar MAP. Solar MAP is designed to help towns and cities navigate the process of installing solar at their public buildings and achieve energy savings. The Green Bank said the program provides support throughout the development process, from identifying viable sites to soliciting installation services and arranging financing.

#### 4. Connecticut Green Bank honors local properties for cleantech projects

Westfair Communications Online

The Connecticut Green Bank announced the winners of the 2020 PACEsetter Awards, which recognized businesses that advanced the cleantech movement through the organization's Commercial Property Assessed Clean Energy (C-PACE) program.

#### 5. <u>Spotlight on PACE: PACE projects from downtown redevelopments to dairy farms</u> Mondaq

The Green Bank's C-PACE program was among the highlights in an article on PACE's overall success maturing into a distinct asset class over the last decade. The article mentions the unique securitization of C-PACE financings in 2014.

#### 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

- With nearly 75% of the FY21 projects including solar PV, solar continues to be the driver of the program's success. FY22 will see a significant transition in the solar industry in Connecticut as the state moves from the LREC/ZREC program and net metering to a tariff-based solution. CGB has been heavily involved in the process at PURA to shape the new program and is currently working to adapt programs and products to the new landscape.
- C-PACE for new construction is driving exponential growth in the national C-PACE market. Connecticut launched its new construction program over two years ago and this year saw began to see projects. This new "flavor" of C-PACE is driving significant interest from new capital providers who have plenty of funding and appetite but are still looking for projects. As this market continues to evolve, CGB will need to make sure its program stays attractive to lenders but also creates a public benefit as intended by the C-PACE enabling legislation.
- Connecticut's open market platform continued to attract capital providers to Connecticut and enable private capital investment. With 94% of the investment private versus 6% "public" through CGB-funded projects, CGB is balancing separate goals of leverage private capital (and not crowding it out) and investment it's dollars to build it's balance sheet. CGB should continue to grow the CPACE market and create new opportunities that the private lenders are not focused on.

#### Commercial Solar PPA

 Operations and maintenance (O&M) continues to be a key tenet of the asset management program for CGB's 19.5MW of owned commercial solar projects. A new O&M provider was appointed in FY21 and a promising start has been made to this important contractual relationship, benefiting from a 'helpdesk' style software.

- Using the findings of the O&M program, CGB continues to hone the risk protection aspects of the engineering, procurement and construction 'form contract'.
- The move toward a more traditional 'developer' role has allowed CGB to secure competitive construction costs for state and municipal solar PPA projects, but has also emphasized the importance of independent engineer partner.

#### Small Business Energy Advantage (SBEA)

 Despite program underperformance primarily due to COVID-19, the program remains popular with contractors and customers. The agreement between Eversource, CGB and Amalgamated Bank is set to expire at the end of calendar year 2021. The organizations are already in discussions to renew the agreement and further expand the availability of capital.

#### Multifamily Affordable Housing

- FY'21 Has Been Another Year of Transition & Evolution as we begin to shift to a primary focus on Solar-PPA's. FY'21 continued to be a year of transition and evolution for the multifamily team. In response to meeting CGB's financial sustainability goals, we wound down planned for capacity reduction in individualized outreach and project technical assistance that we have historically provided to this sector. We also completed development of our energy and financial performance monitoring, verification, and reporting process, which had been underway for several years. We have been working to shift multifamily program focus to solar PPA's, as this product delivers required financial returns to CT Green Bank. (We expect the new solar tariff incentive to be favorable for multifamily projects once it begins in 2022, and that projects that were not economic under the current incentive structure will become viable with the solar tariff.) Capital for Change will take full ownership of the Loans Improving Multifamily Energy (LIME) loan program, as CT Green Bank shifts away from supporting outreach and origination for the LIME program. LIME is primarily focused on funding energy efficiency improvements for mid-cycle multifamily properties.
- Deployment of EnergizeCT Health & Safety Loan Funds was a priority in FY'20. The multifamily team, including CT Green Bank contractors and IPC staff, pressed on through the COVID pandemic, with a goal of getting the ECT H&S Loan funds substantially deployed. (IPC is responsible for deploying these funds, with \$1.5MM originating as a grant from DEEP to CT Green Bank, and then subsequently transferred from CTGB to IPC in 2019.) IPC closed on a \$250,000 loan with Building Neighborhoods Together (BNT) for a scattered site project, involving the rehabilitation of three small multifamily properties located in a transitional neighborhood in Bridgeport. These small multifamily properties represent a very difficult market segment to address and this model (whereby a community development corporation owns and takes on renovation of the properties) is one example for addressing this sector. During FY'20 IPC also received applications from and are in the advanced stages of underwriting and approving H&S funds in the amount of approximately \$1,000,000 for two distressed coops in New Haven, Seabury Coop and Antillean Manor. These projects, combined with the other potential projects in the pipeline, exceed the total remaining Health & Safety funds available. IPC and CTGB have, therefore, put the brakes on concerted direct outreach while these projects work their way through the approval and funding process.

 <u>COVID-19 Has Slowed the Multifamily Program.</u> This health crisis impacted Multifamily Program activity starting in the Feb/Mar 2019 timeframe. With many property owners and managers stretched thin dealing with this crisis as well as uncertainty about rental incomes and financial stability, folks have retreated. We saw some activity; however, our ability to close loans and deploy funds was limited in FY'20. That said, we continued to strategically market our programs and support viable projects in getting to closing.

#### Financing Programs FY 2022 Targets

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

Program	# of Projects	Capital Deployed	Clean Energy Deployed (MW)	Ann. GHG Emissions Avoided (TCO2)
Commercial PACE	44	\$23.3	6,500	11,493
Green Bank Solar PPA	42	\$25.6	13,400	23,053
Small Business Energy Advantage	818	\$14.5	-	32,890
Multifamily Term Loan	4	\$0.7	200	282
Multifamily Health & Safety	2	\$0.6	-	-
EV Offset Program	-	-	-	16,500
Strategic Investments	<u>-</u>	-	<u>-</u>	-
Total	902	\$62.0	19,000	50,127

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

For the Financing Programs, there are 19.7 full time equivalent staff members supporting five (5) different programs.

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### Memo

- To: Connecticut Green Bank Board of Directors
- From: Eric Shrago, Managing Director 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 23, 2021

Re: Investments – Performance towards Targets for FY 2021 – Preliminary

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

				В	udget				A	Actual				
					-					Total	Interest			
										Incon	ne	PV (	of Interest	
Program	Description	Activity Type	Rate	Term	Principal	Rate	Term	Pri	incipal	Gene	erated	Inco	ome	Notes
		Forecast Draws on												
		Existing Revolving												
Multifamily Pgms	C4C Lime facility draws	Loan Facility	3.0%	10	\$ 500,000			\$	-					draws expected to occur in FY 22
CPACE	CGB Portfolio	New CPACE Loans	5.83%	16	\$ 5,000,000	5.37%	13	\$	2,433,507	\$	913,722	\$	707,571	
		Draws on existing												
		Green Works Lending												Line closed and CGB earned \$150k
CPACE	3rd party lending RFP	LoC	5.25%	5	\$ 3,000,000	5.25%	5	\$	3,000,000	\$	392,623	\$	392,623	early term fee
	LBE Solar PPA and	New Loans for State						1						
New Product Dev.	Solar MAP	PPA projects	5.0%	10	\$ 10,000,000			\$	-					Projects Delayed until FY22
		Loans to 3rd party												
	PPA Development 3rd	developers (Skyview												
New Product Dev.	Party Loans	Pequonock)	5.0%	10	\$ 2,500,000	5.2%	15	\$	1,699,700	\$	758,501	\$	576,763	
	Regular Loan	3 additional purchases												
SBEA/BEA	Purchases	of SBEA loans	4.75%	4	\$ 2,044,000	4.75%	4	\$	839,926	\$	35,826	\$	34,875	
	PPA Sub Debt into IPC	Inclusive Solar	F F0(			F F0(		_						Line of Credit with 645k drawn a/o
CE Finance Prg	Fund	Manager Line of Credit		15	\$ 1,500,000	5.5%	15	\$			311,031	· ·	233,201	6/30
CE Finance Prg	Strategic Investments	Fort Hill Farm	5.0%	10	\$ 750,000	5.0%	10	\$	618,611.00	\$	175,031	\$	146,087	
	Constantia la materiante		8.0%	40	A 0.000.000									Facility stands (CGB included IPC
CE Finance Prg CPACE	Strategic Investments Repurchase of Loans	Groton Fuel Cell Cleanfund tranche 1	8.0%	10	\$ 2,000,000	5.0%	18	\$	5,713,429	\$	3,018,157	Ś	2,158,225	participation)
CPACE	Repurchase of Loans	Polamer Precision				5.0%	20	ې \$		ې \$	1,716,639	ې \$	1,155,765	
GFAGE		rolamer riecision				5.0%	20	Ş	2,092,047	Ş	1,710,039	Ş	1,135,765	Income not included as not yet
CPACE	Extension of loan for Cargill Falls					6.5%	25	\$	600,000					drawn
	0	Inclusive Solar			\$ 5,000,000	0.070	20	φ	000,000					
	Working Capital LoC for PPA development to	Developer Line of			÷ 0,000,000									Line of Credit with 89k drawn a/o
CE Finance Prg	IPC	Credit				5.0%	3	\$	5,000,000	Ś	38,566	Ś	29,667	-
CE I mance i ly		draw on existing				0.070		Ψ	3,000,000	Ŷ	30,300	Ŷ	20,007	0,50
Legacy	Nupower	commitment	5.0%	10		5.0%	2	Ś	161,302.00	Ś	10,206	Ś	9,457	
Logacy		communent	0.070	10	\$ 32,294,000	5.070		Ŧ	27,959,122	<u> </u>	7,370,302	<u> </u>	5,444,236	

<sup>1</sup> Intacct, Board Materials, & Power BI data source: <u>https://app.powerbi.com/groups/289235dd-d77d-4043-8dae-</u> <u>d232a51a116a/reports/b24ec66b-a2c1-49f0-9a62-3f7443077b3f/ReportSection13c15e79a907a30b650e</u> For FY2021, the board approved a budget where the staff sought to disburse or commit \$32.2 MM. The team was able to lend, commit, or disburse \$27.9 MM. These investments will generate a forecast of interest income of more than \$7.3 MM over the course of their lives (which has a present value of \$5.4 MM)<sup>2</sup>. The average interest rate was 5.188% for a term of 12.4 years. While this surpasses the Green Banks established internal benchmark of 5% and 10 years, it falls short of the \$9.1 million that would have been generated had the organization achieved its lending target of \$32.2 million at the established internal benchmark rate and term. However, having not changed the original investment targets, this is a valiant achievement in the COVID environment in which we were operating.

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 22, 2021 BOD meeting.

<sup>&</sup>lt;sup>2</sup> Included in the actual principal figure are the principal amounts of loans, draws from borrowers on existing commitments, and new commitments. Interest income is forecast from the amount outstanding on the loans or lines of credit as of 6/30/2021 and assumes that the amounts drawn are repaid over the lives of the agreements.

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## Memo

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

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

Date: July 23, 2021

Re: Overview of Compliance Reporting and the Board of Directors and Committees for FY 2021

#### Overview

This memo provides a summary report of the FY 2021 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).

Position	Name	Status	Voting
		(as of 06-30-21)	
Commissioner of DECD (or designee)	Binu Chandy	Ex Officio	Yes
Commissioner of DEEP (or designee)	Michael Li	Ex Officio	Yes
State Treasurer (or designee)	Steven Meier	Ex Officio	Yes
Finance of Renewable Energy	Adrienne Farrar Houël	Appointed	Yes
Finance of Renewable Energy	Kevin Walsh	Appointed	Yes
Labor Organization	John Harrity	Appointed	Yes
R&D or Manufacturing	Lonnie Reed	Appointed	Yes
Investment Fund Management	Eric Brown	Appointed	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 eleven (11) 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 six (6) voting members at each meeting.

The leadership of the Board of Directors, includes:

- <u>Chair</u> Lonnie Reed
- <u>Vice Chair</u> Mike Li, Bureau Chief, Bureau of Energy & Technology Policy of DEEP (voted in by her peers of the Green Bank Board of Directors)
- <u>Secretary</u> Matthew Ranelli, Partner at Shipman and Goodwin (voted in by his peers of the Green Bank Board of Directors)
- <u>Staff Lead</u> Bryan Garcia, President and CEO

For FY 2021, the Board of Directors of the Green Bank met nine (9) times, including seven (7) regularly scheduled meetings and two (2) special meetings (see Table 2). All meetings were held online via GoToMeeting due to Covid-19.

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved <sup>1</sup>
July 24, 2020	Regular	8 / 80%	5
September 23, 2020	Special	8 / 80%	5
October 23,2020	Regular	9 / 90%	9
December 18, 2020	Regular	8 / 80%	4
January 22, 2021	Regular	8 / 80%	5
March 26, 2021	Regular	9/ 82% <sup>2</sup>	1
April 6, 2021	Special	9 / 82%	1
April 23, 2021	Regular	8 / 73%	3
June 25, 2021	Regular	9 / 82%	7
Total	2 Special Meetings	81%	6
	7 Regular Meetings	81%	34
	9 Total Meetings	81%	40

#### Table 2. Summary of Board of Directors Meetings for FY 2021

Overall, the attendance for each meeting established a quorum -6 of the 10 (or 11 after March 2, 2021) voting members present - in order to enable business decisions, and on average there were 8 of 10 (or 9 of 11) members present at each meeting.

For a link to the materials from the Board of Directors meetings that is publicly accessible – <u>click here</u>.

#### 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 2020 SFI filing – required by May 3, 2021, the OSE received the following from the Connecticut Green Bank (see Table 3):

<sup>&</sup>lt;sup>1</sup> Excludes approval of meeting minutes and adjournment.

<sup>&</sup>lt;sup>2</sup> BOD Membership is now 11 with the appointment of Adrienne Farrar Houël on March 2, 2021.

#### Table 3. Summary of State of Financial Interest Filings with the Office of State Ethics for CY 2019

	Number of SFIs Submitted	% Submitted on Time
Senior Staff	8	100%
Board of Directors	7	100%

Of the 15 SFI filings by Senior Staff and the Board of Directors, all were filed online. On May 18, 2021 the Office of State Ethics sent out their May newsletter in which they congratulated us for being one of fifty-five agencies to earn "the distinction of not only achieving 100% timely compliance but also had 100% submit filings electronically".

#### 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:

- <u>Chair</u> Matthew Ranelli, Partner and Shipman and Goodwin (designated as the Chair by the former Chair of the Board Catherine Smith)
- <u>Members</u> Lonnie Reed, Tom Flynn and Mike Li
- <u>Staff Lead</u> Brian Farnen, CLO and General Counsel

For FY 2021, the ACG Committee of the Connecticut Green Bank met three (3) times, including two 2 regularly scheduled meetings and one (1) special. (see Table 4). All meetings were held online via GoToMeeting due to Covid-19.

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved
October 15, 2020	Special	3 / 75%	2
May 18, 2021	Regular	4 / 100%	1
June 14, 2021	Regular	4 / 100%	2
	2 Regular Meetings	4 / 100%	3
Total	1 Special Meetings	3 / 75%	2
	3 total meetings	3 / 88%	5

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 15, 2020.
- Brian Farnen overviewed the Governance Documents, noting that the Bylaws were revised and changed in FY20 in a response to State Auditor best practice recommendations.
- 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 three (3) 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. BOD Chair Lonnie Reed chose to attend all BOC Committee meetings for FY21. The leadership of the BOC Committee, includes:

- <u>Chair</u> –John Harrity, Labor Union Representative (designated as the Chair by the former Chair of the Board Catherine Smith)
- <u>Members</u> Mike Li, DEEP Designee, Eric Brown (designated as a member of the Committee by BOD Chair)
- <u>Staff Lead</u> Eric Shrago, Managing Director of Operations

For FY 2021, the BOC Committee of the Green Bank met four (4) times, and all) were regularly scheduled (see Table 5).

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved
January 13, 2021	Regular	2 / 75%	0
May 12, 2021	Regular	3 / 100%	1
June 9, 2021	Regular	3 / 100%	0
June 16, 2021	Special	2 / 75%	0
Total	4 Regular Meetings	88%	1
	4 Total Meetings	88%	1

Table 5. Summary of Budget Operations and Compensation Committee Meetings for FY 2021

The attendance for two (2) of the four(4) meetings established a quorum –3 voting members present – in order to enable business decisions and there were 2-3 members present at each meeting.

For a link to the materials from the BOC Committee meetings that is publicly accessible - click here.

#### **Deployment Committee**

The Deployment Committee of the Green Bank is comprised of four (4) ex officio and appointed voting members. A quorum for a meeting of the Deployment Committee is three (3) 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:

- <u>Chair</u> –Mike Li, DEEP Designee (designated as the Chair by the former Chair of the Board Catherine Smith)
- <u>Members</u> Steve Meier (ex officio per bylaws), Matthew Ranelli, and Binu Chandy (designated as a member of the Committee by BOD Chair)
- <u>Staff Lead</u> Bryan Garcia, President and CEO, and Bert Hunter, EVP and CIO

For FY 2021, the Deployment Committee of the Green Bank met four (4) times, including three (3) regularly scheduled meetings (see Table 6).

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved
November 18, 2020	Regular	3 / 75%	1
December 11, 2020	Special	4 / 100%	1
February 24, 2021	Regular	3 / 75%	2
May 26, 2021 <sup>3</sup>	Regular	3/ 75%	1
Total	1 Special Meeting	4 / 100%	1
	3 Regular Meetings	3 / 75%	4
	4 Total Meetings	3 / 75%	5
	_		

#### Table 6. Summary of Deployment Committee Meetings for FY 2021

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 3 members present at each meeting.

For a link to the materials from the Deployment Committee meetings that is publicly accessible – <u>click</u> <u>here</u>.

#### 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:

- <u>Chair</u> Eric Brown, Attorney with CBIA (voted in by his peers of the EEB and the Connecticut Green Bank)
- <u>Vice Chair</u> Mike Li, DEEP (voted in by her peers of the EEB and the Connecticut Green Bank)
- <u>Secretary</u> Bryan Garcia, Connecticut Green Bank, and Craig Diamond, Connecticut Energy Efficiency Fund (voted in by their peers of the EEB and the Connecticut Green Bank)

<sup>&</sup>lt;sup>3</sup> Lonnie Reed joined meeting on 5/26/2021 to make quorum.

- <u>Members</u> Bryan Garcia (non-voting), Bert Hunter (non-voting), John Harrity (designated as member of the Committee by BOD Chair), and Brenda Watson (designated as member of the Committee by BOD Chair)
- <u>Staff Lead</u> Bryan Garcia, President and CEO of the Connecticut Green Bank

For FY 2021, the Joint Committee of the EEB and the Green Bank met four (4) times, including four (4) regularly scheduled meetings (see Table 7).

Date	Regular or	Attendees / % Attendance						
	Special Meeting	Voting	Non-voting (CGB) <sup>4</sup>					
September 16, 2020	Regular	4 / 100%	2 / 100%					
December 16, 2020	Regular	3/ 75%	2/ 100%					
March 17, 2021	Regular	4 / 100%	2 / 100%					
June 16, 2021	Regular	4 / 100%	2 / 100%					
Total	4 Regular Meetings 4 Total Meetings	4/ 94%	2 / 100%					

#### Table 7. Summary of Joint Committee Meetings for FY 2021

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 – <u>click here</u>.

<sup>&</sup>lt;sup>4</sup> Lonnie Reed attended all FY21 meetings.

### Exhibit A

Quarterly Cash Flow		Quarterly Human Resources		Sec. 1-123		REEEFA Bonding		SCRF Notice		F	SIP	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	Туре	Held	Туре	Requested by	Delivered	Due	Submitted
9/30/13	3/14/14	10/1/13	6/17/14	1/1/2015	12/30/2014	1/1/13	2/8/13	CSCU deal	12/1/17	1/1/2014	-	1/1/15	12/30/14	12/16/15	regular	1/26/18	regular	1/15/19	1/10/19	10/1/2019	9/25/2019
12/31/13	3/14/14	1/1/14	6/17/14	1/1/2016	12/31/2015	1/1/14	1/15/14	CSCU, Meriden	11/30/18	1/1/2017	1/30/2017	1/1/16	12/31/15	1/15/16	regular	2/15/18	special	2/1/20	1/31/20	10/1/2021	
3/31/14	4/21/15	4/1/14	6/17/14	1/1/2017	12/29/2016	1/1/15	3/15/15	CSCU, Meriden	12/30/19	1/1/2019	1/11/2019	1/1/17	10/17/16	2/26/16	special	4/3/18	regular	3/15/21	3/15/21		
6/30/14	4/21/15	7/1/14	8/5/14	1/1/2018	12/27/2017	1/1/16	12/23/15	CSCU, Meriden, SHREC	12/7/20	1/1/2021	12/31/2020	1/1/18	12/1/17	3/3/16	special	4/27/18	regular				
9/30/14	6/16/16	10/1/14	10/2/14	1/1/2019	12/31/2018	1/1/17	12/15/16					1/1/19	1/11/19	4/22/16	regular	5/25/18	special				
12/31/14	6/16/16	1/1/15	1/12/15	1/1/2020	12/31/2019	1/1/18	12/1/17					1/1/20	12/27/19	6/17/16	regular	6/13/18	regular				
3/31/15	6/16/16	4/1/15	4/12/15	1/1/2021	12/30/2020	1/1/19	12/31/18					1/1/21	12/31/20	7/6/16	special	6/28/18	regular				
6/30/15	6/16/16	7/1/15	7/9/15			1/2/19	12/30/19							7/22/16	regular	7/27/18	regular				
9/30/15	5/31/16	10/1/15	10/9/15			1/3/19	12/30/20							10/21/16	regular	8/21/18	special				
12/31/15	5/31/16	1/1/16	1/8/16											12/16/16	regular	9/18/18	special				
3/31/16	5/31/16	4/1/16	3/31/16											1/5/17	special	10/26/18	regular				
6/30/16	8/10/16	7/1/16	7/5/16											1/20/17	regular	12/14/18	regular				
9/30/16	11/8/16	10/1/16	10/5/16											3/10/17	special	2/22/19	regular				
12/31/16	2/23/17	1/1/17	2/21/17											4/28/17	regular	3/29/19	regular				
3/31/17	5/10/17	4/1/17	4/10/17											6/9/17	special	4/26/19	regular				
6/30/17	8/9/17	7/1/17	7/17/17											6/23/17	regular	6/28/19	regular				
9/30/17	12/21/17	10/1/17	10/6/17											7/21/17	regular	7/18/19	regular				
12/31/17	2/28/18	1/1/18	1/9/18											9/28/17	regular	9/12/19	regular				
3/31/18	5/17/18	4/1/18	4/2/18											10/3/17	special	10/25/19	regular				
6/30/18	9/5/18	7/1/18	7/5/18											10/20/17	regular	11/20/19	special				
9/30/18	11/28/18	10/1/18	10/3/18											11/6/17	special	12/20/19	regular				
12/31/18	7/11/19	1/1/19	1/3/19											11/13/17	special	1/24/20	regular				
3/31/19	9/23/19	4/1/19	4/1/19											12/1/17	special	3/25/20	regular				
6/30/19	9/23/19	7/1/19	7/1/19											12/15/17	regular	4/24/20	regular				
9/30/19	12/27/19	10/1/19	10/1/19													6/26/20	regular				
12/31/19	3/26/20	1/1/20	1/3/20													7/24/20	regular				
3/31/20	6/22/20	4/1/20	4/3/20						1							9/23/20	special				
6/30/20	9/28/20	7/1/20	7/7/20													10/23/20	regular				
9/30/20	12/18/20	10/1/20	10/9/20													12/18/20	regular				
12/31/20	3/11/21	1/1/21	1/11/21													1/22/21	regular				
3/31/21	6/22/21	4/1/21	4/1/21						1							3/26/21	regular				
		7/1/21	6/30/21						1							4/6/21	special				
									1							4/23/21	regular				
																6/25/21	regular				



75 Charter Oak Avenue, Suite 1 - 103, Hartford, CT 06106 T 860.563.0015 ctgreenbank.com

### Memo

To: Board of Directors

From: Bryan Garcia (President and CEO)

- **Cc:** Sergio Carrillo (Director of Incentive Programs), Mackey Dykes (VP of Financing Programs and Officer), Brian Farnen (General Counsel and CLO), Bert Hunter (EVP and CIO), Jane Murphy (EVP of Finance and Administration), and Eric Shrago (Managing Director of Operations)
- Date: July 23, 2021
- **Re:** FY 2022 Comprehensive Plan Revisions

The following redline edits were made to the FY 2022 Comprehensive Plan:

- <u>Executive Summary</u> updates to impact metrics through FY 2021 and other clarifications;
- Organizational Overview inclusion of "environmental infrastructure" where appropriate and other updates;
- <u>Governance and Organizational Structure</u> inclusion of "environmental infrastructure" where appropriate and other updates;
- Incentive Programs updates to RSIP (including transition from net metering to tariff), battery storage incentive program, ability for Smart-E Loan to apply 2<sup>nd</sup> loan loss reserve beyond "clean energy" to also include "environmental infrastructure" (e.g., health and safety, water, resiliency), and other updates;
- 5. Financing Programs various clarifications and other updates;
- Environmental Infrastructure Programs inclusion of a new section on environmental infrastructure providing an overview of key aspects of PA 21-115, and resources made available to support the development of a comprehensive plan;
- 7. <u>Impact Investment</u> various clarifications and other updates;
- 8. Citizen Engagement various clarifications and other updates;
- 9. <u>Evaluation Framework</u> inclusion of two new areas of measurement (i.e., equity and energy burden), various clarifications and other updates;

- 10. Reporting and Transparency various clarifications and other updates;
- 11. Research and Development various clarifications and other updates;
- 12. <u>Budget</u> various clarifications and other updates;
- 13. <u>Glossary of Acronyms</u> as requested by the BOD, a glossary of key acronyms used by the Green Bank;

There are also various other immaterial changes throughout the document (e.g., cover pages, table of contents).

#### Resolution

**WHEREAS**, on June 25, 2021, the Board of Directors ("Board") of the Connecticut Green Bank ("Green Bank") approved of the annual budgets, targets, and investments for FY 2022.

**WHEREAS,** per Connecticut General Statutes 16-1245n, 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 redline edits to the Comprehensive Plan presented to the Board on July 23, 2021.



# **Comprehensive Plan**

### Green Bonds US

75 Charter Oak Ave., Suite 1 - 103, Hartford, CT 06106>860-563-0015>ctgreenbank.com700 Canal Street, 5th Floor, Stamford, CT 06902greenlibertybonds.com



# **Comprehensive Plan** Fiscal Year 2020 & Beyond

July 2019 Revised July 2020 Revised January 2021 <u>Revised July 2021</u>

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## 1. Executive Summary

"The civilization of New England has been like a beacon lit upon a hill, which, after it has diffused its warmth around, tinges the distant horizon with its glow."

Alexis de Tocqueville, Democracy in America

Although Connecticut is one of the smallest states in the country, its decades of legislative leadership on climate change has had an influential impact across the country and around the world. One example of this was on July 1, 2011, when in a bipartisan manner, Public Act ("PA") 11-80<sup>1</sup> was passed. Within Section 99 of that seminal act, the nation's first state-level green bank was formed. There are now over twenty green banks (and growing) at the local and state level, including several nonprofits, working together to increase and accelerate the growth of investment in clean energy and environmental infrastructure across the United State.<sup>2</sup> The Connecticut Green Bank ("the Green Bank") is a public policy innovation, a catalyst that helps mobilize greater local and global investment to address climate change.

Since its inception, the Green Bank has mobilized <u>nearly-over</u> \$2.02.1 billion of investment into Connecticut's clean energy economy at nearly a  $\underline{87}$  to 1 leverage ratio of private to public funds, supported the creation of over  $\underline{2325}$ ,000 direct, indirect, and induced job-years, reduced the energy burden on <u>over-nearly 5557</u>,000 families (in particular low-to-moderate income\_(``LMI'') families) and businesses, deployed nearly  $\underline{435495}$  MW of clean energy that will help avoid over  $\underline{8.910.6}$  million tons of CO<sub>2</sub> emissions and save over  $\underline{$230302}$  million of public health costs over the life of the projects, and helped generate <u>over</u>  $\underline{$96.7106}$  million in individual income, corporate, and sales tax revenues to the State of Connecticut.<sup>3</sup>

As a result of the Green Bank's success as an integral public policy tool addressing climate change in Connecticut, there has been growing national public policy interest at the local,<sup>4</sup> federal,<sup>5</sup> and international<sup>6</sup> levels to realize similar results. This green bank movement is about increasing and accelerating the flow of private capital into markets that energize the green economy to confront climate change and provide all of society a healthier, more prosperous future. As the "spark" to the green bank movement, the Green Bank continues to be recognized

<sup>&</sup>lt;sup>1</sup> An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future.

<sup>&</sup>lt;sup>2</sup> American Green Bank Consortium – www.greenbankconsortium.org

<sup>&</sup>lt;sup>3</sup> FY20 Comprehensive Annual Financial Report Data collected and analyzed through the data warehouse through June 30, 2021

<sup>&</sup>lt;sup>4</sup> American Green Bank Consortium – <u>https://greenbankconsortium.org/</u>

<sup>&</sup>lt;sup>5</sup> US Green Bank Act of 2019 introduced by Senators Blumenthal (CT), Markey (MA), Murphy (CT), Van Hollen (MD), and Whitehouse (RI) in the Senate, National Climate Bank Act of 2019 introduced by Senators Markey (MA) and Van Hollen (MD), with co-sponsors Blumenthal (CT) and Schatz (HI), the US Green Bank Act of 2019 by Representative Himes (CT) and 13 others in the House. Democratic Presidential Candidates Inslee and Bennet proposed \$90 billion and \$1 trillion "green bank" and "climate banks," respectively as part of their campaigns. In the 117<sup>th</sup> Congress, Senators Markey and Van Hollen introduced the National Climate Bank Act (S. 283), Representative Dingell introduced a counterpart Clean Energy & Sustainability Accelerator Act (H.R. 806), and President Biden included the Clean Energy & Sustainability Accelerator within the American Jobs Plan.

<sup>&</sup>lt;sup>6</sup> Green Bank Network – <u>https://greenbanknetwork.org/</u>

for its innovation through receiving the prestigious 2017 Innovations in American Government Awards by the Ash Center at Harvard University's Kennedy School of Government,<sup>7</sup> Innovation and Green Bond Structure Awards by Environmental Finance in 2020, and Innovative Deal of the Year by Bond Buyer in 2020.

At home and abroad, there is agreement that accelerating the flow of capital into the green economy is one key to addressing the climate crisis. The Paris Agreement's third aim (beyond mitigation of greenhouse gas <u>(``GHG''</u>) emissions and adaptation to climate change impacts) is making finance flows consistent with a pathway towards reduced emissions and increased climate resilient development. The Center for American Progress estimates that the U.S. needs at least \$200 billion in renewable energy and energy efficiency investment a year for 20 years to reduce carbon emissions and avert climate disaster.<sup>8</sup> In a similar vein, the United Nations estimates that \$90 trillion of investment is needed over the next 15 years to advance sustainable development and confront the worst effects of climate change.<sup>9</sup>

To put these numbers into perspective, this is the equivalent of between \$620 to \$800 of investment per person per year for the next 15 years, respectively  $- or_{\overline{7}}$  the equivalent of nearly \$3 billion a year of investment in Connecticut's green economy!

Faced with the magnitude of investment required to put society on a more sustainable path to confront climate change, the Green Bank convened a group of stakeholders at the Pocantico Conference Center of the Rockefeller Brothers Fund in February of 2019 for a two-day strategic retreat entitled "Connecticut Green Bank 2.0 – From 1 to 2 Orders of Magnitude". Having convened at the Pocantico Conference Center in November of 2011 to establish the Green Bank's first strategic plan (i.e., Green Bank 1.0), this new group of stakeholders met to reflect on the past seven years and then to envision an even bigger future for the Green Bank (i.e., Green Bank 2.0) consistent with the larger investment required.<sup>10</sup>

The retreat identified several key findings and recommendations for the Green Bank, including:

 <u>Commitment to Address Climate Change</u> – as the most urgent issue to address, the Green Bank needs to increase and accelerate the impact of its model to support the implementation of Connecticut's climate change plan<sub>±7</sub><sup>11</sup> including becoming more resilient to the impacts of climate change;<sup>12</sup>

<sup>&</sup>lt;sup>7</sup> <u>https://ash.harvard.edu/news/connecticut-green-bank-awarded-harvards-2017-innovations-american-government-award</u>

<sup>&</sup>lt;sup>8</sup> "Green Growth: A U.S. Program for Controlling Climate Change and Expanding Job Opportunities" by the Center for American Progress (September 2014).

<sup>&</sup>lt;sup>9</sup> "Financing Sustainable Development: Moving from Momentum to Transformation in a Time of Turmoil" by the UNEP (September 2016).

<sup>&</sup>lt;sup>10</sup> "Connecticut Green Bank 2.0 – From 1 to 2 Orders of Magnitude" at the Pocantico Conference Center of the Rockefeller Brothers Fund (February 6-7, 2019) – https://www.ctgreenbank.com/wp-content/uploads/2019/08/Green-Bank\_Strategic-Retreat\_Summary\_February-2019.pdf

<sup>&</sup>lt;sup>11</sup> "Building a Low Carbon Future for Connecticut – Achieving a 45% GHG Reduction by 2030" recommendations from the Governor's Council on Climate Change (December 18, 2018)

<sup>&</sup>lt;sup>12</sup> Public Act 18-82 "An Act Concerning Climate Change Planning and Resiliency"

- Scaling Up Investment and Impact in Connecticut and Beyond in order to achieve the climate change goals set forth, more investment from private capital sources leveraged by innovative public sector financing will be needed to scale-up and scale-out the green bank model's impact; and
- <u>Green Bonds to Increase Access to Capital</u> with the ability to issue bonds, the Green Bank is able to increase its access to capital beyond the current sources of funding to scale-up its investment activity, while providing more opportunities to engage citizens in new ways to invest in the state's growing green economy, including through the issuance of <u>mini green bonds</u><u>Green Liberty Bonds</u> (i.e., bonds with denomination values of \$1,000 or less) called Green Liberty Bonds that will engage citizens in making investments alongside the Green Bank.<sup>13</sup>

Increasing and accelerating investment in the green economy by using limited public resources to attract and mobilize multiples of private capital investment is paramount to society's efforts to pursue sustainable development, while confronting climate change. More investment in the green economy creates more jobs in our communities, reduces the burden of energy costs on our families and businesses (especially the most vulnerable), and reduces fossil fuel pollution that causes local public health problems and global climate change, and makes our communities more resilient to the impacts of climate change.

Investment for the sake of investment is not enough unless we have an engaged citizenry that is active in communities across the state! Whether through markets or within communities in partnership with other community-based organizations, the Green Bank is bringing people together and strengthening the bonds we share with one another. In order to confront climate change and provide all of society a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy, the Green Bank calls its Comprehensive Plan launched the "Green Bonds US" campaign, that to promotes a simple but critically important message; green brings us together: green bonds us <u>– the environment unites us</u>.

As the cover to the Comprehensive Plan of the Green Bank suggests, by making <u>investments in</u> clean energy <u>and environmental infrastructure</u> more accessible and affordable to everyone – Green Bonds US – society will reap significant gains from moving forward in the same direction together – for we can't have environmentalism without humanitarianism.

# 2. Organizational Overview

The Green Bank<sup>14</sup> was established by Governor Malloy and Connecticut's General Assembly on July 1, 2011 through Public ActPA 11-80 as a quasi-public agency that supersedes the former

<sup>&</sup>lt;sup>13</sup> In honor of the 50<sup>th</sup> anniversary of Earth Day, the Green Bank created the Green Liberty Bond – https://www.ctgreenbank.com/green-liberty-bond-new-investment-opportunity/

<sup>&</sup>lt;sup>14</sup> P<u>Aublic Act</u> 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.

Connecticut Clean Energy Fund ("CCEF"). <u>On July 1, 2021, the 10<sup>th</sup> anniversary of the Green</u> <u>Bank, Governor Lamont and Connecticut's General Assembly enacted PA 21-115 expanding the</u> <u>scope of the Green Bank beyond "clean energy" to include "environmental infrastructure"</u>. As the nation's first state green bank, the Green Bank leverages public and private funds to drive investment and scale-up clean energy deployment <u>and environmental infrastructure</u> <u>improvement</u> in Connecticut.

The Green Bank's statutory purposes are:

- To develop programs to finance and otherwise support clean energy <u>and environmental</u> <u>infrastructure</u> 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 <u>and environmental infrastructure</u> to foster the growth, development and commercialization of clean energy sources, <u>environmental infrastructure</u>, and related enterprises; and
- To stimulate demand for clean energy and the deployment of clean energy sources<u>and</u> <u>investment in environmental infrastructure</u> 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 <u>Resolution of Purposes</u>.

The Green Bank is a public policy innovation that exemplifies Connecticut's nearly two-decade history of bipartisan gubernatorial leadership on the issue of climate change. Other leadership highlights include:

- <u>Governor Rowland</u> co-chaired the New England Governors and Eastern Canadian Premiers Conference, which established a regional commitment to reduce<u>GHG</u> <u>greenhouse gas</u> emissions (i.e., 1990 levels by 2010, 10% below 1990 levels by 2020, and 80% below 2001 levels by 2050);<sup>15</sup>
- <u>Governor Rell</u> supported Public Act 08-98<sup>16</sup> 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 (<u>'RGGI"</u>) and later become the EPA Administrator under President Obama leading the development of the Clean Power Plan and the U.S. participation in the Paris Agreement and the White House National Climate Advisor under President Biden;
- Governor Malloy led the passage of PA 11-80 establishing the Department of Energy and Environmental Protection ("DEEP"), creating the Green Bank, and other policies catalyzing the market for clean energy, as well as PA 18-50<sup>17</sup> and PA 18-82<sup>18</sup> increasing the state's renewable portfolio standard ("RPS") ("RPS") to 40% by 2030

<sup>&</sup>lt;sup>15</sup> NEG-ECP Resolution 26-4 adopting the "Climate Change Action Plan 2001" (August 2001 in Westbrook, CT)

<sup>&</sup>lt;sup>16</sup> An Act Concerning Connecticut Global Warming Solutions

<sup>&</sup>lt;sup>17</sup> An Act Concerning Connecticut's Energy Future

<sup>&</sup>lt;sup>18</sup> An Act Concerning Climate Change Planning and Resiliency

and establishing a midterm greenhouse gas <u>GHG</u> emissions reduction target of 45% below 2001 levels by 2030, respectively; and

Governor Lamont – his campaign plan for Connecticut<sup>19</sup> seeks to achieve carbon neutrality by 2050 and setting a 100% renewable portfolio standard by 2050 which would help the state realize green jobs in energy efficiency and clean energy (e.g., fuel cells, offshore wind, solar PV, etc.), while reducing energy costsissued his first<sup>20</sup> and third<sup>21</sup> executive orders on state "lead by example" for sustainability and clean energy and climate change leadership respectively, including a 100% zero emission electricity target by 2040, and led the passage of PA 21-115 expanding the scope of the Green Bank to include "environmental infrastructure".

The Connecticut General Assembly 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 and lead the movement on climate change action.

# 2.1 Vision

...a planet protected by the love of humanity.

## 2.2 Mission

Confront climate change and provide all of society a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy.<sup>22</sup>

# 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,<sup>23</sup> by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses.

<sup>23</sup> 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 <u>DEEP</u> the Department of Energy and Environmental Protection in consultation with

<sup>&</sup>lt;sup>19</sup> Ned's Plan for Connecticut – Addressing Climate Change & Expanding Renewable Energy

 <sup>&</sup>lt;sup>20</sup> https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-1.pdf
 <sup>21</sup> https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-3.pdf
 <sup>22</sup> 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 Malloy's Council on Climate Change, and many other past acts, plans, or policies.

community representatives. Inclusion of "vulnerable communities" within the goals of the Green Bank would ensure that it's incentive (e.g., RSIP), financing (e.g., multifamily), and investment (e.g., Green Bank Capital Solutions) programs incorporate it as a priority.

3. To pursue investment strategies that advance market transformation in green investing while supporting the organization's pursuit of financial sustainability.

The vision, mission, and goals support the implementation of Connecticut's clean energy policies be they statutorily required (e.g., CGS 16-245ff on residential Residential Solar Investment Program ("RSIP"), planning (e.g., Comprehensive Energy Strategy), or regulatory (e.g., Docket No. 17-12-03 on grid modernization) in nature.

# 2.4 Definitions – Clean Energy and Environmental Infrastructure

The Green Bank's investment focus is on "clean energy" <u>and "environmental infrastructure"</u> as defined by CGS Section 16-245n:

- **<u>Clean Energy</u>** clean energy means solar photovoltaic energy, solar thermal, geothermal energy, wind, ocean thermal energy, wave or tidal energy, fuel cells, landfill gas, hydropower that meets the low-impact standards of the Low-Impact Hydropower Institute, hydrogen production and hydrogen conversion technologies, low emission advanced biomass conversion technologies, alternative fuels, used for electricity generation including ethanol, biodiesel or other fuel produced in Connecticut and derived from agricultural produce, food waste or waste vegetable oil, provided the Commissioner of Energy and Environmental Protection determines that such fuels provide net reductions in greenhouse gas-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 section 16-1.
- Environmental Infrastructure 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 offsets<sup>24</sup> and ecosystem services.<sup>25</sup>

# 3. Governance and Organizational Structure

The Green Bank is overseen by a governing Board of Directors (<u>"BOD"</u>) comprised of ex officio and appointed members, while the organization of the Green Bank is administered by a

<sup>&</sup>lt;sup>24</sup> Carbon offsets means an activity that compensates for the emission of carbon dioxide or other greenhouse gases by providing for an emission reduction elsewhere.

<sup>&</sup>lt;sup>25</sup> 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.

professional staff overseeing two-three business units – Incentive Programs, and Financing Programs, and Environmental Infrastructure Programs.

## 3.1 Governance

Pursuant to Section 16-245n of the CGS, the powers of the Green Bank are vested in and exercised by <u>a BOD</u> a Board of Directors<sup>26</sup> that is comprised of <u>eleven-twelve</u> voting and one non-voting members each with knowledge and expertise in matters related to the purpose of the organization – see Table 1.<sup>27</sup>

#### 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	<u>Yes</u>
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 <u>BOD</u> Board of Directors of the Green Bank, including Audit, Compliance, and Governance Committee (<u>ACG Committee</u>), Budget, Operations, and Compensation Committee (<u>BOC Committee</u>), Deployment Committee, and the Joint Committee of the Energy Efficiency Board (<u>EEB</u>) and the Green Bank.<sup>28</sup>

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 <u>BOD</u> Board of Directors of the Green Bank is governed through enabling legislation, as well as by an <u>Ethics Statement</u> and <u>Ethical Conduct Policy</u>, <u>Resolutions of Purposes</u>, <u>Bylaws</u>, <u>Joint</u> <u>Committee Bylaws</u>, and a Comprehensive Plan. All meetings, agendas, and materials of the

<sup>&</sup>lt;sup>26</sup> https://www.ctgreenbank.com/about-us/governance/board-of-directors/

<sup>&</sup>lt;sup>27</sup> <u>https://www.ctgreenbank.com/about-us/governance/</u>

<sup>&</sup>lt;sup>28</sup> Pursuant to Section 16-245m(d)(2) of the CGSonnecticut General Statutes

Green Bank's <u>BOD</u> Board of Directors and its Committees are publicly available on the organization's website.<sup>29,30</sup>

# 3.2 Organizational Structure

The organizational structure of the Green Bank is comprised of two (2)three (3) business units, including:

- **Incentive Programs** the Governor and the Connecticut General Assembly from time-to-time may decide that there are certain incentive (or grant) programs that they seek to have the Green Bank administer (e.g., CGS 16-245ff). 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. For example, the Green Bank administers the Residential Solar Investment Program ("RSIP") whereby through a declining incentive block structure no more than 350 MW of new residential solar PV systems are deployed, while nurturing the sustained, orderly development of a local state-based solar PV industry. Through the public policy creation of a Solar Home Renewable Energy Credit ("SHREC"), the Green Bank is able to recover its costs for administering the RSIP by selling such credits to the Electric Distribution Companies ("EDCs") through a Master Purchase Agreement ("MPA") to support their compliance under Connecticut Class I RPSrenewable Portfolio Standard ("RPS"). Costs recovered from such mechanisms (i.e., earned revenues from SHRECs) are expected to cover the incentive, administrative expenses, and financing expenses of the Incentive Programs business unit.
- Financing Programs 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 provides capital to building owners to make clean energy 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 Financing Programs business unit.
- 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

<sup>&</sup>lt;sup>29</sup> <u>http://www.ctgreenbank.com/about-us/board-member-resources/connecticut-grboard-meetings/</u>

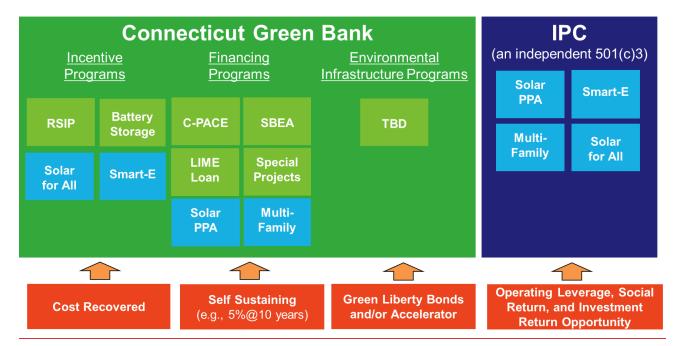
<sup>&</sup>lt;sup>30</sup> http://www.ctgreenbank.com/about-us/board-member-resources/connecticut-grittee-meetings/

"environmental infrastructure," in FY22 the Green Bank will develop a Comprehensive Plan for the review and approval by the BOD for implementation in FY23.

These two-three business units – Incentive Programs and 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.

An Employee Handbook and <u>Operating Procedures</u> have been approved by the <u>BOD</u> Board of Directors and serve to guide the staff to ensure that it is following proper contracting, financial assistance, and other requirements.

In 2018, 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., <u>LMIIow-to-moderate income</u> 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 the goals of Connecticut public policy by administering programs on behalf of the Green Bank. 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

# 4. Incentive Programs

The Green Bank manages incentive programs. That is to say that it oversees grant or subsidy program(s) (including credit enhancements – interest rate buydowns and loan loss reserves) used to deploy clean energy, while at the same time cost recovering the expenses associated with those 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.

Per CGS 16-245ff, updated by PA 19-35<sup>31</sup>, the Green Bank administers the RSIP that includes a declining incentive block structure 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. The RSIP also requires that participating households undergo a Home Energy Solutions (<u>"HES"</u>) or Home Energy Solutions – Income Eligible ("HES-IE") assessment, or equivalent audit. It should be noted that the Green Bank has also strategically sought to ensure that households in vulnerable communities (e.g., low-and-moderate income households) have equal access to residential solar PV.<sup>32</sup> Through the Solar for All program, the Green Bank and its partners are enabling households to reach "solar parity" such that the proportion of solar PV installed on low-and-moderate income households is no less than non-low-and-moderate income households, or "beyond solar parity" for communities of color whereby Black and Hispanic households are proportionately installing solar PV more than White households.

As of December 31, 2020June 30, 2021, 349-370.4 megawatts of residential solar PV systems have been approved through RSIP, supporting 43,55345,702 projects across the state and over \$1.331.406 billion of investment.<sup>33</sup> Of these approved projects, 321-341.6 MW have been completed – or over-nearly 90 98 percent of the statutory target. Starting January 1, 2022, the residential solar PV market will transition from net metering to a tariff-based compensation structure.<sup>34</sup>

To support the Green Bank's implementation of the RSIP, the EDCs are required to purchase the SHRECs to assist them in their compliance with the RPS. The SHREC price is established by the Green Bank to recover its costs for administering the RSIP through a 15-year MPA with the EDCs. The cash flow from the sale of current and future SHRECs produced by these systems can be sold as a "green bond"<sup>35</sup> to generate cash flow upfront to support the cost recovery of the program – see Figure 2.

<sup>&</sup>lt;sup>31</sup> An Act Concerning a Green Economy and Environmental Protection

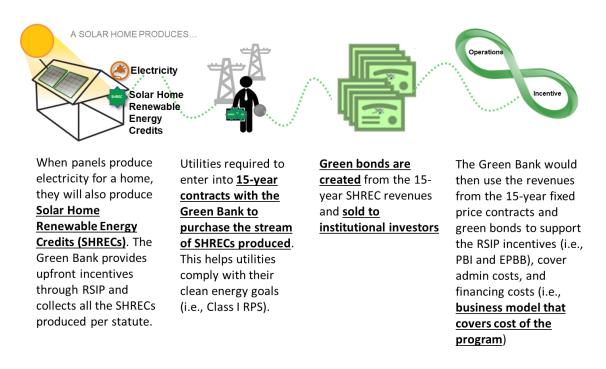
<sup>&</sup>lt;sup>32</sup> Sharing Solar Benefits – Reaching Households in Underserved Communities of Color in Connecticut by the Connecticut Green Bank (May 2019) – <u>click here</u>.

<sup>&</sup>lt;sup>33</sup> Prior to the RSIP, through incentives provided by the <u>CCEF-Connecticut Clean Energy Fund</u>, the predecessor of the Green Bank, there are another 2,018 residential solar PV projects totaling 13.4 MW.

<sup>&</sup>lt;sup>34</sup> See Docket No. 20-07-01

<sup>&</sup>lt;sup>35</sup> <u>https://www.ctgreenbank.com/cgb-enters-green-bond-market/</u>

#### Figure 2. Incentive Program – Overview of the RSIP and the SHREC



It should be noted that in FY 2020 and continuing into FY 2021, the COVID-19 public health crisis destabilized the local residential solar industry. As a result, in order to ensure that the Green Bank is "fostering the sustained orderly development of a local solar industry," the <u>BOD</u> Board of Directors of the Green Bank approved an extension of the RSIP (i.e., RSIP-E) by 32 MW to (1) ensure that 350 MW of residential solar PV is completed, and (2) provide additional incentive capacity to stabilize the industry as it manages through COVID-19 and the transition from net metering to a tariff.<sup>36</sup> This extension also provided the local solar industry an opportunity to engage the Connecticut General Assembly to debate the need for an increase in the 350 megawatt target. At the conclusion of the 2021 legislative session, there was no increase in the RSIP target.

In order to ensure the sustained, orderly development of the local solar industry beyond the conclusion of the RSIP, the Green Bank actively engaged in the regulatory process (i.e., Docket No. 20-07-01) overseen by the Public Utilities Regulatory Authority ("PURA") to establish the soon-to-be EDC-administered residential renewable energy tariff program under CGS 16-244z. As a result of this nearly yearlong process, through the Green Bank's engagement, the following key program designs were included:

 Reasonable Rate of Return – per CGS 16-244z, a just, reasonable, and adequate rate of return of between 9 to 11 percent was determined (i.e., equivalent to \$0.2900/kWh in 2021) for the 20-year tariff through the Green Bank's inclusion of an objective analysis of the RSIP;

<sup>&</sup>lt;sup>36</sup> <u>https://www.ctgreenbank.com/about-us/governance/connecticut-grboard-meetings/2020-2/</u> - see September 23, 2020 materials for details.

- HES or HES-IE Requirement to continue the linkage between energy efficiency and solar PV, an important objective of the Joint Committee, the Green Bank advocated for a HES or HES-IE requirement as part of every residential solar PV project supported by the tariff;
- 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 adders for low income (i.e., \$0.0250/kWh) or households located in distressed municipalities<sup>37</sup> (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 Back advocated for direct payments of the tariff rates from the EDCs to a third-party inpart or in-whole as a way to reduce risk and therefore make solar PV more affordable and accessible to vulnerable communities. This provides a financing mechanism that would allow the Green Bank to provide investment in developers serving vulnerable communities.

These key program design inclusions 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.

<u>Beyond the SHRECs and RECs created through the RSIP and RSIP-E respectively, </u>Tthe Green Bank, through its partner C-Power, aggregates and registers residential solar PV systems in ISO-NE's On-Peak Hours Resource Program for which it receives Forward Capacity Market payments.<sup>38</sup>

In general, over the course of a year, a typical residential solar PV system produces, and the household simultaneously consumes, about fifty percent of the production from the system – meaning that about fifty percent of the system's production is being exported to the grid (and generally used subsequently by the household under the existing net metering policy) – see Figure 3. Beginning on January 1, 2022, all new behind the meter residential renewable energy systems will no longer be able to access net metering, but instead be subject to a tariff-based form of compensation (i.e., a credit for every kWh of energy produced from such systems over a 20-year period).

<sup>&</sup>lt;sup>37</sup> https://portal.ct.gov/DECD/Content/About DECD/Research-and-Publications/02 Review Publications/Distressed-Municipalities

<sup>&</sup>lt;sup>38</sup> https:///www.iso-ne.com/markets-operations/markets/forward-capacity-market

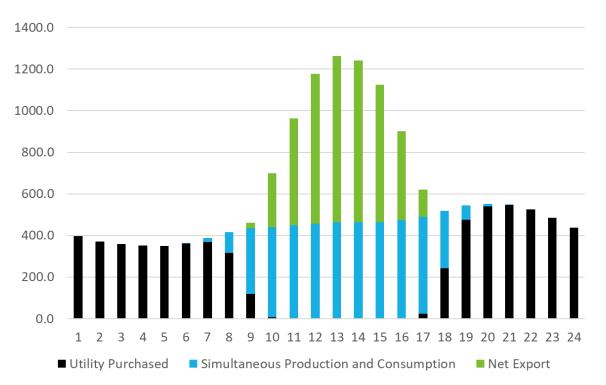


Figure 3. Average Residential Consumption (i.e., kWh) and Solar PV Production Over the Course of a Year by Hour of the Day

In order to store the system's production that would have been exported to the grid for the purposes of later using it for (1) back-up power that would benefit the household, and/or (2) reducing demand, specifically peak demand, that would benefit all ratepayers, in FY 2019, the Green Bank submitted an application into the Electric Efficiency Partners Program ("EEPP") (i.e., Docket No. 18-12-35) demonstrating the "cost effectiveness" of residential solar PV in combination with battery storage.<sup>39</sup> In FY 2021, the Green Bank submitted its "Solarize Storage" proposal into the Public Utility Regulatory Authority's ("PURA") Equitable Modern Grid process (i.e., Docket No. 17-12-03(RE03)),<sup>40</sup> an incentive program with a focus on combined residential solar PV and battery storage that maximizes participant benefits while sharing those benefits with ratepayers and society. This proposal was used by PURA within the Docket as a straw proposal from which a 580 MW residential and non-residential battery storage incentive program would be implemented. During the 2021 legislative session, PA 21-53 "An Act Concerning Energy Storage" was unanimously passed establishing a 1000 MW target by 2030, including residential and non-residential behind the meter installations and front of the meter grid tied solutions, and potential program implementers to include DEEP, Green Bank, EDCs, or other third parties. In collaboration with DEEP and the EDCs through the Joint Committee,<sup>41</sup> efforts are being made to enable residential solar PV in combination with battery storage to deliver greater benefits to participating households as well as all ratepayers on the electric grid

<sup>&</sup>lt;sup>39</sup> Section 94 of PA 07-242

<sup>&</sup>lt;sup>40</sup> <u>https://www.ctgreenbank.com/wp-content/uploads/2020/08/PURA-Docket-No.-17-12-03RE03---Solarize-Storage-Proposal-from-the-Green-Bank.pdf</u>

<sup>&</sup>lt;sup>41</sup> Pursuant to Section 16-245m(d)(2) of the CGS onnecticut General Statutes

- through a combination upfront incentive in support of passive demand response through the Green Bank in conjunction with a performance-based incentive in support of active demand response through the <u>EDCs</u> electric distribution company administration of the <u>Conservation and Load Management PlanConnected Solutions Program</u>. The Green Bank is now working with the EDCs to support PURA's issuance of straw proposal program design.recent interim decision within the docket.

The EnergizeCT Smart-E Loan in partnership with local community banks and credit unions, provides easy access to affordable capital for homeowners to finance clean energy, as well as <u>health & safety\_environmental infrastructure</u> improvements (e.g., health & safety, water, resiliency) on their properties through a partnership between local contractors and financial institutions, IPC, and the Green Bank. As the Green Bank provides credit enhancements to the Smart-E Loan in the form of interest rate buydowns (i.e., subsidy) and loan loss reserves from its balance sheet, it is considered an incentive Incentive Pprogram since there is no direct financial return (e.g., principal and interest\_earned revenues) to the organization like Ffinancing Pprograms.

The Green Bank has set targets for its Incentive Programs business unit for FY  $2020_{,}^{42}$  and FY  $2021_{,}^{43}$  and FY  $2022_{,}^{43}$  in terms of the number of projects, total investment (i.e., public and private), and installed capacity – see Tables 2 and 3through 4.

Program / Product	Projects	<b>Total</b> Investment (\$MM's)	Installed Capacity (kW)
Residential Solar Investment Program	7,059	\$214.2	60,000
Solar for All Program	615	\$17.2	4,200
Electric Efficiency Partners Program <sup>44</sup>	0-500	\$0.0-\$5.5	0-2,000
EnergizeCT Smart-E Loan	<u>540</u>	<u>\$7,2</u>	<u>500</u>
Total <sup>45</sup>	8,099	\$226.9	62,500

Table 2. Revised FY 2020 Targets for the Incentive Programs Business Unit

Table 3. Revised FY 2021 Targets for the Incentive Programs Business Unit

<sup>&</sup>lt;sup>42</sup> Revised by the <u>BOD</u> Board of Directors on January 24, 2020

<sup>&</sup>lt;sup>43</sup> It should be noted that there are two factors impacting the FY 2021 targets for the RSIP – COVID-19 impacts on market demand and achieving the 350 MW target – and therefore, the low and high range for the targets.

<sup>&</sup>lt;sup>44</sup> The <u>Connecticut</u> Green Bank has submitted a Technology Application (i.e., Docket No. 18-12-35) into PURA through the E<u>EPPIectric Efficiency Partners Program</u> in support of a residential battery storage incentive program that would retrofit existing residential solar PV systems installed through the RSIP. Beyond existing solar PV systems that could be retrofit with battery storage, RSIP Step 15 proposes a combined residential solar PV and battery storage upfront incentive for new installations that demonstrates significant "cost effectiveness" of distributed energy systems. Meeting this target was contingent upon PURA's determination in Docket No. 18-12-35. There was not yet a determination by PURA in the docket, and therefore the revision.

<sup>&</sup>lt;sup>45</sup> The total does not count Solar for All projects separately because all Solar for All projects are also RSIP projects and therefore already counted.

Program / Product	Projects	<b>Total</b> Investment (\$MM's)	Installed Capacity (kW)	Ann. GHG Emissions Avoided (TCO2)
Residential Solar Investment Program	3,177-4,706	\$96.7-\$143.2	27,000-40,000	16,995-25,178
Solar for All Program	177-416	\$4.3-\$10.1	1,200-2,700	724-1,700
Equitable Modern Grid <sup>46</sup>	0-100	\$0.0-\$0.9	0-500	-
EnergizeCT Smart-E Loan	<u>270-740</u>	<u>\$3.6-\$9.8</u>	<u>300-1,000</u>	<u>1,972-3,911</u>
Total <sup>47</sup>	3,447-5,581	\$100.3-\$153.0	27,300-41,500	19,691-30,789

Table 4. FY 2022 Targets for the Incentive Programs Business Unit

Program / Product	<u>Projects</u>	<u>Total</u> <u>Investment</u> <u>(\$MM's)</u>	Installed Capacity ( <u>kW)</u>	Ann. GHG Emissions Avoided (TCO2)
Residential Solar Investment Program	<u>471</u>	<u>\$13.7</u>	<u>4,000</u>	<u>7,049</u>
<u>Solar for All Program</u>	<u>96</u>	<u>\$2.5</u>	<u>660</u>	<u>1,154</u>
Equitable Modern Grid <sup>48</sup>	<u>362</u>	<u>\$11.8</u>	<u>5,000</u>	
EnergizeCT Smart-E Loan	<u>800</u>	<u>\$11.2</u>	<u>800</u>	<u>15,168</u>
Total <sup>49</sup>	<u>1,633</u>	<u>\$36.6</u>	<u>9,800</u>	<u>22,217</u>

Starting in FY 2021, the Green Bank has added annual GHG emissions avoided (see Tables 3 and 4) and investment in vulnerable communities (see bullet below) as targets for its Incentive Programs.

 By 2025, no less than 40 percent of investment and benefits (e.g., jobs) from Incentive Programs is directed to vulnerable communities.

It should be noted that there are two factors impacting the FY 2021 targets for the RSIP – COVID-19 impacts on market demand and achieving the 350 MW target<sup>50</sup> – and therefore, the low and high range for the targets.

As a result of successfully achieving these targets, the Green Bank will reduce the energy burden on <u>and improve the resiliency from climate change for</u> Connecticut families, <u>especially</u> <u>those in vulnerable communities</u> (including low to moderate income households and communities of color, as well as ratepayers by reducing demand, specifically peak demand,

<sup>&</sup>lt;sup>46</sup> The Green Bank will be submitting a proposal into Docket No. 17-12-03(RE03) – Electric Storage. Should the Request for Proposed Designs ("RFPD") be accepted by PURA, then the Green Bank would anticipate administering an upfront electric storage incentive program beginning January 1, 2021.

<sup>&</sup>lt;sup>47</sup> The total does not count Solar for All projects separately because all Solar for All projects are also RSIP projects and therefore already counted.

<sup>&</sup>lt;sup>48</sup> The Green Bank will be submitting a proposal into Docket No. 17-12-03(RE03) – Electric Storage. Should the Request for Proposed Designs ("RFPD") be accepted by PURA, then the Green Bank would anticipate administering an upfront electric storage incentive program beginning January 1, 2021.

<sup>&</sup>lt;sup>49</sup> The total does not count Solar for All projects separately because all Solar for All projects are also RSIP projects and therefore already counted.

<sup>&</sup>lt;sup>50</sup> Given the devastating impacts of COVID-19 on the local solar industry, the Connecticut Green Bank Board of Directors approved an extension to the RSIP (see Footnote 28).

through the use of solar PV and battery storage), 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.

# 5. Financing Programs

The Green Bank manages financing programs. That is to say that it oversees financing programs that provide 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 business unit.

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

- <u>Commercial Property Assessed Clean Energy ("C-PACE")</u><sup>51</sup> 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.
- <u>Green Bank Solar PPA</u> third-party ownership structure to deploy solar PV systems for commercial scale end-use customers (e.g., businesses, nonprofits, municipal and state governments, <u>affordable multifamily properties</u>, etc.) that uses a multi-year <u>PPAs</u> <u>Power Purchase Agreement ("PPAs"</u>)-to finance projects while reducing energy costs for the host customer.
- <u>Small Business Energy Advantage ("SBEA")</u> Eversource Energy administered onbill commercial energy efficiency loan program for small businesses, in partnership with low-cost capital provided by Amalgamated Bank with a credit enhancements from the Green Bank (i.e., subordinated debt) and the Connecticut Energy Efficiency Fund (i.e., loan loss guaranty and interest rate buydown).
- <u>Multifamily Products</u> 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-totime 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.

<sup>&</sup>lt;sup>51</sup> CGS 16a-40g

The Green Bank has set targets for its Financing Programs business unit for FY  $2020_{2}^{52}$  and FY  $2021_{53}^{53}$  and FY  $2022_{2}^{53}$  in terms of the number of projects, total investment (i.e., public and private), and installed capacity – see Tables 4-<u>5 and through 57</u>.

Program / Product	Projects	<b>Total Investment</b> (\$MM's)	Installed Capacity (kW)
Commercial PACE	56	\$25.0	7,000
Green Bank Solar PPA	33	\$28.0	12,600
Small Business Energy Advantage <sup>54</sup>	1,000	\$20.0	-
Multifamily Predevelopment Loan	2	\$0.1	-
Multifamily Term Loan	8	\$1.3	200
Multifamily Catalyst Loan	2	\$0.1	-
Strategic Investments	<u>2</u>	<u>\$7.5</u>	-
Total	1,718	\$99.2	24,000

Table 554. Revised FY 2020 Targets for the Financing Programs Business Unit

Table 6. Revised FY 2021 Targets for the Financing Programs Business Unit

Program / Product	Projects	<b>Total</b> Investment (\$MM's)	Installed Capacity (kW)	Ann. GHG Emissions Avoided (TCO2)
Commercial PACE	33-48	\$15.2-\$23.3	5,300-7,100	1,452-1,641
Green Bank Solar PPA	30-58	\$4.0-\$6.8	6,200-15,400	3,400-9,668
Small Business Energy Advantage	1,203	\$20.4	-	-
Multifamily Predevelopment Loan	1	\$0.1	-	-
Multifamily Term Loan	2	\$0.2	0.1	68
Multifamily Health & Safety	1	\$0.1	-	-
EV Offset Program	-	-	-	17,770
Strategic Investments	<u>3</u>	<u>\$7.8</u>	<u>-</u>	<u>-</u>
Total	1,267-1,273	\$46.1-\$69.2	10,900-20,700	6,800-13,100

#### Table 7. FY 2022 Targets for the Financing Programs Business Unit

Program / Product				
Commercial PACE	<u>44</u>	<u>\$23.3</u>	<u>6,500</u>	<u>11,493</u>
Green Bank Solar PPA	<u>42</u>	<u>\$25.6</u>	<u>13,400</u>	23,053
Small Business Energy Advantage	<u>818</u>	<u>\$14.5</u>		<u>32,890</u>

<sup>52</sup> Revised by the <u>BOD Board of Directors</u> on January 24, 2020

<sup>53</sup> Given the uncertain impacts of COVID-19, low and high range targets were proposed.

<sup>&</sup>lt;sup>54</sup> In partnership with Eversource Energy and Amalgamated Bank, the Green Bank provides capital in support of the utilityadministered S<u>BEAmall Business Energy Advantage</u> program to provide 0% on-bill financing up to 4-years for energy efficiency projects.

Program / Product	<u>Projects</u>	<u>Total</u> Investment (\$MM's)	<u>Installed</u> Capacity (kW)	Ann. GHG Emissions Avoided (TCO2)
Multifamily Term Loan	<u>4</u>	<u>\$0.7</u>	<u>200</u>	<u>282</u>
Multifamily Health & Safety	<u>2</u>	<u>\$0.6</u>		
EV Offset Program	Ξ	Ξ.	<u> </u>	<u>16,500</u>
Strategic Investments	<u>_</u>	<u> </u>	<u> </u>	<u> </u>
<u>Total</u>	<u>902</u>	<u>\$62.0</u>	<u>19,000</u>	<u>50,127</u>

Starting in FY 2021, the Green Bank has added annual GHG emissions avoided (see Table<u>s 6</u> and 75) and investment in vulnerable communities (see bullet below) as targets for its Financing Programs.

 By 2025, no less than 40 percent of investment and benefits (e.g., jobs) from Financing Programs is directed to vulnerable communities.

Given the uncertain impacts of COVID-19, there are low and high range targets proposed.

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 also reducing the energy burden on <u>and improve the resiliency from climate</u> <u>change for</u> Connecticut families and businesses, <u>especially those in vulnerable communities</u>, 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.

# 6. Environmental Infrastructure Programs

The Green Bank is developing environmental infrastructure programs. That is to say that the Green Bank will utilize its financing tools, in close cooperation with the DEEP, to mobilize private investment in the modernization and decarbonization of environmental infrastructure, making it more resilient to the impacts of climate change. With the passage of PA 21-115, the scope of the Green Bank has broadened from "clean energy" to now include "environmental infrastructure". As required by statute, the Green Bank must first develop a Comprehensive Plan in order to be able to expend resources to foster its growth, development, and commercialization. In FY 2022, the Green Bank will develop such plan.

The policy supports environmental infrastructure in the following ways:

 Governance – establishes an ex officio position on the BOD for the Secretary of the Office of Policy and Management ("OPM") (or their designee);

- Fund establishes an Environmental Infrastructure Fund ("EIF") which may receive funds, including federal funds, that are available for environmental infrastructure investments;<sup>55</sup>
- Bonding allows the Green Bank to issue bonds for up to 25 years for "clean energy" and 50 years for "environmental infrastructure" projects or the useful life of the measure, whichever is less;
- Special Capital Reserve Fund ("SCRF") increases the Green Bank's access to the SCRF from \$100 MM to \$250 MM;<sup>56</sup> and
- Reporting increases reporting to committees of cognizance within the Connecticut General Assembly from energy and commerce, to now include environment and banking.

For FY 2022, the Green Bank's budget includes resources to support the development of a Comprehensive Plan, and hiring of a Director of Environmental Infrastructure Programs. To immediately support private investment in environmental infrastructure, the Green Bank will expand its Smart-E Loan Program with local community banks and credit unions to provide borrowers with the ability to finance environmental infrastructure projects (e.g., health & safety, wells for water, greenhouses) on their homes.<sup>57</sup> In FY 2023, after the completion, review, and approval of a Comprehensive Plan, the Green Bank will implement an environmental infrastructure program.

# 6.7. Impact Investment

The Green Bank pursues investment strategies that advance market transformation in green investing while supporting the organization's pursuit of financial sustainability. With the mission to confront climate change and provide all of society a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy, the Green Bank leverages limited public resources to scale-up and mobilize private capital investment in the green economy of Connecticut.

# 76.1 State Funds

The Green Bank receives public capital from a number of ratepayer and state sources <u>(i.e., public revenues)</u> that it leverages to scale-up and mobilize private capital investment in the green economy of Connecticut.

## <u>System Benefit Charge – CEFClean Energy Fund</u>

<sup>57</sup> Through a second loan loss reserve, the Green Bank currently provides local community banks and credit unions with a credit enhancement to provide low-cost and long-term unsecured loans for clean energy improvements to their homes.

<sup>&</sup>lt;sup>55</sup> Such funds shall not include ratepayer (e.g., CEF) or RGGI funds, or funds associated with the Clean Water Fund or such funds collected from a water company.

<sup>&</sup>lt;sup>56</sup> SCRF will only be allowed for up to 25 years for "clean energy" and "environmental infrastructure"

As its primary source of public capitalrevenues, the Green Bank through CGS 16-245n(b) receives a 1 mill per kilowatt-hour surcharge called the 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 1990's.<sup>5859</sup> On average, households contribute between \$7-\$10 a year for the CEF, which the Green Bank leverages to attract multiples of private capital investment in the green economy of Connecticut through its Financing Programs.<sup>60</sup>

#### **Regional Greenhouse Gas Emission Allowance Proceeds**

As a secondary source of public capital<u>revenues</u>, the Green Bank receives a portion (i.e., 23%) of Connecticut's Regional Greenhouse Gas Initiative ("RGGI") allowance proceeds through the Regulation of Connecticut State Agencies Section 22a-174(f)(6)(B). The Green Bank invests RGGI proceeds from the nation's first cap-and-trade program to finance clean energy improvements (i.e., renewable energy projects) through its Financing Programs.

## 76.2 Federal Funds

The Green Bank receives public capital through a number of past, current, and future sources<sup>61</sup> 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 invested the remaining \$8.2 million in financing programs. With <u>nearly</u> \$2.2 million of ARRA funds left,<sup>62</sup> the Green Bank invested over \$6.46 million of ARRA funds to attract and mobilize more than \$110-169 million of public and private investment in residential clean energy financing programs.

#### **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.<sup>63</sup> 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.

#### **Clean Energy & Sustainability Accelerator**

<sup>58</sup> PA 98-28 "An Act Concerning Electric Restructuring"

<sup>&</sup>lt;sup>59</sup> 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

<sup>&</sup>lt;sup>69</sup> 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

<sup>&</sup>lt;sup>61</sup> 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.

<sup>62</sup> As of July 1, 20192021

<sup>&</sup>lt;sup>63</sup> "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 mostlydeveloped 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.

Modelled after the Green Bank, the Clean Energy & Sustainability Accelerator ("Accelerator") is a public policy introduced by Congress (i.e., funding levels between \$20B to \$100B) and included as part of the American Jobs Plan (i.e., funding level of \$27B) by President Biden to create a national independent 501(c)3 nonprofit green bank. With growing bipartisan support, the creation of an Accelerator would provide the Green Bank with access to federal resources to mobilize private investment in "clean energy" and "environmental infrastructure" projects.

# 76.3 Green Bonds

The future of green bonds is growing. Globally, in 2020, countries, companies, and local governments sold \$305.1 billion (2019: \$269.4 billion) of green bonds that fund projects that are good for the environment.<sup>64</sup> In July of 2019, Connecticut Treasurer Shawn Wooden announced that the Clean Water Fund's Green Bond Sale shattered state records. The AAArated green bond had a record low interest rate of 2.69% and received retail investor orders topping \$240 million in one day! This is the highest level of retail investor orders (i.e., from Separately Managed Accounts ("SMAs") or individuals) in the 20-year history of this program – with the balance of the bonds offered to institutional investors generating an additional \$128 million in orders. In April 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. It was honored by Environmental Finance with the Innovation and Green Bond Structure awards in 2020. In July 2020, the Green Bank issued \$16.8 million in a SCRF special capital reserve fund backed Green Liberty Bond that was Climate Bond Certified. The Green Liberty Bond was recognized by The Bond Buyer with the Innovative Deal of the Year award in 2020. 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 retain investors in Connecticut and across the U.S., as well as institutional investors interested in sustainability investments.

Green Banks have an essential role in leveraging limited public funds with private capital to drive investment in the green economy to achieve climate change goals, create jobs in our communities, and reduce the burden of energy costs on our families and businesses. 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.

Connecticut's climate change plan<sup>65</sup> focuses on three mitigation wedges (see Figure 4), including:

 Decarbonizing Electricity Generation – representing 23% of Connecticut's economy-wide GHG emissions, electricity generation must be transitioned to zero-carbon renewable energy sources. Strategies include financing for in-state or regional utilityscale renewable energy resources (e.g., community solar, wind, run-of-the-river hydro,

<sup>&</sup>lt;sup>64</sup> Bloomberg News (James Crombie, January 8, 2021)

<sup>&</sup>lt;sup>65</sup> "Building a Low Carbon Future for Connecticut – Achieving a 45% GHG Reduction by 2030" recommendations from the Governor's Council on Climate Change (December 18, 2018)

food-waste-to-energy, etc.) and financing and incentives for in-state distributed energy resources (e.g., behind the meter solar PV, battery storage, fuel cells, combined heat and power, etc.) that assist with the implementation of the Class I and III <u>RPSRenewable Portfolio Standard</u>, <u>RGGIRegional Greenhouse Gas Initiative</u>, and other public policies. To ensure a sustainable downward trajectory to meet the State's 2050 target, electricity generation must be 66% and 84% carbon-free by 2030 and 2050, respectively.

- Decarbonizing Transportation representing over 35% of Connecticut's economywide GHG emissions, the transportation sector is the largest source of statewide emissions and must be transitioned to zero- and low-carbon technologies. Strategies for zero- and low-carbon transportation include adopting innovative financing models for zero emission vehicles ('ZEV'')ZEV deployment (i.e., EVs and <u>fuel cell electric vehicles</u> ('`FCEVs'')) and ZEV charging infrastructure, ensuring equitable access to clean transportation options such as electric bus fleets and ride sharing or hailing services. Also important is supporting voluntary (e.g., carbon offset) and regulatory (e.g., Transportation Climate Initiative) markets for cleaner transportation that transitions us away from fossil fuel to renewable energy. More specifically, to meet the 2030 target, 20% of the passenger fleet and 30% of the heavy-duty fleet must be zero emission; and to meet the 2050 target, 95% of the passenger fleet and 80% of the heavy-duty fleet must be zero emission.
- Decarbonizing Buildings representing over 30% of Connecticut's economy-wide GHG emissions, residential, commercial, and industrial buildings are the second largest emitting sector that must transition away from fossil fuels to renewable thermal technology. Strategies for zero-carbon buildings include financing and incentives for energy efficiency (e.g., thermal insulation, appliances, etc.) and renewable heating and cooling (e.g., air source heat pumps, ground source heat pumps, heat pump water heaters, etc.). To meet the economy-wide 2030 and 2050 targets for Buildings, renewable heating and cooling technologies must be significantly deployed to 11% and 26% for residential, and 9% and 20% for commercial, by 2030 and 2050 respectively.

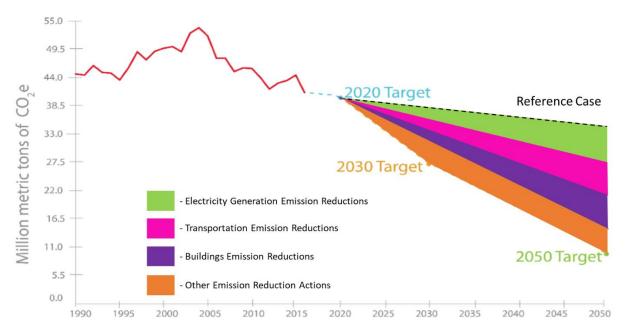


Figure 4. Example of Key GHG Emission Reduction Measures (i.e., Mitigation Wedges) for Connecticut to Achieve Targets

The size of investment required and long-term revenue streams from clean energy, lend themselves well to bond structures. Issuing green bonds can provide the Green Bank a lower-cost, longer-term source of capital, enabling the Green Bank to further leverage state and federal funds to increase its impact in Connecticut by attracting and mobilizing private investment in the state's green economy. The Green Bank has an important role to play in advancing green bonds in the U.S., especially given its history of engaging citizens and communities and its expertise in developing impact methodologies and a thorough and transparent reporting framework.

### 7.8. Citizen Engagement

The Green Bank, and its predecessor the Connecticut Clean Energy Fund (CCEF), have a longstanding history of citizen engagement within the communities of Connecticut. In 2002, the CCEF partnered with six private foundations<sup>66</sup> 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 Program.<sup>67</sup> 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,<sup>68</sup> while also advancing the SunShot Initiative of the U.S. Department of Energy (<u>"USDOE"</u>) in partnership with the Clean Energy States Alliance through projects that reduce soft-costs for solar PV (i.e., customer acquisition,

<sup>&</sup>lt;sup>66</sup> Emily Hall Tremaine Foundation, The John Merck Fund, Pew Charitable Trust, The Oak Foundation, Rockefeller Brothers Fund, and Surdna Foundation

<sup>&</sup>lt;sup>67</sup> "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).

<sup>&</sup>lt;sup>68</sup> "Solarize Your Community: An Evidence-Based Guide for Accelerating the Adoption of Residential Solar" by the Yale Center for Business and the Environment.

permitting, and financing) and provide better access to solar PV for <u>LMI</u> <del>low-to-moderate</del> income-households.

Engaging citizens has been in the DNA of the Green Bank since its inception.

# 7.1 Green Bonds US-Campaign

From the air we breathe to the products we consume; the world's population is inescapably connected. And while that may present challenges in the context of global climate change, it also affords incredible opportunities for collaboration and progress.

Whether through markets or within communities, the Connecticut Green Bank is bringing people together and strengthening the bonds we share with one another. As its name<u>the name of the</u> Comprehensive Plan suggests —, the "Green Bonds US" campaign, seeks to promote a simple but critically important message; green brings us together, green <u>bonds</u> us, the environment <u>unites us</u>. 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.multimedia, brand awareness and green bond promotional campaign will promote the benefits of green energy, as well as a brand-new green energy investment opportunity provided by the Green Bank.

### **Green Liberty Bonds**

Despite the rising demand for <u>green\_clean\_energy</u> in the state, barriers still exist that may prevent more people from participating in Connecticut's growing green economy. For example, a homeowner who, despite having a strong desire to "go solar", is not able to because of factors like price, siting, or other issues. To allow more people to benefit from, and invest in, green\_clean\_energy and environmental infrastructure, the Green Bank is offering another way. For the first time in its history, the Green Bank <u>will issue "mini" has issued "mini"</u> green-bonds (e.g., small denomination bonds, certificate of deposits, and/or other fixed income investments) called Green Liberty Bonds, for sale to institutions and retail investors (i.e., <u>SMAs\_separately</u> managed accounts "SMAs" and individuals). Launching as a pilot program, <u>Green Liberty Bonds</u> 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.

With these three features within a bond, any green bond can be a Green Liberty Bond.

Green Liberty Bonds represent another step forward on the path to inclusive prosperity.

In March and December of 2020, the Green Bank's bonds were awarded for innovation and green bond structure by Environmental Finance and The Bond Buyer, respectively.

For more information on Green Liberty Bonds, visit <u>www.greenlibertybonds.com</u>

### Market Research

To gauge the public's interest and assess market demand for <u>mini-green-bondsGreen Liberty</u> <u>Bonds</u>, the Green Bank performed primary and secondary research such as an online survey, interviews with industry professionals, as well as internal review of recent market data and investment reports.

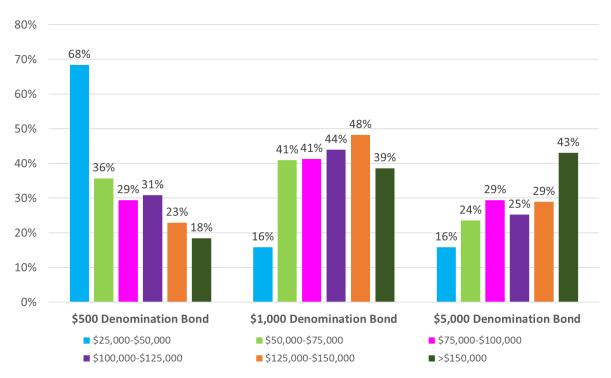
In June of 2019, the Green Bank engaged GreatBlue Research to conduct primary research throughout Connecticut, measuring the market potential for "mini-bonds". A digital survey was sent to two target audiences: 1.) households that have installed solar PV through the RSIP and 2.) the general population (i.e., households that haven't participated in a Green Bank program). When asked "what types of green projects would you support through your private investments," the survey participants had the following responses:

- Recycling and waste reduction 69.5%
- Clean water 67.3%
- Roof-top solar 64.5%
- High efficiency heating and cooling systems 58.8%
- Home energy efficiency projects 56.7%
- Land conservation 49.3%
- Energy efficiency appliance rebates 45.6%
- Electric vehicles ("EV's) 41.2%

The Green Bank and GreatBlue research also highlighted that the income of the investor, alongside the denomination of the bond, represents an opportunity for increasing equitable access to greater investment in the environment – see Figure 5.

After taking into account the results of our state-wide primary research, current national trends and conversations with various industry experts, there is sufficient data to suggest that the green bond market for individual investors in Connecticut may be quite large. As a result, the Green Bank intends to <u>continue to</u> issue <u>mini-green-bondsGreen Liberty Bonds</u>, with proceeds going to support the development of <u>green-"clean</u> energy" and "environmental infrastructure" projects within Connecticut.

For more information on the Green Bonds US campaign, visit www.greenbondsus.com



#### Figure 5. Comparison of Interest in Bond Denomination Value by Income of Survey Respondents

The Green Bank expects to continue to conduct survey research on retail green bond investors from Connecticut and across the country to assess their interest in investing in "clean energy" and "environmental infrastructure" projects.

## 7.2 Sustainable CT

Sustainable CT and the Green Bank are developing an engagement and investment platforms to raise capital in support of local projects that provide individuals, families, and businesses with investment opportunities to make an impact on sustainability in their communities. The partnership between Sustainable CT 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.

Through a partnership between Sustainable CT and Patronicity, an online crowdfunding platform will enable citizen leaders to have access to financial resources <u>(i.e., grants)</u> that they need <u>for to support</u> local sustainability projects.

For more information on Sustainable CT, visit www.sustainablect.com

# 8.9. Evaluation Framework and Impact Methodologies

The Green Bank's evaluation efforts seek to understand how the increase in investment and deployment of clean energy <u>and environmental infrastructure</u> 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.

# 98.1 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.<sup>69</sup> This framework focuses primarily on assessing the market transformation the Green Bank is enabling, including:

- <u>Supply of Capital</u> including affordable interest rates, longer term maturity options, improved underwriting standards, etc.
- <u>Consumer Demand</u> 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.
- <u>Societal Impact</u> the benefits society receives from more investment and deployment of clean energy.

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.,  $E^4$ ) – including Economy, Environment, Energy, and Equity.

## <u>98.2 Green Bond Framework</u>

The Green Bank's Green Bond Framework ("Framework")<sup>70</sup> provides a structure in which the Green Bank can more efficiently and effectively support its efforts to raise capital and deploy more clean energy <u>and environmental infrastructure</u> 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 to meet the 10x goals identified by the United Nations as the level needed to <u>advance sustainability and</u> hold off the worst effects of climate change, the Green Bank will use its statutory authority (i.e., CGS 16-245kk) to issue bonds, including <u>Green-green Bondsbonds</u>. These are key to sourcing capital for clean energy <u>and</u>

<sup>&</sup>lt;sup>69</sup> https://ctgreenbank.com/wp-content/uploads/2017/02/CTGreenBank-Evaluation-Framework-July-2016.pdf

<sup>&</sup>lt;sup>70</sup> https://ctgreenbank.com/wp-content/uploads/2020/04/CGB\_Green-Bond-Framework\_final-4-22-2020.pdf

<u>environmental infrastructure</u> 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.

## <u>98.3 Impact Methodologies</u>

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 Navigant Consulting, 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.<sup>71</sup>
- <u>Tax Revenues</u> working in consultation with the Connecticut Department of Revenue Services ("DRS"), through the work of Navigant Consulting, the Green Bank devised a methodology that takes investment in clean energy to reasonably estimate the individual income, corporate, and sales tax revenues from clean energy deployment.<sup>72</sup>
- <u>Environmental Protection</u> working in consultation with the United States Environmental Protection Agency ("<u>US</u>EPA") 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, NOx, SO2, and PM2.5) resulting from clean energy deployment.<sup>73</sup>
- Public Health Improvement working in consultation with the EPA, 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.<sup>74</sup>
- 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

<sup>&</sup>lt;sup>71</sup> https://www.ctgreenbank.com/wp-content/uploads/2018/03/CGB\_DECD\_Jobs-Study\_Fact-Sheet.pdf

<sup>72</sup> https://www.ctgreenbank.com/wp-content/uploads/2018/09/CGB-Eval-Tax-Methodology-7-24-18.pdf

<sup>&</sup>lt;sup>73</sup> <u>https://www.ctgreenbank.com/wp-content/uploads/2018/01/CGB-Eval-IMPACT-091917-Bv2.pdf</u>

<sup>&</sup>lt;sup>74</sup> https://www.ctgreenbank.com/wp-content/uploads/2018/03/CGB-Eval-PUBLICHEALTH-1-25-18-new.pdf

ensuring that no less than 40 percent of investment from its programs are directed to vulnerable communities by 2025.

 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, to estimate the energy burden reduction from financing solar PV.

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.<sup>75</sup> In FY 2020 and FY 2021, the Green Bank is developing its Equity and Energy impact methodologies to accompany its Economy and Environmental methodologies. In FY 2023, the Green Bank will revise its methodologies beyond "clean energy" to also include "environmental infrastructure" projects and their associated benefits.

The Green Bank's efforts to increase investment in and deployment of clean energy and <u>environmental infrastructure</u> projects – which result in increased benefits to Connecticut and all of society – can also be looked at through the lens of the United Nation's Sustainable Development Goals ("UNSDG's").<sup>76</sup> The UNSDG's include, but are not limited to – reducing poverty, improving health and well-being, making clean energy affordable, increasing economic development, reducing inequalities, supporting sustainable communities, and confronting climate change – areas where the Green Bank is measuring (or will measure) the impacts of its investments.

# 9.10. Reporting and Transparency

The Green Bank has extensive reporting on its financial management and societal impact through various mechanisms. As an administrator of ratepayera recipient of public revenues (i.e., Clean Energy Fund) and taxpayer and (e.g., Regional Greenhouse Gas Initiative allowance proceeds) resources, 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., OPM), various committees of cognizance within the Connecticut General Assembly (i.e., energy & technology, commerce, environment, and banking), and other departments (e.g., DEEP, Office of Fiscal Analysis)

# **<u>10</u>9.1** Comprehensive Annual Financial Report (<u>"CAFR"</u>)

A Comprehensive Annual Financial Report ("CAFR") 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 a CAFR in its annually updated publication *Codification of Governmental Accounting and Financial Reporting Standards*. A CAFR 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

<sup>&</sup>lt;sup>75</sup> <u>http://www.ctgreenbank.com/strategy-impact/impact/</u>

<sup>&</sup>lt;sup>76</sup> https://www.un.org/sustainabledevelopment/sustainable-development-goals/

independent audit of the CAFR 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.<sup>77</sup>

To date, the Green Bank has issued seven CAFR'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)
- <u>Fiscal Year Ended June 30, 2020</u>

As the "gold standard" in government reporting, the CAFR is the mechanism the Green Bank uses to report its fiscal year financial and investment performance – including societal benefits and impacts – to its stakeholders. For each of its seven years filing the CAFR with the Government Finance Officers Association the Green Bank has received a Certificate of Achievement for Excellence in Financial Reporting.<sup>78</sup>

# 109.2 Annual Report

Beyond the CAFR, 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 nine annual reports, including:

- Fiscal Year 2012 Annual Report
- Fiscal Year 2013 Annual Report
- 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
- <u>Fiscal Year 2019 Annual Report</u>
- <u>Fiscal Year 2020 Annual Report</u>

<sup>&</sup>lt;sup>77</sup> 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 (CAFR Program) in 1945 to encourage and assist state and local governments to go beyond the minimum requirements of generally accepted accounting principles to prepare <u>CAFRs</u> comprehensive annual financial reports that evidence the spirit of transparency and full disclosure and then to recognize individual governments that succeed in achieving that goal.

<sup>&</sup>lt;sup>78</sup> GAO has yet to designate the FY 2020 CAFR with a Certificate of Achievement

# **<u>109</u>.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 quasipublic 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 Connecticut Green Bank in fulfillment of its duties under Sections 1-122 and Section 2-90 of the Connecticut General Statutes.GS

To date, the APA has conducted three audits, including:

- Fiscal Years 2012 and 2013
- Fiscal Years 2014 and 2015
- Fiscal Years 2016 and 2017
- Fiscal Years 2018 and 2019

## 109.4 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.<sup>79</sup> 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 http://www.openquasi.ct.gov/

### 109.5 Stakeholder Communications

The Green Bank holds quarterly stakeholder webinars to update the general public on the progress it is making with respect to its Comprehensive Plan and annual targets.<sup>80</sup> Through these webinars, the Green Bank staff invite questions from the audience. These webinars are announced through the Green Bank's list serve consisting of thousands of stakeholders as well as the events page of its website.<sup>81</sup>

The Green Bank also issues an e-newsletter through its list serve that provides key topics in the news and important information on products, programs and services.<sup>82</sup>

<sup>&</sup>lt;sup>79</sup> <u>https://openquasi.ct.gov/</u>

<sup>&</sup>lt;sup>80</sup> https://www.ctgreenbank.com/news-events/webinars/

<sup>&</sup>lt;sup>81</sup> <u>https://www.ctgreenbank.com/news-events/events-calendar/</u>

<sup>&</sup>lt;sup>82</sup> <u>https://www.ctgreenbank.com/newsletters/</u>

# **10.11.** Research and Product Development

As the Green Bank implements its Comprehensive Plan, there will be ongoing efforts to develop new 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 impact, including, for example:

- <u>Shared Clean Energy Facilities</u> to support decarbonizing the electricity infrastructure climate change wedge, while reducing the burden of energy costs on Connecticut's families and businesses, the Green Bank will seek to apply its experience administering the RSIP to supporting and investing in shared clean energy facilities (or community solar projects) with a focus on <u>LMI low to moderate income</u> families;
- <u>Energy Burden from Transportation</u> as Operation Fuel has done an exceptional job quantifying the energy burden for electricity use and heating of homes, understanding the energy burden from transportation (i.e., gasoline to alternative fuel vehicles) will help the Green Bank and others (e.g., Department of Housing, Connecticut Housing and Finance Authority, Partnership for Strong Communities, DEEP, etc.) understand its role in addressing the decarbonization of transportation emissions climate change wedge; and
- Environmental Infrastructure if there were an expansion of scope for the Green Bank beyond "clean energy," the Green Bank could apply the green bank model to mobilize private investment in "environmental infrastructure".<sup>83</sup> Working with DEEP and other state agencies, local governments, nonprofit organizations, academic institutions, and businesses, the Green Bank could, for example, identify new areas for increased investment in climate change adaptation and resiliency through the issuance of green bonds.<sup>84</sup>
- Metering to better understand the performance of various technologies, the Green Bank might support the deployment of meters. For example, meters for ground source heat pumps are being provided for free for the first 50 customers that finance such systems using the Smart-E Loan. Performance data collected from the meters and analyzed from such systems, over time, will inform installation, servicing, and financing of such systems supporting their wider adoption.

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.

<sup>83</sup> Proposed Senate Bill 927 in the 2019 Legislative Session

<sup>&</sup>lt;sup>84</sup> Section 10.3 Sustainability of the Comprehensive Plan of the Connecticut Green Bank for FY 2017 through FY 2019 recognizes that other green banks invest beyond "clean energy" and include "environmental infrastructure".

# **<u>11.12.</u>**Budget

# 121.1 FY 2020 Budget

For the details on the FY 2020 budget– <u>click here</u>.

For details on the FY 2019 to FY 2020 variance analysis supporting the continuation of the Sustainability Plan - <u>click here</u>.

## 121.2 FY 2021 Budget

For the details on the FY 2021 budget– <u>click here</u>.

For details on the FY 2021 revised budget – <u>click here</u>.

#### 12.3 FY 2022 Budget

For the details on the FY 2022 budget- click here.

# **13. Glossary of Acronyms**

ABS	Asset-Backed Security
ACG Committee	Audit, Compliance, and Governance Committee
AICPA	American Institute of Certified Public Accountants
APA	Auditors of Public Accounts
ARRA	American Recovery and Reinvestment Act
BOC Committee	Budget, Operations, and Compensation Committee
BOD	Board of Directors
CAFR	Comprehensive Annual Financial Report
CBI	Climate Bonds Initiative
CCEF	Connecticut Clean Energy Fund
CDFI	Community Development Financial Institution
CEF	Clean Energy Fund
CGS	Connecticut General Statutes
C-PACE	Commercial Property Assessed Clean Energy
DECD	Department of Economic and Community Development
DEEP	Department of Energy and Environmental Protection
DPH	Department of Public Health
DRS	Department of Revenue Services
EDC	Electric Distribution Company
EEB	Energy Efficiency Board
EEPP	Electric Efficiency Partners Program
EIF	Environmental Infrastructure Fund
EV	Electric Vehicle
GASB	Governmental Accounting Standards Board
GHG	Greenhouse Gas Emissions
HES	Home Energy Solutions
HES-IE	Home Energy Solutions – Income Eligible

IPC	Inclusive Prosperity Capital
LMI	Low-to-Moderate Income
MPA	Master Purchase Agreement
MTI	Master Trust Indenture
OPM	Office of Policy and Management
PA	Public Act
PPA	Power Purchase Agreement
PURA	Public Utilities Regulatory Authority
REC	Renewable Energy Credit
RGGI	Regional Greenhouse Gas Initiative
RPS	Renewable Portfolio Standard
RSIP	Residential Solar Investment Program
RSIP-E	Residential Solar Investment Program – Extension
SBEA	Small Business Energy Advantage
SCRF	Special Capital Reserve Fund
SHREC	Solar Home Renewable Energy Credit
SMA	Separately Managed Accounts
UNSDG	United Nations Sustainable Development Goals
USDA	U.S. Department of Agriculture
USDOE	U.S. Department of Energy
USEPA	United States Environmental Protection Agency
ZEV	Zero Emission Vehicle



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# Memo

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

From: Bryan Garcia (President and CEO) and Eric Shrago (Managing Director of Operations)

Date: July 16, 2021

Re: Proposed Equity Methodology – Vulnerable Communities

The Green Bank has long sought to ensure that clean energy is available to all in Connecticut. We have refined program guidelines and added new offerings to ensure that the organization has the intended reach into communities that were not being adequately served.

In so doing, we have not had an overarching method or standard by which we assess or measure our offerings in terms of equity.

On May 18, 2021 the Audit Compliance and Governance Committee of the Board of Directors reviewed the proposed methodology. They have recommended its approval by the Board of directors.

#### I. Public Act 20-5 definition of Vulnerable Communities

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<sup>1</sup>.

In response to this definition being adopted, the Green Bank Board of Directors approved updating the second goal of the organization in the current comprehensive plan to:

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.

The Board also directed staff, in the same Comprehensive Plan to achieve no less than 40% of the investment and benefits in vulnerable communities by 2025 through its Incentive and Financing Programs.

#### II. Green Bank Methodology for Equity

To assess the progress made by the organization towards the above goal and gage how programs are doing from an equity perspective, we will look at the census track of where projects, investment, and deployment are located. We will count projects that are located in what we define as a vulnerable community census track that meets one of the following criteria established by the above statute:

• Low-to-Moderate Income Population – We will use our existing definition of Low-to-Moderate Income as being a census track where the tract's mean income is less than 100% of the Metropolitan Statistical Area's Adjusted Mean Income for the local Census Area for the present year. For example, for the past three fiscal years, the following is a breakdown of residential activity – see Table 1.<sup>2</sup>

Fiscal Year	# Projects		ects Investment (\$MM's)			Deployment (MW)		
	#	%	#	%	#	%		
2018	5,062	61%	\$92.6	50%	21.1	49%		
2019	5,966	62%	\$138.3	55%	29.4	49%		
2020	4,757	51%	\$120.8	48%	32.0	47%		

Table 1. Residentia	l Activity in MSA AM	I Bands below 100%	by FY Closed

<sup>2</sup> FY2020 Comprehensive Annual Financial Report (140)

<sup>&</sup>lt;sup>1</sup> Per Public Act 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 the Department of Energy and Environmental Protection in consultation with community representatives. Inclusion of "vulnerable communities" within the goals of the Green Bank would ensure that it's incentive (e.g., RSIP), financing (e.g., multifamily), and investment (e.g., Green Bank Capital Solutions) programs incorporate it as a priority.

• Eligible for Community Reinvestment Act Investment – The Green Bank will use the standards established in the CRA of 1977 to identify which census tracks are eligible (generally those where the median income is less than 80% of the Metropolitan Statistical Area's Adjusted Mean Income). For example, for the past three fiscal years, the following is a breakdown of residential activity from a CRA perspective – see Table 2.<sup>34</sup>

Fiscal Year	# Projects			tment M's)	Deployment (MW)		
	#	%	#	%	#	%	
2018	3,603	43%	\$55.4	30%	11.5	27%	
2019	3,679	38%	\$88.6	35%	16.1	27%	
2020	2,818	30%	\$66.7	27%	17.2	26%	

#### Table 2. Residential Activity that is potentially eligible for CRA Credits

- Environmental Justice Communities as defined by statute, these are census block where the average income is less than 200% of the federal poverty level or is located in a distressed municipality.
- Other Communities at risk of the impacts of climate change The Green Bank will annually engage DEEP for a list of these census tracks/blocks.

The Green Bank will include reporting on these in the Consolidated Annual Financial Report's Non-Financial Statistics Section on a numerical and on a percentage basis in comparison with the rest of the organization's activities. This percentage can then be compared to the split of the state population that lives in vulnerable communities to track progress towards the 40 percent by 2025 target.

<sup>&</sup>lt;sup>3</sup> FY2020 Comprehensive Annual Financial Report (147)

 $<sup>^4</sup>$  It should be noted that CRA defines low income as less than 50% AMI and moderate income as 50-80% AMI

#### Resolution

**WHEREAS,** the Connecticut Green Bank has long sought to gage and assess the reach of its programs in terms of their equity and inclusion;

**WHEREAS**, the State of Connecticut has adopted the definition set forth in Public Act 20-05 of Vulnerable Communities;

**WHEREAS**, the Green Bank established Incentive and Financing Program goals for investment and benefits in these Vulnerable Communities by 2025;

**WHEREAS**, pursuant to Section 5.2.1 of the Connecticut Green Bank (Green Bank) Bylaws, the Audit, Compliance, & Governance (ACG) Committee is charged with the review and approval of, and in its discretion recommendations to the Board of Directors (Board) regarding organizational policies and procedures, and on May 18, 2021 made such a recommendation to the Board of Directors;

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors of the Green Bank approves of the above methodology for assessing the equity and inclusion of the organization's Incentive and Financing Programs including, but not limited to, the number of projects, investment, and deployment in Vulnerable Communities.

Second. Discussion. Vote

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



### Memo

- To: Connecticut Green Bank Board of Directors
- From: Karl Johnson (Senior Associate of Asset Management and Compliance), and Eric Shrago (Managing Director of Operations)

Date: July 16, 2021

Re: Proposed Energy Burden Methodology – Solar Financing

#### I. Background

Describing the contributions of the projects supported by the Connecticut Green Bank to the green economy helps illustrate the how the continued deployment of clean energy and thus the Green Bank helps society. Through its evaluation efforts in general, and specifically its "Evaluation Framework: Assessing, Monitoring, and Reporting of Program Impacts and Processes," the Green Bank has assembled the following materials:

 Evaluation Framework: Societal Perspective (Combined Energy Burden Reduction – Solar PV) – Draft Fact Sheet by the Green Bank

The Green Bank seeks to reasonably estimate the economic benefits to end-use customers of clean energy – or what we call the energy burden reduction. Providing end-use customers with estimates of the energy burden reduction resulting from clean energy deployment, will increase other end-use customer interests in pursuing similar benefits. The Energy Burden Reduction methodology has been reviewed by the Public Utilities Regulatory Authority (PURA) and the Department of Energy and Environmental Protection (DEEP), and both have found this to be an acceptable and reasonable methodology for estimating actual Savings in Dollars for residential and commercial end-use customers of solar PV.

The below methodology only applies to solar customers in programs where the Green Bank has insight to both generation and financing costs (Posigen, Resi Solar Lease, PPA, Residential Solar Loan). In the future we may evaluate its use elsewhere.

On June 14, 2021, the Audit, Compliance, and Governance Committee of the Board of Directors of the Green Bank reviewed this methodology and recommended its approval and adoption to the Board of Directors.

#### II. Green Bank Methodology for Energy Burden Reduction

This methodology estimates the Energy Burden Reduction for residential and commercial solar customers participating in Green Bank Programs in Dollars. Generally, Savings in Dollars is calculated by subtracting the Hypothetical Avoided Utility Expense by Solar Lease or Loan Expense, shown below in Formula 1.

(Formula 1) Savings = Hypothetical Avoided Utility Expense – Solar Expense

The Solar Expense is calculated differently for customers depending on the program in which they participate. For Residential customers, savings is calculated by subtracting the Solar Expense (Solar Lease or Loan Payment) from the Hypothetical Avoided Utility Expense (Hypothetical Avoided Utility expense is calculated by multiplying the utility rate by the generation of their system ) shown in Formula 2.

(Formula 2) Posigen/SL1/SL2 Savings = (Utility Rate \* Solar PV Generation) - Solar Expense

For commercial PPA customers, savings is strictly the difference between the utility rate and a customer's contractual PPA rate all multiplied by the Solar PV Generation, shown in Formula 3.

(Formula 3) Commercial Savings = (Utility Rate – PPA Rate) \* Solar PV Generation

The utility rate calculation is the same for UI and Eversource customers, but the various charges differ by rate class and date shown in Formula 4.

(Formula 4) Utility Rate = (Generation Charge + Policy and Other Delivery Charges + Transmission Charge + Distribution Charge + Demand Charge + Combined Public Benefits Charges)

We only consider kWh charges for solar PV because residential electric rates don't have demand charges.

Escalating Lease Price: Residential customers with escalating lease prices have a predetermined lease price/ kWh that increases at a compounding escalator rate every year on the anniversary of the energize date. The report calculates the number of anniversaries since the energize date to adjust for an escalating solar expense.

Escalating PPA Rate: Customers with an escalating PPA rate see their PPA rates increase by a compounding escalator rate every year on the anniversary of the commercial operation date. The report calculates the number of anniversaries since the commercial operation date then calculates the Adjusted PPA price.

PPA rates are pulled from SalesForce (database where all project details are kept). Solar Loan payments are pulled from Concord (the loan servicer). Solar Lease payments are pulled from Resi Legacy Projects table (data warehouse). PosiGen lease payments are pulled from Powerclerk.

Our Solar Photovoltaic systems continuously upload production data to Locus Energy's web platform on a fifteen-minute basis. Locus is our source of PV generation data.

Utility providers differentiate their prices depending on what time-of-day the energy is consumed. Research shows that peak hour prices are always more expensive than, or equal to, off peak hour prices. Therefore, in an effort to be conservative in the estimate of savings, only use off peak charges in the Hypothetical Avoided Utility Expense calculation.

#### III. Controls

Per the organization's best practice in building methodologies to assess impact, The Green Bank engaged those considered to be knowledgeable on the subject. Staff sought feedback from Public Utilities Regulatory Authority (PURA) and Department of Energy and Environmental Protection (DEEP) specifically on this methodology

To ensure a high degree of accuracy in this estimation of savings, staff have implemented the following as controls around this and other associated processes:

- Estimate to Actual Production Regular review of the estimated production (PowerClerk) vs. the actual production;
- Staff Performance Review –staff responsible for programs are accountable for reviewing production in their annual reviews; and
- Annual Audit Requirement independent third-party auditor to undertake the following as part of the regular review of Green Bank Impact:
  - Review methodology for reasonableness
  - Assess process for data collection, analysis, and reporting.

Staff intends to use build dashboards that reflect these savings estimates and will report on them in ongoing impact reporting including in the non-financial statistics section of the CAFR.

#### Resolution

**WHEREAS,** the Connecticut Green Bank (Green Bank) has long sought to gage and assess the reach of its programs in terms of their financial impact for their customers; and

**WHEREAS,** the Green Bank has implemented a generation monitoring platform that provides real-time and historical insight into solar system performance; and

**WHEREAS**, the Green Bank has established internal and external controls to ensure the accuracy of the generation; and

**WHEREAS**, the Green Bank created a database of electricity rates used to estimate customer expenses; and

**WHEREAS**, the Green Bank sought input from the Connecticut Department of Energy and Environmental Protection and the Public Utilities Regulatory Authority; and

**WHEREAS**, pursuant to Section 5.2.1 of the Green Bank Bylaws, the Audit, Compliance, & Governance (ACG) Committee is charged with the review and approval of, and in its discretion recommendations to the Board of Directors (Board) regarding organizational policies and procedures, and on June 14, 2021 made such a recommendation to the Board;

NOW, therefore be it:

**RESOLVED**, that the Board of Directors of the Green Bank approves of the above methodology for assessing customer savings and reduction of their energy burdens.

Second. Discussion. Vote



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## MEMO

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

From: Brian Farnen, Loyola French, and Bryan T. Garcia

Date: July 23, 2021

**Re:** Overview of Requests for Approvals for Professional Services Agreements over \$75,000 for FY 2021 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 2021 fiscal year ("FY2021"). This approval process is outlined in Section IX (ii) of the Connecticut 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, Incorporate 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 31 PSAs, or amendments to existing PSAs, with not-toexceed amounts over the \$75,000 threshold for FY2021, for a total amount of \$5,722,970. Approval for 7 of the 31 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 FY 2021 at the 6/26/2020 BOD meeting or at subsequent meetings of the Board (see Table 2). This number is up from that of FY 2020 by \$1,301,465 when approval was sought for twenty-five PSAs and/or amendments over \$75,000, for a total amount of \$4,421,505, with thirteen being approved by direct request of BOD Chair Lonnie Reed and approval for the remaining twelve being granted by the full Board. A breakdown of the agreements for FY2021 follows.

#### Table 1. FY 2021 PSAs over \$75,000 approved by BOD Chair Lonnie Reed

Date	Agreement	Division / Program	Original PSA Amount	Amount Amended By
7/1/2020	Monte Verde Consulting – PSA 5626	CI&I -SL2,CEFIA Hold	\$90,000	
11/1/2020	CSW LLC – PSA 5664	CI&I – CPACE	\$450,000 <sup>1</sup>	
11/9/2020	Guidehouse Inc. – PSA 5611 1 <sup>st</sup> Amendment	S&I	\$100,000	\$100,000
2/1/2021	John Watts Associates – PSA 5657	General Operations	\$180,000	
5/1/2021	C-TEC – PSA 5666	CI&I – (CSCU portfolio)	\$40,000 <sup>2</sup>	
5/1/2021	C-TEC – PSA 5667	CI&I – SL2 &SL3	\$246,666	
6/22/2021	Clean Power Research – PSA 5616 1 <sup>st</sup> Amend	S&I-RSIP	\$257,895	\$124,339
		Total:	\$556,666	\$224,339

#### Table 2. FY 2021 PSAs over \$75,000 approved by Green Bank BOD

Date	Agreement	Division / Program	Original PSA Amount	Amount Amended By
7/1/2020	Guidehouse PSA 5611	S&I	\$100,000	
7/1/2020	IPC (Smart-E) PSA 5410 2 <sup>nd</sup> Amendment	Resi – Smart-E	\$722,426	\$270,837
7/1/2020	IPC (MF) PSA 5411 2 <sup>nd</sup> Amendment	Resi - MF	\$873,820	\$497,642
7/1/2020	IPC (Commercial Solar) PSA 5412 2 <sup>nd</sup> Amend	CI&I - SL	\$447,895	\$235,779
7/1/2020	IPC (Invest Mgmt) PSA 5413 2 <sup>nd</sup> Amendment	Resil/MF – LMI	\$519,525	\$361,962
7/1/2020	Clean Power Research PSA 5616	S&I RSIP	\$257,895	
7/1/2020	Adams & Knight – PSA 5585	Marketing	\$125,000	
7/1/2020	Go, LLC – PSA 5588	Marketing	\$231,000	
7/1/2020	AlsoEnergy (Locus) Resi PSA 5617	S&I RSIP	\$985,000	
7/1/2020	AlsoEnergy (Locus) Commercial PSA 5618	S&I Commercial	\$33,000 <sup>2</sup>	
7/1/2020	Adnet technologies PSA 5622	General Operations	\$380,000	
7/1/2020	Strategic Environmental Associates PSA 5619	Marketing	\$120,000	
7/1/2020	ENCON PSA 5406 2 <sup>nd</sup> Amendment	CI&I - SL	\$440,000	\$232,000
7/1/2020	ENCON PSA5463 3 <sup>rd</sup> Amendment	CI&I - CSCU	\$63,000	\$43,000
7/1/2020	Alter Domus Inc – PSA 5634	CI&I - CPACE	\$120,000	
7/1/2020	Energy Resource Solutions PSA 5633	CI&I - CPACE	\$150,000	
11/1/2020	CSW LLC – PSA 5664	CI&I – CPACE	\$450,000	
1/20/2021	CliftonLarsonAllen PSA 5583 1 <sup>st</sup> Amendment	Accounting	\$55,000 <sup>2</sup>	\$400
1/20/2021	CliftonLarsonAllen PSA 5655	Accounting	\$38,600 <sup>32</sup>	

<sup>&</sup>lt;sup>1</sup> BOD approved for FY21, contract term is through FY22 so Mackey brought to Lonnie for review. Amount included for BOD approved only.

 $<sup>^{\</sup>rm 2}$  Multiple PSAs for FY21 brings aggregate amount over \$75K

1/20/2021	CliftonLarsonAllen PSA 5656	Accounting	\$30,850 <sup>2</sup>	
3/25/2021	Guidehouse PSA 5611 2 <sup>nd</sup> Amendment	S&I	\$200,000	\$100,000
4/4/2021	CliftonLarsonAllen PSA 5670	Accounting	\$71,400 <sup>2</sup>	
6/1/2021	CliftonLarsonAllen PSA 5672	Accounting	55,000	
6/25/2021	IPC CESA Grant- PSA 5574 1 <sup>st</sup> Amendment	S&I (SunShot)	46,600	\$52,600
		Total:	\$3,147,745	\$1,794,220

 $<sup>^2</sup>$  Multiple PSAs for FY21 brings aggregate amount over  $\$75\mathrm{K}$ 



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## Memo

- To: Connecticut Green Bank Board of Directors
- **From:** Bryan Garcia (President and CEO), Bert Hunter (EVP and CIO), Jane Murphy (EVP of Finance and Administration), and Eric Shrago (Managing Director of Operations)

Date: July 23, 2021

Re: FY 2022 Budget Clarification

#### Background

On June 25, 2021, the staff of the Green Bank presented the proposed FY 2022 targets, budget, and investments with support from the Budget, Operations, and Compensation Committee ("BOC Committee"). The Board of Directors ("BOD") reviewed and approved the staff proposal contingent on the staff coming back in July with an additional clarification of the budget indicating how certain expenses impact the overall budget presentation. Staff have developed an additional budget presentation showing consolidated revenues (i.e., public revenues and earned revenues) to expenses (i.e., operating expenses and non-operating expenses), while pulling out certain expenses (i.e., meter replacements<sup>1</sup> and environmental infrastructure) in question – see Attachment A.

#### Summary

Adjusting for the one-time expense of \$2,500,000 from Incentive Programs for meter replacements, which will be cost-recovered over time through the sale of SHRECs per Connecticut General Statute (CGS) 16-245ff, and accounting for \$295,585 from Environmental Infrastructure Programs for various operating expenses<sup>2</sup> to support the development of a Comprehensive Plan required under recent scope expansion under CGS 16-245n, total budgeted expenses for FY 2022 would have been reduced by \$1,220,771 (2.7%) from the FY 2021 budget – as opposed to increased by \$1,574,814 (3.5%) from the FY 2021 budget.

<sup>&</sup>lt;sup>1</sup> See memo to the Deployment Committee provided on May 25, 2021 for details on reason for and estimated metering replacement costs – Attachment B

<sup>&</sup>lt;sup>2</sup> Environmental infrastructure expenses include \$211,403 in a new-hire 0.69 FTE, \$50,000 for Research and Development to support the development of a Comprehensive Plan, and \$34,182 in rent, location, and other office expenses.

Revenues in FY 2022 are estimated to increase by \$2,993,553 or 6.0% in comparison to FY 2021<sup>3</sup> - while expenses (without certain expenses) in FY 2022 are estimated to decrease by \$1,220,771 or 2.7% in comparison to FY 2021. The inclusion of certain expenses in the FY 2022 budget totaling \$2,795,585 is justified.

We hope this clarifies the true fiscal picture of the Green Bank and our efforts to control operating expenses. As always, please do not hesitate to reach out to staff if you have any questions or need further clarification.

<sup>&</sup>lt;sup>3</sup> Increase in public revenues (i.e., Clean Energy Fund and RGGI) of \$523,016 (2%) and earned revenues (e.g., SHREC revenues, interest income) of \$2,470,537 (14%)

#### Exhibit A

Clato		Toniado ani		0 I III.a.	inemig i regi			. ogi anno			loti aotai o					
		Total			Financing Programs			Incentive Programs				Environmental Infrastructure				
	FY22	FY21	Variand	e	FY22	FY21	Variar	nce	FY22	FY21	Varian	ce	FY22	FY21	Varianc	е
	Budget	Budget	\$	%	Budget	Budget	\$	%	Budget	Budget	\$	%	Budget	Budget	\$	%
Revenue																
Public Revenues	30,549,240	30,026,224	523,016	1.7%	30,549,240	30,026,224	523,016	1.7%	-	-	-	-%	-	-	-	-%
Earned Revenues	20,305,009	17,834,471	2,470,537	13.9%	8,892,610	8,002,089	890,521	11.1%	11,412,399	9,832,382	1,580,016	16.1%	-	-	-	-%
Total Revenue	50,854,249	47,860,695	2,993,553	6.3%	39,441,850	38,028,313	1,413,537	3.7%	11,412,399	9,832,382	1,580,016	16.1%	-	-	-	-%
Expenses																
Personnel Expenses *	10,030,161	9,186,993	843,168	9.2%	6,879,024	6,465,190	413,834	6.4%	3,151,138	2,721,804	429,334	15.8%	-	-	-	-%
Non-Personnel Expenses	11,351,063	11,835,270	(484,207)	(4.1%)	6,562,329	6,104,165	458,164	7.5%	4,788,734	5,731,106	(942,371)	(16.4%)	-	-	-	-%
Other Non-Operational Expenses	22,163,965	23,743,697	(1,579,732)	(6.7%)	2,079,401	2,919,553	(840,152)	(28.8%)	20,084,563	20,824,144	(739,580)	(3.6%)	-	-	-	-%
Total Expenses, Excl Meter & El expenses	43,545,189	44,765,960	(1,220,771)	(2.7%)	15,520,754	15,488,907	31,846	0.2%	28,024,435	29,277,053	(1,252,618)	(4.3%)	-	-	-	-%
Meter Expenses & Environmental																
Infrastructure	2,795,585	-	2,795,585	-%	-	-	-	-%	2,500,000	-	2,500,000	-%	295,585	-	295,585	-%
Total Expenses	46,340,774	44,765,960	1,574,814	3.5%	15,520,754	15,488,907	31,846	0.2%	30,524,435	29,277,053	1,247,382	4.3%	295,585	-	295,585	-%
Net Revenues Over (Under) Expenses	4,513,475	3,094,735	1,418,740	45.8%	23,921,096	22,539,405	1,381,691	6.1%	(19,112,036)	(19,444,670)	332,634	(1.7%)	(295,585)	-	(295,585)	-%

#### Connecticut Green Bank FY 2022 Operations and Program Budget Statement of Revenues and Expenses - Financing Programs vs. Incentive Programs vs. Environmental Infrastructure Programs

\* If the 3 new hires in Incentive Programs and 1 new hire in Environmental Infrastructure Programs had not been hired, then personnel expenses would have increased by 5.0% YOY in total and 1.5% YOY in Incentive Programs. Per Docket No. 17-12-03RE03, it is expected that PURA is going to authorize the Green Bank to co-administer a battery storage incentive program to support the 1000 MW by 2030 target under PA 21-53 "An Act Concerning Energy Storage" with program cost recovery. Per PA 21-115, the Green Bank will use a portion of its earned revenues to support the development of a Comprehensive Plan for its scope expansion, which now includes "environmental infrastructure".



### **STATE OF CONNECTICUT** PUBLIC UTILITIES REGULATORY AUTHORITY

### Electric Storage Program Summary

Docket No. 17-12-03RE03

In this Decision, the Authority establishes a statewide electric storage program (Electric Storage Program, or Program) to leverage the value of electric storage for the net benefit of the electric distribution system, pursuant to Public Act 21-53 (PA 21-53). The Program includes provisions for residential, commercial, and industrial customers, as well as standalone front of the meter systems. The key Program elements include upfront and performance-based incentives, which shall be available to all customers of the State's electric distribution companies (EDCs) with an end goal of deploying 580 MW of electric storage by 2030.

The EDCs and the Connecticut Green Bank (CGB; together Program Administrators) shall jointly administer the Program and develop the appropriate program documents necessary to effectively launch the Program on January 1, 2022. The Authority will conduct an annual review process (Annual Review) to review key metrics and make strategic adjustments and conduct a full program review (Program Review) every three years to evaluate whether the Program is delivering the expected ratepayer benefits.

#### **Program Objectives**

The Authority identified the following seven (7) objectives (Program Objectives) that shall guide the Program Administrators in their implementation of the Program established herein:

- 1) Provide positive net present value to all ratepayers;
- 2) Provide multiple types of benefits to the electric grid;
- 3) Foster the sustained, orderly development of a state-based electric energy storage industry.
- Prioritize delivering increased resilience to: (1) low-to-moderate income (LMI) customers, customers in environmental justice or economically distressed communities, customers coded medical hardship, and public housing authorities;
   (2) customers on the grid-edge who consistently experience more and/or longer than average outages during major storms; and (3) critical facilities.
- 5) Lower the barriers to entry, financial or otherwise, for electric storage deployment in Connecticut;
- 6) Maximize the long-term environmental benefits of electric storage by reducing emissions associated with fossil-based peaking generation; and
- 7) Maximize the benefits to ratepayers derived from the wholesale capacity market.

#### Program Length and Statewide Electric Storage Deployment Targets

PA 21-53 establishes statewide energy storage deployment goals, namely: (1) 300 MW by December 31, 2024; (2) 650 MW by December 31, 2027; and (3) 1,000 MW by December 31, 2030. Section 2 of PA 21-53 directs PURA to develop the program authorized herein. Section 3 of PA 21-53 authorizes DEEP to procure energy storage. Accordingly, the Authority targets a total Program deployment of 580 MW. During each three-year Program Review, the Authority will re-assess the program deployment targets and the breakdown of the deployment targets by customer class.

Table 1: Electric Storage Deployment Targets								
CUSTOMER CLASS	2022-2024	2025-2027	2028-2030	TOTAL				
Residential	50 MW	100 MW	140 MW	290 MW				
Commercial and Industrial	50 MW	100 MW	140 MW	290 MW				
Total	100 MW	200 MW	280 MW	580 MW				

#### Table 1: Electric Storage Deployment Targets

#### **Compensation Structure**

Electric storage systems participating in the Program will be compensated through two mechanisms: (1) an upfront incentive administered by the CGB; and (2) performancebased incentives administered by the EDC. The final incentive levels are subject to future review prior to January 1, 2022 (i.e., Table 2 and 3 are subject to change).

#### Upfront Incentive - Residential

The Authority authorizes a declining block upfront incentive structure for residential customers during the first three-year program cycle (2022-2024). The parameters proposed by the CGB are shown in Table 2. The CGB shall strive to deploy 40 percent of the residential installations in Underserved Communities, which shall include environmental justice communities, distressed municipalities, and public housing authorities. Such customers shall be eligible for a higher upfront incentive.

INCENTIVE STEP	ESTIMATED # OF PARTICIPANTS	CAPACITY BLOCK (MW)	NON-LMI EFFECTIVE UPFRONT INCENTIVE (\$/KWH) <sup>1</sup>	LMI EFFECTIVE UPFRONT INCENTIVE (\$/KWH)	AVERAGE UPFRONT INCENTIVE PER SYSTEM				
1	400	2.0	\$280	\$560	\$3,950				
2	700	3.5	\$240	\$480	\$3,400				
3	1,300	6.5	\$200	\$400	\$2,900				
4	2,600	13.0	\$170	\$340	\$2,350				
5	5,000	25.0	\$130	\$260	\$1,850				
Total	10,000	50.0			\$2,300				

#### Table 2: CGB Proposed Residential Customer Upfront Incentive (2022-2024)

<sup>1</sup> The effective incentive level for both non-LMI and LMI residential participants factors in the usable energy capacity (kWh) and the maximum power output rating (kW) of the energy storage system. The incentive is adjusted based on kWh and kW capacity.

#### Upfront Incentive – C&I

The Authority authorizes one capacity block C&I customers for the first three-year program cycle, to be finalized by the CGB prior to Program launch. The CGB's proposed incentives are shown in Table 3.

#### Table 3: CGB Proposed C&I Customer Upfront Incentive Structure (2022-2024)

CAPACITY	EFFECTIVE U	PFRONT INCENT	<b>FIVE</b> (\$/KWH) <sup>2</sup>
BLOCK (MW)	Small Commercial	Large Commercial	Industrial
50.0	\$280	\$250	\$225

#### Performance Incentive

Electric storage systems in both UI and Eversource territories participating in the Program will also be eligible for performance incentives for the summer and winter seasons during which the storage system is dispatched. The CGB proposed the incentive parameters shown in Table 4, which will be finalized prior to Program launch.

#### Table 4: Proposed Performance Incentive Parameters (2022-2024)

	SUMMER	WINTER
Incentive (\$/kW)	\$225	\$50
Season Dates	June 1 – September 30	December 1 – March 31
Number of Events	30-60	5
Event Duration	3 hours	3 hours
Timing	2:00 pm – 7:00 pm	2:00 pm – 7:00 pm

#### Front of the Meter (FTM) Considerations

To address demand charges that may be a barrier to the deployment of FTM standalone electric storage systems, the EDCs are directed to develop a revenue-neutral tariff rider that does not contain a demand charge for implementation no later than January 1, 2022. The CGB shall consult with FTM electric storage stakeholders, DEEP, the EDCs, and wholesale market participants to better understand the barriers to entry, market opportunities, and programs options for FTM standalone electric storage systems. The Authority will consider the CGB's findings in the Annual Review proceeding to be initiated on or around August 1, 2022.

<sup>&</sup>lt;sup>2</sup> The effective incentive level is adjusted based on kWh and kW capacity using the same formula as the Residential Program area. The upfront incentive is capped at 50% of the cost of the electric storage system for all customer classes.

#### **Program Eligibility**

An electric storage system must be set to the default passive dispatch settings to receive an upfront incentive and must be actively dispatched to receive ongoing performance incentives. The Authority will require residential and C&I Program participants to transfer the capacity rights to the appropriate EDC as the default arrangement. However, electric storage system operators will be permitted to request capacity rights in select cases. Operators will be able to request to retain system capacity rights for projects that serve: (1) Customers on the Grid Edge; (2) Critical Facilities; (3) C&I customers with existing fossil fuel generators; and (4) Small Business Customers. Such operators shall be required to adopt the passive dispatch settings but may operate outside the passive dispatch parameters to meet any ISO-NE market obligations. Customers meeting criteria (2), (3), and (4) will also be required to submit a Resiliency Plan in which the customer shall demonstrate how their system would be recharged when grid-charging is otherwise unavailable.

#### **Benefit-Cost Analysis**

The CGB calculated benefit-cost ratios for the Program Administrator Cost Test (PACT), Participant Cost Test (PCT), Societal Cost Test (SCT), Total Resource Cost Test (TRC), and the Ratepayer Impact Measure (RIM). While all five cost tests are vitally important and informative, the nascent nature and unique scope and breadth of this Program requires cost effectiveness targets be set so the Authority can be confident that the Program will deliver on its Objectives. Therefore, the CGB is directed to finalize the Program incentives, using the Avoided Energy Supply Components in New England: 2021 Report, to deliver a RIM of 1.5 over the first three-year Program cycle.

#### **Program Administration**

The Program Administrators shall work together to procure a single platform that will collect all relevant enrollment information from customers and will have shared access to all program data collected through the platform. To promote the Program, the CGB will develop a communication and promotion plan (i.e., Marketing Plan) in collaboration with the EDCs. Additionally, the CGB will conduct a targeted communication and outreach campaign, similar to its SolarizeCT campaign, to encourage projects that support public policy goals, namely for customers in Underserved Communities, on the Grid Edge, Critical Facilities, facilities with existing fossil fuel generators, and Small Business Customers.

#### Evaluation, Measurement, and Verification

The Program Administrators will retain a third party to evaluate, measure, and verify results of the Program (EM&V Consultant). The EM&V Consultant shall develop Program metrics, associated calculation methodologies, and data requirements for verifying Program performance based on the established metrics. All metrics and calculation methodologies shall be subject to review and approval by the Authority. Additionally, the Program Administrators shall provide an annual report summarizing the Program results to date and recommendations for any Program modifications.

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# Memo

To: Connecticut Green Bank Board of Directors

From: Sergio Carrillo (Director of Incentive Programs)

Date: July 23, 2021

Re: RGM (Revenue-Grade Meter) Upgrade Provider RFP

Due to the sunset of 3G cell services, solar PV production meters (Revenue Grade Meters – RGMs) will stop communicating with the Green Bank's solar production monitoring platform (Locus Platform) hindering our ability to create and monetize SHRECs. For this reason, the Green Bank needs to engage outside companies to upgrade production meters to at least 4G network capability. The Green Bank has identified ~5,000 meters that will need to be replaced, including the make and location of each meter and each respective cell carrier. The Green Bank has also identified the deadlines for 3G sunsets. This data is summarized below:

Meter PMP	Cellular Service Provider	3G Sunset Date	Homeowner Owned Systems	SL-2 Systems	Total
Locus	AT&T	Feb-2022	2,330	1,076	3,406
Enphase	AT&T	Feb-2022	476		476
Solar-Log	AT&T	Feb-2022	432		432
Solar-Log	T-Mobile	Oct-2021	91		91
SolarEdge	T-Mobile	Oct-2021	559		559
Total			3,888	1,076	4,964

Note that the Green Bank is focusing on homeowner-owned systems with the understanding that Third-Party Owned (TPO) systems will be addressed by their installers.

On May 28, 2021, the Green Bank released an RFP to solicit proposals to complete the meter upgrades as described above. Applicants submitted questions to the Green Bank on June 4, 2021 and held a Q&A webinar on June 11, 2021.

Nine (9) final proposals were submitted to the Green Bank on June 21, 2021. After numerous internal discussions, the Green Bank ranked each application and down selected two Applicants best suited for the work and providing the best value to the Green Bank. We have notified the Applicants and will begin negotiating the specific terms of their professional service agreement's (PSA's) early next week (the week of July 19, 2021)

All Applicants were qualified on the technical side, and most cost proposals were competitive. However, the Green Bank found the most critical criteria to be an Applicant's ability to scale up and perform the large volume of work efficiently and accurately. For that reason, we are proposing to move forward with two national companies that have experience with handling a large volume of meter changes. The Green Bank believes that local installers did not have the same capacity or experience to handle this large volume of work, especially with regards to the significant level of customer service that will be required.

The Green Bank would like to have PSA's (which are based off the standard Green Bank PSA template) executed by the end of the July so that Providers can begin procuring meters and scheduling appointments. The expected lead time between executing PSA's and the commencement of field work is two (2) weeks.

#### **Resolution**:

**WHEREAS**, cellular service providers will be sunsetting 3G service and the production meters on the 3G network will stop communicating data to the Connecticut Green Bank ("Green Bank") hindering our ability to create and monetize Solar Home Renewable Energy Credits ("SHRECs");

**WHEREAS**, the Terms and Conditions of the Residential Solar Investment Program (RSIP) and the RSIP Extension Program (RSIP-E) require that solar PV systems report production data to the Green Bank;

**WHEREAS,** the Green Bank is entering into negotiations with two down selected applicants ("Applicants") to perform the work outlined in the Request for Proposals ("RFP").

#### NOW, therefore be it:

**RESOLVED**, that the Board of Directors of the Green Bank approve entering into Professional Services Agreements (PSAs) with the Applicants to complete the replacement of Revenue Grade Meters (RGM) specified in the RFP, with a not-to-exceed amount of \$2,500,000.

**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 memo submitted to the Board of Directors on July 23, 2021 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 and any documents as they shall deem necessary and desirable to effect the above-mentioned legal instrument or instruments.



# Memo

То:	Connecticut Green Bank Board of Directors			
From:	Emily Basham, Senior Manager; Bryan Garcia, President and CEO			
CC:	Bert Hunter, EVP and CIO; Eric Shrago, Managing Director of Operations			
Date:	July 16, 2021			
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.<sup>1</sup> This grant enables the continued support of Sustainable CT to engage communities throughout the state to improve their sustainability, 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 Year 2020 & Beyond and supported by an initial grant in fiscal year 2019, and continued in 2020 and 2021, 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. The partnership between Sustainable CT 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 (e.g., through grant-providing platforms such as Patronicity,<sup>2</sup> administered by Sustainable 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

<sup>&</sup>lt;sup>1</sup> It should be noted that the staff of the Connecticut 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.

<sup>&</sup>lt;sup>2</sup> 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

• Creating a measurable impact, both qualitative and quantitative.

In 2019, the Board approved of a grant to support the partnership between the Green Bank and Sustainable CT, funded primarily through the regranting of \$75,000 of the Green Bank's Harvard University Kennedy School Ash Center's prestigious Innovations in American Government Award and \$25,000 from the Green Bank directly. Under this grant, the partnership was 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. With the continuation of grant support, the partnership can pivot from aligning the programs to accelerating municipal action and activity in Green Bank programs.

The Green Bank's FY2022 Budget, Marketing Expenditures, allocates \$125,000 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 program targets for FY 2022. Presented for consideration by the Board is a grant to allocate the 125,000 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) programs and services, including the soon-to-be launched battery storage program;
- **Engagement** engaging Sustainable CT's network of partners, local municipalities, businesses, and their citizens with incentive and financing programs that will help them achieve their sustainability goals including Sustainable CT's online crowdfunding campaign 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 in their communities through incentive and financing program support from the Green Bank

From the Green Bank's perspective, this grant agreement will leverage the existing partnership with Sustainable CT to increase the pipeline of project leads for our incentive and financing programs (e.g., Green Bank Solar PPA, C-PACE, Smart-E Loan, etc.) – 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, 122 cities and towns are registered and 64 of them certified. This program includes numerous actions where the Green Bank can increase its impact through its incentive and financing 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, and implementing community energy campaigns. Municipalities that take

advantage of all the Green Bank's incentive and financing program can earn up to 120 sustainability points, more than halfway to the 200 points needed for Bronze certification.

Previous grant activity focused on increasing the Green Bank's impact in communities by "offering up" its line of 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:

- <u>Branford Energy Campaign</u>: to educate Branford residents about Home Energy Solutions, Heat pumps, and Solar
- <u>Green Jobs Corps</u>: Connecting young people in New Haven to paid jobs, stewarding natural resources, and building community
- <u>Bridgeport Art Trail, 2020 Vision During Covid19</u>: Funds support program and artists' stipends for 10 days of Bridgeport art, online presentations, including studio tours, interviews, demos, and workshops

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. On an annual basis, the Fellows Program consists of 15-20 students, each receiving \$5,400 to provide direct support full-time to local communities. Green Bank staff participated in the onboarding process to train two 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 lowcarbon economy
- Create connections with community leaders across Connecticut
- Build partnership with Sustainable CT

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 Municipal Assistance Program (SolarMAP) providing project development support for the Green Bank PPA, as well as the C-PACE and Solar for All programs. In the future, Sustainable CT will also provide a channel in which the battery storage incentive program and the to be developed environmental infrastructure

program(s) will be offered. Through these efforts the partnership met and exceeded the goals outlined in the previous grant agreement, including:

- Solar PPA The team exceeded by far the goal to launch no less than 3 Sustainable CT community efforts for the Green Bank's Solar PPA product that will create no less than 10 leads resulting in at least 25% of leads becoming closed PPA projects. The SolarMAP program closed 17 PPA projects in 5 Sustainable CT communities.
- <u>C-PACE</u> The team met the goal to co-host no less than 5 business owner workshop events for the C-PACE program in Sustainable CT communities.
- Solar for All The team exceeded the goal to launch no less than two community-based campaigns for the Solar for All program in Sustainable CT communities, by launching three community campaigns in Bristol, Norwalk, and a joint campaign in Mansfield and Windham. While Norwalk is still underway, the other two increased the project pipeline by 25 projects per campaign increasing access to solar PV by vulnerable communities.

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.

#### **Grant Allocation**

In order to further engage communities to improve sustainability and focus investment opportunities on participation in Green Bank incentive and financing programs, the grant funds will be used per the following:

- 1. \$25,000 matching grant for Sustainable CT Fellows Program
- 2. \$50,000 matching grants for projects submitted through the Patronicity online crowdfunding platform
- 3. \$50,000 organizational support to Sustainable CT

#### **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 projects and recognizing the benefits to them for doing so; and
- **Impact** significant deployment of clean energy resulting from the Green Bank's incentive and financing programs in Sustainable CT communities which will reduce the burden of energy costs, create jobs, and reduce air emissions that damage public health and cause global climate change. To deliver this measurable impact, in partnership with Sustainable CT, the Green Bank will:
  - <u>Solar PPA</u> engage no less than 20 Sustainable CT communities for the Green Bank's Solar PPA product that will create no less than 50 leads resulting in at least 30% of leads becoming closed PPA projects;
  - <u>C-PACE</u> engage no less than 3 Sustainable CT communities that generate no less than 10 leads for the C-PACE program in Sustainable CT communities;

- <u>Smart-E</u> launch no less than two community-based campaigns for the Smart-E loan program in Sustainable CT communities to increase the project pipeline by 5-10 projects per campaign; and
- <u>Battery Storage</u> develop a community-based marketing strategy that includes Sustainable CT as a mechanism to increase the deployment of battery storage for residential and nonresidential end-use customers, especially deployment in vulnerable communities to make them more resilient to the impacts of climate change.
- 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 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,<sup>34</sup> 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.

(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 February of 2019,<sup>5</sup> 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 \$75,000 of the Green Bank's contribution (e.g., through foundation grants, citizen 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

<sup>&</sup>lt;sup>3</sup> Created in 2005 by the predecessor of the Connecticut Green Bank – the Connecticut Clean Energy Fund

<sup>&</sup>lt;sup>4</sup> "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.

<sup>&</sup>lt;sup>5</sup> Connecticut Green Bank 2.0 – From 1 to 2 Orders of Magnitude (click here)

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. Under the previously awarded grant, Sustainable CT 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's Comprehensive Plan for Fiscal Year 2020 & Beyond, 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. The proposed grant agreement is necessary to expand upon the existing partnership between Sustainable CT and the Green Bank. With Board approval, the partnership will drive investment in projects in our communities, engage communities from project origination through financing, and create 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 Year 2020 & Beyond and FY22 budget allocation of \$125,000.

#### **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 15 Green Bank Solar PPA projects (i.e., 2.6 MW and \$6.5 MM in investment) produce an average 69,000 MWh over the lifetime<sup>6</sup> of the projects. A \$125,000 grant to Sustainable CT will generate nearly \$3.9MM of Green Bank investment through the Green Bank Solar PPA product.

#### **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 15 additional Green Bank Solar PV projects, derived from approximately \$\$3.9 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)<sup>7</sup> generating approximately \$85,000in present value interest income per project (i.e., from \$110,000 in interest income over the life of the PPA), for a total of \$1.3 MM present value interest income for 15 projects, the costs of the grant as well as personnel and non-personnel related expenses will be covered times 10.

#### **Capital Expended**

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

The full \$125,000 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 \$125,000 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:

\$125,000 Credit: Cash	[Sustainable CT Grant – Marketing Expense]
\$1.3 MM Debit: Cash	Interest Income – Solar PPA

#### **Target Market**

#### Who are the end-users of the engagement?

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;

<sup>&</sup>lt;sup>6</sup> Green Bank average PPA system size is 172.65 kW

<sup>&</sup>lt;sup>7</sup> 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.

- 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.

#### **Program Partners**

Sustainable CT – see Exhibit C

#### **Risks and Mitigation Strategies**

The following is the key risk and mitigation strategy:

Loss of the Grant – the \$125,000 grant to Sustainable CT is intended to create new opportunities (i.e., new marketing channel) 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 \$125,000 grant, only 2 of the target 15 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 15 project target.

#### Resolutions

WHEREAS, the Comprehensive Plan and FY 2022 budget identify Sustainable CT as a partner of the Connecticut Green Bank ("Green Bank"), including an allocation of \$125,000 from the FY 2021 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 \$125,000 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 16, 2021;

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 16, 2021; and

**WHEREAS**, Green Bank would benefit from Sustainable CT's public awareness and engagement program to increase participation in Green Bank's incentive and financing programs. 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 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: Emily Basham, Senior Manager, and Bryan Garcia, President & CEO



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### **Capital Solutions RFP**

### A Funding Facility for Connecticut Green Bank Issuance of Short Term Mini-Bonds Via the Raise Green Crowd Investing Portal July 16, 2021



**Document Purpose:** This document contains background information and due diligence on a proposed funding facility for the Connecticut Green Bank by issuing short term mini-bonds via the Raise Green crowd investing portal. The information herein is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

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

### Memo

To: Connecticut Green Bank Board of Directors

From: David Beech, Associate Manager, Clean Energy Finance; Bert Hunter, EVP and CIO

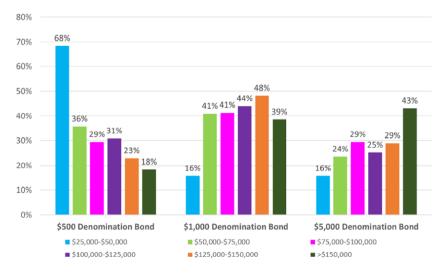
**Cc:** Bryan Garcia, President and CEO; Brian Farnen, General Counsel and CLO; Mackey Dykes, VP Financing Programs and Officer

Date: July 16, 2021

**Re:** Raise Green Capital Solutions RFP Proposal

#### Background

Raise Green, a Connecticut based company, has submitted a proposal through the Green Bank's Capital Solutions RFP. Staff is requesting approval of their proposal which offers a pilot program for the Green Bank to issue up to \$2M of "mini-bond" instruments over 2 years with denominations as low as \$100. The issuances would have a maturity of up to one year and be obligations of a Green Bank subsidiary backed by the Green Bank's Small Business Energy Advantage ("SBEA") loan revenues. This series of issuances could build off the Green Liberty Bond's success with retail investors by offering bond prices below \$1,000. The purpose of the program is to test the appeal of low risk (see "Coverage Ratio Analysis" below), short term investment instruments for investors with a lower investment entry point (i.e., below \$1,000). A Green Bank survey, taken in connection with the proposed issuances of Green Liberty Bonds, substantiates this thesis as shown here:



If the program is successful, the Green Bank could then consider modifying the mini-bond structure for funding certain investments either on its own or in combination with other Green

Bank resources (cash, lines of credit, or Green Liberty Bond proceeds, for instance). There are hundreds of millions of dollars in "green bond" investments available in the marketplace. At the same time, there is little, if any, regular source of short term (one year or less) green certified investment paper in the market. The Green Bank sees this as an opportunity to not only open an additional funding source, but to also afford green investors with a short term green investment option.

#### **Raise Green Background**

Raise Green is a climate tech marketplace for local impact investing, making it easy for anyone to invest in climate projects. For investors, Raise Green offers a way for anyone accredited and non-accredited - to invest in verifiable green impact projects for as little at \$100. By creating new investment pathways, Raise Green's goal is to democratize the ownership and benefits of clean energy and climate-resilient infrastructure. Raise Green was co-founded in New Haven, Connecticut in 2018, and launched its first live offering taking investments on the marketplace in July of 2020. Since launching, Raise Green has conducted six live securities offerings under Regulation Crowdfunding, and raised more than \$2M through its marketplace, from more than 400 individual retail investors. Issuers include the following:

National Energy Improvement Fund	4 Offerings	~\$500,000 raised
Blocpower	2 Offerings	~\$1.5 million raised
Solaris Energy	1 Offering	~\$250,000 raised

#### **Issuance Process**

To meet federal regulations the bonds must be issued by a taxable entity. Also, the bonds cannot be guaranteed by the Green Bank, so the entity's organic cash flow would need to be able to satisfy any debt service requirements of the bonds. Therefore, a taxable subsidiary of CEFIA Holdings would be created to issue the bonds. That issuing entity would then purchase the Green Bank's current ownership of SBEA loans. The purchase would be financed by a loan from the Green Bank to the new entity, subordinated in terms of repayment until all of the bond debt service obligations have been paid or defeased with cash. In addition, if the bond issuance program were to continue, future tranches of SBEA loans would be immediately sold to the issuing entity after being purchased by the Green Bank from Eversource. Once the subsidiary is incorporated the next steps are to create financial statements and work with Raise Green to complete Template Form C (a legal disclosure document sent to the SEC). The Green Bank would need to complete Raise Green's know your customer requirements and related "bad actor check" and finalize our plans for managing the investor "capitalization table". The last steps are to create the issuance website and offering page, and Connecticut focused marketing plan for the raise. Green Bank has engaged Shipman and Goodwin, Green Bank's bond counsel, to review the structure and process - and they have participated in staff's review of the proposed issuance plan. While staff and Raise Green believe the Green Bank can issue these securities as proposed, the issuance program would be subject to final review and approval by bond counsel.

#### **Issuance Costs**

We estimate the first issuance will cost figure is split between Raise Green's fee financial advisor and marketing



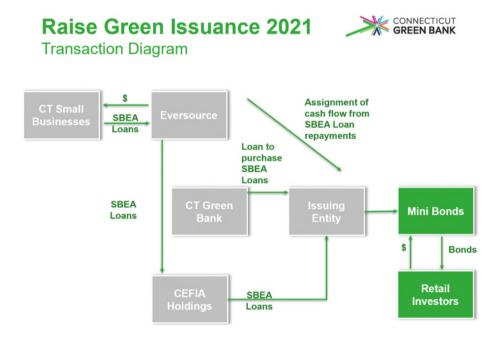
advisor.

#### **Coverage Ratio Analysis**

To analyze the risks of these transactions to potential bond buyers, the finance team conducted a modeling exercise using the expected future payments from the outstanding SBEA Loan Tranches. We modeled 8 guarterly \$250.000 note issuances over two years. We expect these notes to sell at a premium to the one-year denominations of the Green Liberty bonds which received an interest rate of 0.35%. To reflect that, and still be conservative, we assumed these issuances would offer an interest rate of %. With these assumptions, we found that the current SBEA loan tranches could provide sufficient coverage of at least 2.0x DSCR for 5 quarterly issuances before falling below that number.

To analyze the effect of future SBEA loan tranches funding additional issuances beyond the first 5 noted above, we took an average of SBEA tranches 2-5 to act as a representative future tranche. These four tranches were chosen because they were all purchased prior to COVID-19 and do not include any outlying data.

When these future tranches are included, all 8 issuances have a DSCR of 5x or higher. We also modeled future tranches at 50% of their estimated size to reflect a scenario where the program remains at its COVID low. Under this scenario, all 8 issuances maintained sufficient coverage of 3.5x or higher.



#### **Cash Flow Diagram**

#### **Post Close Operations**

The Green Bank will address the following post-close operational issues once the transaction closes and the capital is raised:

- A. Investor Relations and Communications Green Bank staff will manage communications with investors including messaging out impact, keeping them aware of Green Bank news, responding to requests, answering questions, and processing transfers of investments. The staff expect the volume of these requests to be minimal as we intend to limit transfers to only among family members.
- B. Capitalization Table Management The Green Bank will maintain the list of investors and track transfers internally. If the Green Bank surpasses 500 investors, we will need to hire a transfer agent to officially custody this list for us and are confident we can find a cost-effective solution to do so.
- C. Taxes and Payments The Green Bank will need to issue 1099INT forms for investors and will need to pay them their principal and interest at maturity. We are currently looking at several external providers to handle this on our behalf from a risk perspective.

#### Evaluation

Capital Solutions RFP Proposals are evaluated on the following criteria:

A. Meeting Green Bank Goals

Based on the successful issuances of other Raise Green issuers, staff believes the proposed issuance will assist in the attainment of energy efficiency, renewable energy deployment, or resiliency goals by bringing an additional source of capital to bear on the clean energy marketplace and diversifying Green Bank funding sources. And per the Green Bank's Comprehensive Plan, the organization has several goals relevant to this transaction, including:

- 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; and
- To pursue investment strategies that advance market transformation in green investing while supporting the organization's pursuit of financial sustainability.
- B. Green Bank Essentiality to what extent is participation by the Green Bank essential to the success of the project?

This is an atypical "project" because the objective is to "raise capital" vs. "deploying capital" to a project. The purpose of the program is to test the appeal of low risk, short term investment instruments for investors with a lower investment entry point (i.e., below \$1,000). This would help meet a Green Bank goal to make investing in Connecticut's green economy accessible to a wider class of investors.

C. Project Feasibility – How feasible is the project to achieve its stated goals?

Given the success of other issuers and the fact that the Green Bank would be issuing similar instruments (but shorter term in maturity) the staff and Raise Green believe the issuance will be successfully received by investors.

D. Project Replicability – Could a similar project be replicated in Connecticut or elsewhere, or is this a unique opportunity?

One of the goals is to make the Green Bank's capital raising experience with Raise Green available to other green banks. We would do this through a white paper and presentation to the members of the American Green Bank Consortium.

E. Project timetable – total development and construction timeline

Green Bank and Raise Green hope to issue the securities in September or October 2021 and approximately every three months thereafter for the duration of the program.

F. Relevant Experience – Does the proposer offer relevant and sufficient experience for the type of project being proposed?

Yes. Raise Green has managed several issuances using a similar process to great success.

G. References

Green Bank staff has spoken with senior officers of 2 issuers – **Automation**. Both found the process to be satisfactory and they were pleased with the outcome (both have issued more than once). They each spoke highly of the Raise Green team. The references are well known to Green Bank staff.

H. Pending Litigation

None.

#### Conclusion

This proposal offers a unique opportunity for the Green Bank to achieve our goals of equity and market transformation. Given the success of the Green Liberty Bonds, it is clear there is strong demand from retail investors for climate-related investments. This series of issuances would build off that success and give more investors the opportunity to get involved through lower denominations and to invest in shorter term obligations rather than multiple year obligations. Approval is recommended.

#### Resolutions

BE IT RESOLVED, that the Green Bank is authorized 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 (the "Bonds"). 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 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.



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#### Line of Credit Renewal

### A Funding Facility for Connecticut Green Bank Revolving Line of Credit Warehouse Funding Facility Secured by SHRECs

July 16, 2021



**Document Purpose:** This document contains background information and due diligence on a proposed revolving line of credit warehouse funding facility for the Connecticut Green Bank which is presently being provided by Webster Bank and Liberty Bank, but subject to renewal upon its existing expiration date of July 31, 2021. The information herein is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

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

### Memo

To: Connecticut Green Bank Board of Directors

From: Bert Hunter, EVP and CIO and Mike Yu, Director, Clean Energy Finance

**CC:** Bryan Garcia, President and CEO; Brian Farnen, General Counsel and CLO; Eric Shrago, Managing Director of Operations, Jane Murphy, Executive Vice President of Finance and Administration; Director, Sergio Carrillo, Director of Incentive Programs

Date: July 16, 2021

**Re:** SHREC Warehouse Funding Facility Renewal

In a memo to the Connecticut Green Bank (the "Green Bank") Board of Directors (the "Board") dated 24<sup>th</sup> 2020 "July 2020 Memorandum" July (the see enclosed file "6d SHREC Warehouse Renewal Memo (07.22.20) (revised).PDF"), staff recommended a renewal and amendment of a short-term revolving credit warehouse facility (the "Warehouse"). The renewal allowed the Green Bank to remove the Tranche 3-2019 ("Tranche 3") of Solar Home Renewable Energy Credits ("SHRECs") as collateral, which was needed for the issuance of 2020 Green Liberty Bonds ("GLB"), and substitute in Tranche 4 to enable continued use of the Warehouse. Attached to the July 2020 Memorandum was a summary of key amendments for the Warehouse renewal.

The original warehouse funding concept was a non-restoring line of credit, a joint facility with two Connecticut banks (Webster and Liberty, collectively "Warehouse Lenders") approved by the Board at its June 28, 2018 meeting. The Board subsequently approved the Warehouse (with the "revolving" feature) at its July 18<sup>th</sup>, 2019 meeting, and Green Bank and the Warehouse Lenders executed documentation for the Warehouse with effect from July 31<sup>st</sup>, 2019.

As part of the Green Bank's 2021 GLB issuance, which was approved by the Board at its April 6<sup>th</sup>, 2021 meeting, Tranche 4 was sold from the Warehouse SPV back to the Green Bank in order to serve as collateral for the bonds. The Green Bank is unable to draw on the Warehouse without collateral, but Tranche 5 of SHRECs was fully executed with the utilities in June 2021 and can now be used as collateral. Staff expects Tranche 6 (est. July 2022) will also be available as collateral once it is executed with the utilities. Staff recommends continued utilization of this short-term revolving warehouse facility that (a) provides a bridge to the next bond issuance and (b) enhances liquidity and allows the Green Bank to meet its significant obligations in a flexible manner (e.g., can draw and repay as needed). Staff is bringing forward for approval a 1-year renewal of the Warehouse (to July 31<sup>st</sup>, 2022) on substantially similar terms as discussed in the 2020 memo except with the ability to both (a) substitute in Tranche 5 collateral, and (b) remove and sell the Tranche 5 back to the Green Bank as needed for Green Liberty Bond issuances.

- 1. As is the case under the existing Warehouse, the Green Bank will continue to provide guaranty of repayment of the advances by the Warehouse Lenders as well as assign the rights to future tranches.
- 2. The spread over LIBOR remains % with a floor for LIBOR of % (unchanged).
- 3. The facility size remains \$10,000,000 and as is the case at present can be upsized back to \$14,000,000 (and potentially higher if required dependent upon the value of the SHREC collateral.
- 4. As before, there is a **second** facility fee and an unused fee of **second**% per annum on any portion of the Warehouse that is fully committed (i.e., initially \$10 million) but not utilized.
- 5. Other key economic terms (interest-only payments (i.e., no required repayment of principal except at facility maturity) remain the same as before.

Staff requests approval by the Board of Directors to move forward with renewing and amending the warehouse funding facility and approve resolutions in respect of approval by the Green Bank as well as separate resolutions in respect of approval by SHREC WAREHOUSE 1 LLC, the wholly-owned subsidiary of Green Bank, as borrower under the SHREC Revolving Credit Facility.

#### Resolution

All of the members of the Board of Directors (the "**Board**") of the Connecticut Green Bank, a quasi-governmental agency of the State of Connecticut (the "**Green Bank**"), which is the sole member of SHREC Warehouse 1 LLC, Connecticut limited liability company (the "**Company**"), hereby consent to and adopt the following resolutions for and on behalf of the Green Bank and, in the Green Bank's capacity as the sole member of the Company, for and on behalf of the Company:

WHEREAS, the Company intends to enter into a Second Amendment to Credit Agreement (the "Second 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 (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 Ten Million and 00/100 Dollar (\$10,000,000) secured revolving line of credit, with a Four Million and 00/100 Dollar (\$4,000,000) uncommitted accordion feature ("Loan") for the purpose of financing the Tranche 5-2021 (as defined in the Credit Agreement) Solar Home Renewable Energy Credit program ("Tranche 5-2021 SHRECs"); 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 Second Amendment, in order to, among other things, secure the Loan with the Tranche 5-2021 SHRECs as collateral and extend the term of the Loan; and

**WHEREAS**, in connection with the modification of the Loan, the Company and Green Bank, as applicable, shall also enter into those documents listed on <u>Exhibit A</u> attached hereto (collectively, the "**Modification Documents**"); 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 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 "MPA's"), which collateral assignment and security interest shall include any and all rights to payment of money under the MPA's with respect to Tranche 5-2021 SHRECs and those other attributes and rights associated with the Tranche 5-2021 SHRECs, (iii) a collateral assignment 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 Second 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 Second Amendment and the Modification Documents and authorizes, ratifies, directs and approves the Company's and the Green Bank's entering into the Second Amendment and the Modification Documents 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 Second 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 Second Amendment and the other Modification Documents and all of the Green Bank's and the Company's obligations under the Second Amendment and the other Modification Documents; 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 Second Amendment and the other Modification Documents 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 Second 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 effect the above-mentioned legal instrument or instruments.

#### EXHIBIT A

#### **MODIFICATION DOCUMENTS**

- Perfection Certificate made by the Company in favor of Agent.
   Second Amended and Restated Collateral Assignment of Master Purchase Agreements and Other Loan Documents made by the Company and Green Bank to Agent.



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#### PosiGen

#### Green Bank Term Loan Facility Modification Request

#### July 16, 2021

Solar Energy and Energy Efficiency



**Document Purpose:** This document contains background information and due diligence on modification of existing credit facilities for PosiGen Inc. ("PosiGen") collateralized by residential solar PV facilities located within and outside of Connecticut and by the future performance based incentive ("PBI") payments PosiGen will earn from various residential solar PV projects in Connecticut. The information herein is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

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

### **Investment Modification Memo**

- To: Connecticut Green Bank Board of Directors
- **CC:** Bryan Garcia, President and CEO; Jane Murphy, Executive Vice President of Accounting and Financial Reporting; Brian Farnen, General Counsel and CLO; Eric Shrago, Managing Director of Operations; Sergio Carrillo, Director of Incentive Programs

From: Bert Hunter, EVP and CIO

Date: July 16, 2021

Re: PosiGen Back Leverage and Performance Based Incentive Facility Modification

#### Background

At its April 2021 meeting, the Board of Directors (the "Board") of the Connecticut Green Bank ("Green Bank"), supported staff's recommendation to allow for an upsize in the first lien asset-backed facility ("Ares FLCF") that Ares Capital Corporation ("Ares") makes available to our strategic partner for low to moderate income ("LMI") solar and energy efficiency, PosiGen, Inc. and its subsidiaries (collectively, "PosiGen"). The Green Bank is the "2<sup>nd</sup> Lien" lender subordinated to Ares in that facility (the second lien credit facility, or "SLCF"). This upsized financing facility through Ares subsequently closed in early June, providing PosiGen with million more availability to continue to accelerate deployment of systems serving low- and moderate-income households in Connecticut, primarily, as well as its other core and emerging markets.

The Ares FLCF now has a maximum aggregate limit of million and the Green Bank SLCF has a maximum aggregate limit of million (with Green Bank's exposure capped at \$14 million (fully drawn and outstanding) which exposure is supplemented by additional SLCF lenders as previously approved by the Board and discussed later). This Green Bank SLCF exposure is in addition to a 1st lien credit facility provided by Green Bank that is collateralized by the Performance Based Incentive ("PBI") payments that the company receives from the Green Bank, which represents another \$5 million of non-participated exposure (total exposure limit \$19 million – actual outstanding balance at 6/30/21: \$18.1 million which is net of Inclusive Prosperity Capital's participation of \$1.9 million).

As discussed at that Board meeting, even as PosiGen proceeded with upsizing the Ares FLCF earlier this year to ensure uninterrupted operations, PosiGen was considering options to meaningfully lower its cost of capital, given how well its portfolio performed over the course of 2020 (see the last few pages of Exhibit A, attached, "PosiGen Monthly KPI Update Deck Extract - 2021 07-15" for real-time portfolio performance data). PosiGen has now succeeded in identifying a lender, when it has negotiated preferential terms for a refinanced asset-backed loan facility, including a significant reduction in pricing vs. Ares' cost of capital of approximately 50%. The proposed for a meaningfully higher advance rate than the company currently enjoys with Ares with a lower advance rate for the Green Bank's SLCF, which would allow PosiGen to pay down a significant portion of the Green Bank's existing exposure.

This memo provides context on the Green Bank's current exposure to PosiGen, our projected position as an ongoing partner under the contemplated **sector**, and a recommendation designed to enable the Green Bank / PosiGen partnership to continue to deliver on our goal of expanded access to clean energy to all homeowners across the state.

#### **Current Green Bank Position**

As previously advised to and approved by the Board, the Green Bank currently provides a 2<sup>nd</sup> lien assetbacked facility to PosiGen, at a 17% advance rate against the net present value of the contracted cash flow associated with the company's operating portfolio of solar leases. The total amount of Green Bank exposure for this position is \$14 million. On top of the Green Bank's own exposure, there are five charitable foundations that participate in the 2<sup>nd</sup> lien facility (

), totaling an additional \$ million (for a total outstanding together with Green Bank's \$14 million exposure of \$ million under the Green Bank SLCF. This is in addition to a 1<sup>st</sup> lien facility that is collateralized by the Performance Based Incentive ("PBI") that the company receives from the Green Bank, which represents another \$6 million of non-participated exposure outstanding. On the 1<sup>st</sup> lien, PBI-backed facility, Inclusive Prosperity Capital ("IPC") also participates at a \$1.9 million level. For the Green Bank itself, the organization's total exposure limit is currently \$18.1 million (that is, \$14 million against the lease portfolio, and a net \$4.1 million against the PBI).

The Green Bank's 2<sup>nd</sup> lien facility is in a second position behind Ares, with the 1<sup>st</sup> lien currently advancing % against an asset-backed borrowing base. After its recent upsize, the Ares facility commitment is fillion, of which PosiGen has borrowed nearly for million. Under its loan with Ares, PosiGen pays a stated interest rate of % per annum, which inclusive of all fees ends up costing the company close to % in annual interest expense on an all-in basis.

#### Proposed Bank Facility and Green Bank Positioning

Exhibit B ("PosiGen\_Term\_Sheet\_(CB)\_-Executed) attached hereto lays out the full terms of the proposed new 1<sup>st</sup> lien facility with **Security**. But to summarize the key economic terms, the proposed loan would:

- Commit **\$** million in capital for both refinancing and growth ("Pre-Accordion Cap"), with an accordion feature to allow the facility to expand up to **\$** million ("Accordion Cap") and a further right of first refusal ("ROFR") for upsizing to **\$** million
- Provide an advance rate of % against the borrowing base, sized via the existing % discount rate (with the exception of unhedged REC cash flows, which will carry a % discount rate)
- Deliver a sub- % interest rate (LIBOR floor of % plus a spread of % max)

In light of this meaningful improvement in terms, staff proposes that the Green Bank reposition our relationship with PosiGen as follows:

- Against the PosiGen's portfolio of lease cash flows:
  - Maintain our 2<sup>nd</sup> lien position at an advance rate not to exceed % (down from the current % level) which together with the % advance rate under the results in an overall % advance rate to accommodate the Accordion Cap of the proposed
    - This results in a Pre-Accordion Cap advance limit of \$11.25 million (Green Bank limit \$4.5 million) for the modified Green Bank SLCF and an Accordion Cap of \$16 million (Green Bank limit \$6.4 million)
    - Given \$14 million currently outstanding, this lower Green Bank advance rate will result in a paydown of the Green Bank's position of at least \$10 million (exact amount TBD based on closing draw levels), since the 2<sup>nd</sup> Lien participants (

) will maintain their current exposure levels (up to the Pre-Accordion Cap) at a combined **\$ million** 

- These participations will continue to generate fee income for the Green Bank, given our role as 2<sup>nd</sup> lien agent (approximately \$6,000 per annum)
- Extend the maturity of the Green Bank's facility to align with **Extended** terms (3 years from the effective date of the transactions, expected to be September 2021)
- Reduce the Green Bank's interest rate to % (vs the current %, which was set higher due to risk adjustments made in late 2019), in line with the agreed interest rate with the other Green Bank SLCF participants and Green Bank's improved risk position and reduced exposure
  - TBD whether the 2<sup>nd</sup> lien participants would similarly reduce their interest rates, but staff plans to work with PosiGen directly to secure the best pricing possible from the 2<sup>nd</sup> lien participants as part of this refinancing.
  - Green Bank interest rate would not be less than the highest interest rate negotiated with any 2<sup>nd</sup> lien participant.
- Against the PBI
  - Currently \$5 million outstanding, with Board approval already in place to fund up to \$7 million
    - Enable this to grow up to \$10 million in total (inclusive of Green Bank recovering the outstanding IPC balance in the PBI Facility of approximately \$1.9 million), adjusting the ability to approve advances up to the 3 year maturity of the

and returning pricing to the originally Board-approved rate of % (again, the rate currently sits at % after prior risk adjustments) given the reduced overall risk levels.

- Overall exposure

Exposure @ closing	\$18,100,000	\$16,400,000 (full Accordion) <b>\$10,000,000</b>
Max Exposure	\$19,000,000	\$14,500,000 (Pre-Accordion)
IPC Participation	<u>( 2,000,000)</u>	<u>\$0</u>
PBI	\$ 7,000,000	\$10,000,000
SLCF	Current \$14,000,000	Proposed \$ 4,500,000 (Pre-Accordion) \$ 6,400,000 (full Accordion)

#### Recommendation

In partnership with the Green Bank, PosiGen has persevered through a challenging period in the company's history while continuing to serve the LMI households who otherwise have had only limited options to access the benefits of clean energy. As the company continues to improve financially, investors have taken note and this has attracted additional equity capital (see Exhibit C "PosiGen Series E Term Sheet (**Genergy**)" for a sense of PosiGen's ability to attract additional equity investment). Staff believes that with this **Genergy** facility, the Green Bank can both reduce our exposure to PosiGen while still supporting the company's growth.

By returning at least \$8 million to the Green Bank balance sheet (being the reduced exposure of \$10 million from the Green Bank SLCF offset by Green Bank taking over IPC's participation in the first lien PBI Facility of approximately \$2 million), this transaction effectively marks the end of "Phase 1" of our organizational commitment to PosiGen, with a meaningful return of capital after having helped catalyze a sorely underserved market. With a reduced but still meaningful participation going forward, and with the majority of the potential exposure (60-70%) secured by our own PBI incentive cash flows, risk is contained. We are now well positioned for a natural "Phase 2" stage, where we continue to expand LMI access not just to the benefits of solar and energy efficiency, but also to battery storage, GRID 2.0 technology more broadly, and an inclusive approach to the electrification / virtual power plant vision that represents the future we are seeking to create for Connecticut.

#### **Resolutions**

**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 and energy efficiency financing offering to LMI households in Connecticut;

**WHEREAS**, the Green Bank Board of Directors ("Board) previously authorized and later amended the Green Bank's participation in a credit facility (the "BL Facility") encompassing all of PosiGen's solar PV system and energy efficiency leases in the United States as part of the company's strategic growth plan, as well as the company's PBI cash flows received under the Residential Solar Investment Program, in amounts not to exceed \$14 million and \$5 million, respectively;

**WHEREAS**, Congressional Bank ("Congressional") has provided a term sheet for a new BL Facility for the company, as explained in the memorandum to the Board dated July 16, 2021 (the "Board Memo");

**WHEREAS**, the Congressional term sheet contemplates an ongoing role for the Green Bank as a 2<sup>nd</sup> lien lender against PosiGen lease cash flows and as 1<sup>st</sup> lien lender against PBI cash flows, as further explained in the "Board Memo";

NOW, therefore be it:

**RESOLVED**, that the Board authorizes the Green Bank to amend its existing 2<sup>nd</sup> lien facility to allow for the new Congressional 1<sup>st</sup> lien facility, as set forth in the Board Memo;

**RESOLVED**, that the Green Bank may advance up to \$6.4 million in 2<sup>nd</sup> lien financing associated with the Congressional facility, in addition to serving as an agent for third-party participation to increase that total as available;

**RESOLVED**, that the Green Bank may further advance up to \$10 million in 1<sup>st</sup> lien financing associated with PBI cash flows; and

**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 effect the above-mentioned legal instruments.

Submitted by: Bert Hunter, EVP and CIO

# PosiGen

Solar Energy and Energy Efficiency

# PosiGen, Inc.

# **Monthly KPI Update Presentation**

July 15, 2021



# Overview





## Section 2. Sales Performance



# Total Sales by Product & Market

Sales team leadership priorities yielding results in the field



### Sales per Headcount - Active Employees

11



### CAC per Approved Sale – 2019 thru Jun-21



# Section 3. Operations Performance

13



### H1 Totals





### How the Ops Team is Overcoming Challenges & Improving Communication

۲





### Total Installs by Product & Market

16



### Cycle Time Bottlenecks and Targets



# Section 4. Lease Portfolio Performance



### Fleet Cash Collections – 2019 thru Jun-21

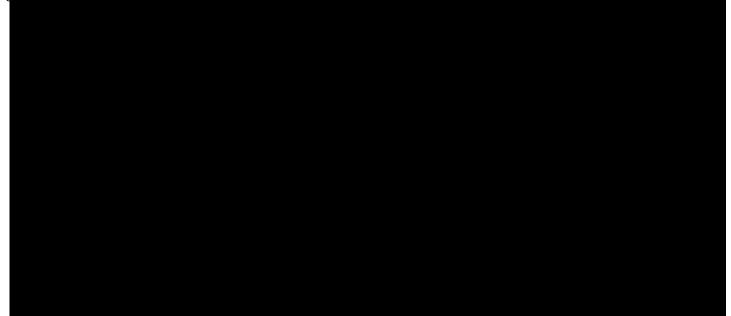


## Delinquency and Deferment Analysis

The following is intended to summarize certain basic terms of the proposed Revolving Loan (the "Investment"). It is not intended as a definitive list of all our requirements in connection with the financing. This summary term sheet does not constitute a commitment, a contract to provide a commitment, or an offer to enter into a contract regarding the proposed Investment on these or any other terms. Such commitment, contract, or offer is subject to, among other things, completing our due diligence, the final customary approval of the applicable Lender(s) Investment Committees, and delivery of final loan documentation satisfactory to Lender(s). These summary terms and conditions are confidential and should be treated as such and should not be discussed with any other party, except for the Sponsors, Borrower, and respective advisors.

#### POSIGEN BACKLEVERAGE, LLC

PRELIMINARY SUMMARY TERMS AND CONDITIONS



DocuSign Envelope ID: 7384341C-3FDE-430B-B24F-CB9BFB5F24DD Signed and agreed,



### SERIES E OVERVIEW

Confidential

Series E	



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#### **Connecticut Municipal Electric Energy Cooperative (CMEEC)**

#### & US Naval Submarine Base – Groton, CT Fuel Cell Project

### A Fuel Cell Debt Financing Strategic Selection Green Bank Term Loan Facility Extension Request July 16, 2021



**Document Purpose:** This document contains background information and due diligence on a proposed credit facility for the FuelCell Energy, Inc. ("FCE" and NASDAQ: FCEL) fuel cell project under a power purchase agreement between FCE and the Connecticut Municipal Electric Energy Cooperative ("CMEEC") and located at the US Naval Submarine Base – Groton, CT. The information herein is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

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

### **Strategic Selection Financing Extension Memo**

То:	Connecticut Green Bank Board of Directors
From:	Bert Hunter, EVP & CIO
Cc:	Bryan Garcia, President & CEO; Brian Farnen, General Counsel & CLO; Sergio Carrillo, Director, Incentive Programs; Jane Murphy, EVP of Finance and Administration
Date:	July 16, 2021
Re:	FuelCell Energy / US Navy / CMEEC / Groton Fuel Cell Project
	Term Loan Facility Update & Extension Request

#### **Term Loan Background**

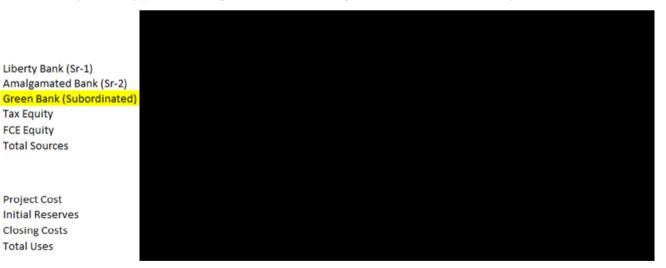
Tax Equity FCE Equity **Total Sources** 

Project Cost Initial Reserves **Closing Costs** Total Uses

At the December 2020 meeting of the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board"), the Board approved a term loan facility to finance the 7.4 megawatt FuelCell Energy, Inc. ("FCE") fuel cell at the US Naval Submarine Base, Groton, CT (the "Navy Project") in partnership with and subordinated to loans (the "Senior Loans" and together with Green Bank's loan, the "Term Loans") from two bank lenders: Liberty Bank and Amalgamated Bank (the "Senior Lenders" and together with Green Bank, the "Lenders").

At the January 2021 meeting of the Board, the Board was advised that the loan repayment profiles of the senior lenders will mirror each other rather than have one senior lender be paid out later than the other, as set forth below in the rightmost column (the Green Bank loan structure was not affected):

The structure previously presented together with the change for the Senior Lenders is presented here:



#### **Term Loan Update & Extension Request**

The senior lenders and FCE have entered into a commitment for the financing, subject to finalization of diligence and credit approval, both of which are in progress. The Board's December 18, 2020 authorization for the Green Bank funding had a shelf life of 180 days and expired on June 16, 2021. The project financing is expected to close in September 2021. However, in an abundance of caution since the next meeting of the Board is October 22, 2021, staff requests the approval be extended to 315 days from its original approval date (October 29, 2021).

# **Resolutions**

WHEREAS, in accordance with (1) the statutory mandate of the Connecticut Green Bank ("Green Bank") to foster the growth, development, and deployment of clean energy sources that serve end-use customers in the State of Connecticut, (2) the State's Comprehensive Energy Strategy ("CES") and Integrated Resources Plan ("IRP"), and (3) Green Bank's Comprehensive Plan (the "Comprehensive Plan") in reference to the CES and IRP, Green Bank continuously aims to develop financing tools to further drive private capital investment into clean energy projects;

WHEREAS, FuelCell Energy, Inc., of Danbury, Connecticut ("FCE") has used previously committed funding (the "Bridgeport Loan") from Green Bank to successfully develop a 15 megawatt fuel cell facility in Bridgeport, Connecticut (the "Bridgeport Project"), and FCE has operated and maintained the Bridgeport Project without material incident, is current on payments under the Bridgeport Loan;

**WHEREAS**, FCE has requested financing support from the Green Bank to develop a 7.4 megawatt fuel cell project in Groton, Connecticut located on the U.S. Navy submarine base and supported by a power purchase agreement ("PPA") with the Connecticut Municipal Electric Energy Cooperative ("CMEEC") (the "Navy Project");

WHEREAS, staff has considered the merits of the Navy Project and the ability of FCE to construct, operate and maintain the facility, support the obligations under the Loan throughout its 20-year term, and as set forth in the due diligence memorandum (the "Board Memo") dated December 18, 2020, recommended this support be in the form of a term loan not to exceed \$8,000,000, secured by all project assets, contracts and revenues as well as a pledge of revenues from an unencumbered project as explained in the Board Memo (the "Credit Facility");

**WHEREAS**, on the basis of that recommendation, the Green Bank Board of Directors ("Board") approved of the Credit Facility, in an amount not to exceed \$8,000,000 with the provision that the Credit Facility be executed no later than 180 days from the date of authorization by the Board (June 16, 2021);

WHEREAS, Green Bank has further advised the Board that the Credit Facility is expected to close within the next 90 days and to accommodate the additional time needed to execute the Credit Facility requests the permitted time to execute the credit facility be increased from not later than 180 days from the original date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 16, 2021) to not later than 315 days from the date of authorization by the Board (June 29, 2021);

NOW, therefore be it:

**RESOLVED**, that the Green Bank Board hereby approves the extension of time for the execution of the Credit Facility to not later than 315 days from the original date of authorization by the Board (i.e., not later than October 29, 2021); and

**RESOLVED,** that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to provide the Credit Facility to FCE (or a special purpose entity wholly-owned by FCE) in an amount not to exceed \$8,000,000 with terms and conditions consistent with the memorandum submitted to the Board dated December 18, 2020 (the "Memorandum"), and as he or she shall deem to be in the interests of the Green Bank and the ratepayers; and

**RESOLVED**, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the Term Loan and participation as set forth in the Memorandum.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO;



75 Charter Oak Avenue, Suite 1 - 103, Hartford, CT 06106 T 860.563.0015 ctgreenbank.com

# Memo

To: Board of Directors

From: Bryan Garcia (President and CEO)

**Cc:** Sergio Carrillo (Director of Incentive Programs), Mackey Dykes (VP of Financing Programs and Officer), Brian Farnen (General Counsel and CLO), Bert Hunter (EVP and CIO), Jane Murphy (EVP of Finance and Administration), and Eric Shrago (Managing Director of Operations)

Date: July 23, 2021

**Re:** Environmental Infrastructure – Comprehensive Plan Process

#### Background

On July 1, 2011, through the leadership of Governor Dannel Malloy, Public Act 11-80 "An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future" passed, on a bipartisan basis, creating the nation's first state-level green bank – Connecticut Green Bank ("Green Bank"). A decade later, through the leadership of Governor Ned Lamont, Public Act 21-115 "An Act Concerning Climate Change Adaptation" ("the Act") passed, again, on a bipartisan basis, expanding the scope of the Green Bank beyond "clean energy" to include "environmental infrastructure" (see Attachment A – specifically Sections 19 through 23 of Public Act 21-115 from pages 18 through 33).

The Act makes the following additions to the Green Bank mission:

- <u>Environmental Infrastructure</u> expands the scope of the Green Bank to include environmental infrastructure, which "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 offsets and ecosystem services;
- <u>Environmental Infrastructure Fund</u> creates an Environmental Infrastructure Fund ("EIF") to receive funds, including federal funds as may become available to Connecticut for environmental infrastructure investments;<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> It should be noted that the EIF shall not receive (i) Ratepayer or RGGI funds, (ii) funds deposited in or required to be deposited in the Clean Water Fund pursuant to CGS 22a-475 to 22a438f, inclusive, or (iii) funds collected from a water company under CGS 25-32a.

- <u>Board of Directors</u> includes an additional ex officio member to its Board of Directors ("BOD"), the Secretary of the Office of Policy and Management ("OPM") or the Secretary's designee;
- <u>Special Capital Reserve Fund</u> expands the special capital reserve fund ("SCRF") for the Green Bank from \$100 MM to \$250 MM to support its bond issuance capabilities;
- <u>Bond Terms</u> extends bond terms for "clean energy" from up to twenty (20) years to up to twenty-five (25) years, and establishes bond terms for "environmental infrastructure" for up to fifty (50) years;<sup>2</sup> and
- **<u>Reporting</u>** increases reporting requirements for the committees of cognizance from (1) energy & technology and (2) commerce to also include (3) environment and (4) banking.

In order to authorize the expenditure of funds within the EIF to support environmental infrastructure projects, a Comprehensive Plan must be developed to foster the growth, development, commercialization and, where applicable, preservation of environmental infrastructure and related enterprises. The current Comprehensive Plan<sup>3</sup> of the Green Bank – Green Bonds US – does not yet include a substantive strategy on environmental infrastructure besides allowing the Smart-E Loan to include such measures. This memo provides an overview of the process to develop a Comprehensive Plan, and the other requirements necessary (e.g., governance) to enable the Green Bank to make such investments in environmental infrastructure projects.<sup>4</sup>

#### **Department of Energy and Environmental Protection Engagement**

The Department of Energy and Environmental Protection ("DEEP") is an integral partner to the Green Bank. As the agency charged with conserving, improving and protecting the natural resources and the environment of the state of Connecticut as well as making cheaper, cleaner and more reliable energy available for the people and businesses of the state, DEEP is committed to playing a positive role in rebuilding Connecticut's economy and creating jobs – and to fostering a sustainable and prosperous economic future for the state.<sup>5</sup> The leadership of the Green Bank, will meet with the leadership of DEEP, to assess how the expanded scope of the Green Bank provides DEEP with a financing tool to support its mission.

As such, the Green Bank sees DEEP as a partner in the development, implementation, and evaluation of its efforts to mobilize more private capital investment in the green economy of Connecticut. It should be noted, with the mission to "<u>confront climate change</u> and provide <u>all of society</u> a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy" (emphasis added), that the Green Bank will prioritize "climate adaptation and resilience" within its environmental infrastructure scope, as well as the need to increase investment in such projects in vulnerable communities.

<sup>&</sup>lt;sup>2</sup> With the term being set at up to 25 years for clean energy or 50 years for environmental infrastructure, or the useful life of the project, whichever is less.

<sup>&</sup>lt;sup>3</sup> Comprehensive Plan of the Green Bank – Green Bonds US (click here)

<sup>&</sup>lt;sup>4</sup> It should be noted that within the FY22 budget, that there are resources for hiring a Director of Environmental Infrastructure Programs and support for technical assistance (e.g., strategic planning).

<sup>&</sup>lt;sup>5</sup> <u>https://portal.ct.gov/DEEP/About/About-Us</u>

☑ <u>DEEP Engagement</u> – the Green Bank will engage the leadership and divisions of DEEP at the outset of the process to solicit their perspectives on the development of a Comprehensive Plan through various meetings and issue a memo to the BOD on October 22, 2021, on its findings.

#### **Governance Amendments**

In accordance with Conn. General Statute 16-245n, the following areas of governance and accounting require review and revisions led by the General Counsel and CLO and the Executive Vice President of Finance and Administration, with the support of the Audit, Compliance, and Governance Committee ("ACG Committee"), and approval by the Board of Directors ("BOD"):

- <u>Resolutions of Purposes</u> revision of resolution of purposes to include environmental infrastructure;
- <u>Bylaws</u> revision of bylaws to carryout functions related to environmental infrastructure, including consideration of the establishment of committee(s) as necessary to conduct business;
- <u>Operating Procedures</u> revision of the operating procedures to include environmental infrastructure; and
- <u>Ethical Conduct Policy of Board of Directors</u> revision of the ethical conduct policy to include environmental infrastructure.

The amendment to these governance documents will provide the framework for decisionmaking with respect to environmental infrastructure.

In addition to the amendment of these governance documents, and consistent with the accounting treatment necessary to administer the EIF, the staff will propose accounting methods for the EIF to not comingle ratepayer or RGGI funds for "clean energy" with Green Bank resources available to support "environmental infrastructure" (e.g., earned revenues, federal funds, bond proceeds).

☑ <u>**Governance Amendments**</u> – it is expected that the ACG Committee will review the revisions to the governance documents and proposed accounting methods on October 12, 2021, and recommend approval by the BOD on October 22, 2021.

## **Bond Potential**

Per Conn. General Statutes 16-245kk, 16-245ll, and 16-245mm, the Green Bank has the statutory authority to issue bonds in support of "clean energy" and "environmental infrastructure" projects, including with the support of the SCRF. In accordance with these provisions, the EVP and CIO, General Counsel and CLO, and the Director of Clean Energy Finance, with the support of the Green Bank's bond advisor (i.e., Lamont Financial Services) and bond counsel

(i.e., Shipman and Goodwin), will determine the best approach(es) for issuing bonds, including, but not limited to the use of the Green Liberty Bond.

In recognition of the 50<sup>th</sup> anniversary of Earth Day, the Green Bank created the Green Liberty Bond<sup>6</sup> as a capital raising tool with the following characteristics:

- <u>Use of Proceeds</u> with the mission to "confront climate change," the use of proceeds from the sale of bonds must go towards projects that support the Paris Agreement (i.e., mitigation of greenhouse gases or adaptation to the impacts from climate change);<sup>7</sup>
- <u>Retail Accessible and Affordable</u> modelled after the Series-E War Bonds of the 1940's, these bonds must be accessible and affordable (i.e., no more than \$1,000 denomination) to retail investors in Connecticut and across the United States; and
- Independently Certified and Verified given retail accessibility, the bonds must be independently certified and verified green or climate bonds.<sup>8</sup>

The Green Liberty Bond structure can be used to issue bonds for both clean energy and environmental infrastructure.

The Act improves upon the Green Bank's ability to raise capital in support of its mission through the issuance of bonds by:

- Increasing SCRF increasing the Green Bank's access to SCRF from \$100 MM to \$250 MM;
- 2. **Expanding Scope** including environmental infrastructure alongside clean energy as a use of proceeds from the sale of bonds; and
- 3. <u>Expanding Terms</u> increasing the bond term for clean energy from up to twenty (20) years to up to twenty-five (25) years, and environmental infrastructure to up to fifty (50) years.

The issuance of bonds will be a source of funding (including for the EIF) in support of clean energy and environmental infrastructure projects.

☑ Bond Potential – the Green Bank will consult with its bond advisor and bond counsel to discern the potential of its new bond capabilities, and issue a memo to the BOD on October 22, 2021 describing how it can be used to raise capital in support of clean energy and environmental infrastructure projects.

<sup>&</sup>lt;sup>6</sup> For more information on Green Liberty Bonds, go to <u>www.greenlibertybonds.com</u>

<sup>&</sup>lt;sup>7</sup> For the Green Bank, this is consistent with "clean energy" and "environmental infrastructure"

<sup>&</sup>lt;sup>8</sup> The Green Bond Framework 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 bonds. For mor information on the Green Bond Framework, go to <u>https://www.ctgreenbank.com/strategy-impact/impact/green-bond-framework/</u>

# Stakeholder Engagement

Over the next six (6) to nine (9) months, the President and CEO will engage with various public, private, and nonprofit stakeholders to understand how the Green Bank's ability to invest in environmental infrastructure projects (with a focus on climate adaptation and resilience) could support the state's public policy goals and objectives. Beyond private and nonprofit stakeholders, there is a myriad of public sector stakeholders the Green Bank must meet with to discern relevance and need – see Appendix I – Public Sector Stakeholders.

These meetings will include the following topics of discussion:

- <u>Relevance</u> what area(s) of environmental infrastructure are relevant to the stakeholder?<sup>9</sup> Are there other "environmental markets" that the stakeholder would recommend the Green Bank consider (e.g., brownfields)?
- <u>Policies and Targets</u> what public policies (e.g., refund value of \$0.05 per beverage container) and targets (e.g., diverting/reducing, reusing, and recycling 60% of municipal solid waste by 2024) are the state trying to achieve from the area of environmental infrastructure?
- <u>Market Potential</u> what is the total available market ("TAM")<sup>10</sup> (e.g., rivers), Serviceable Available Market ("SAM")<sup>11</sup> (e.g., water plan), and Serviceable Obtainable Market ("SOM")<sup>12</sup> (e.g., dams and hydropower) from the environmental infrastructure resource?
- <u>Technical Assistance, Funding, and Financing Sources</u> what are the existing technical assistance resources (e.g., Connecticut Institute for Resilience and Climate Adaptation), funding (e.g., DEEP's Microgrid and Resilience Grant and Loan Pilot Program), and financing (e.g., Clean Energy & Sustainability Accelerator)<sup>13</sup> available for the area of environmental infrastructure?
- <u>Use Cases</u> what are some basic project funding and financing structures for the area of environmental infrastructure?
- <u>Permitting</u> what are the relevant local, state, and federal permitting requirements for the area of environmental infrastructure given relevant use cases?
- Key Metrics what are the key metrics (i.e., inputs, outputs, and outcomes) to track progress in improving the specific environmental infrastructure improvement?
- <u>Building Resilience of Vulnerable Communities</u> what are the various impacts from climate change (e.g., loss of shelter, food, power, heat, water) that need to be addressed

<sup>&</sup>lt;sup>9</sup> On a scale of 0 to 5 with 0 being irrelevant to 5 being extremely relevant, how would the stakeholder rank each area of environmental infrastructure from their perspective.

<sup>&</sup>lt;sup>10</sup> Total market demand for a product or service

<sup>&</sup>lt;sup>11</sup> Segment of the TAM targeted by public policy

<sup>&</sup>lt;sup>12</sup> Portion of the SAM captured

<sup>&</sup>lt;sup>13</sup> A component of President Biden's American Jobs Plan is the creation of a "Clean Energy & Sustainability Accelerator," which would provide federal resources to green banks. The Accelerator is currently in Congressional bipartisan negotiations.

by building resilience<sup>14</sup> of vulnerable communities through improvements to environmental infrastructure?

 <u>Stakeholder Identification</u> – what additional stakeholders would the stakeholder suggest the Green Bank meet with?

Feedback from stakeholders will inform the development of the Comprehensive Plan. It will be really important that we solicit feedback from cities and towns. Reaching out to Connecticut Conference of Municipalities ("CCM"), Council of Small Towns ("COST") and Sustainable CT can facilitate such engagements.

## Building Resilience of Vulnerable Communities

The expansion of the Green Bank's scope to include environmental infrastructure was enabled by the passage of PA 21-115, which was the result of a recommendation by the Financing and Funding Adaptation and Resilience Working Group of the Governor's Council on Climate Change.<sup>15</sup> Given the priority to address climate adaptation and resiliency and vulnerable communities, the Green Bank and DEEP successfully sought technical assistance through the European Union ("EU") and United States Climate Alliance ("USCA") Climate Risk and Resilience Cooperation facilitated by the Climate Finance Advisors ("CFA").<sup>16</sup> In support of technical assistance on "Physical Climate Risk Management & Infrastructure," CFA will facilitate a 6-month effort led by DEEP, Green Bank, Department of Insurance, and the Connecticut Institute for Resilience and Climate Adaptation ("CIRCA") (i.e., "the Collaborators"), resulting in the following deliverables:

- Brief report on EU experiences relevant to Connecticut's specific climate adaptation and resilience goals;
- Showcasing events (e.g., Climate Week NYC, Connecticut Insurance Summit) and knowledge sharing;
- Strengths, weaknesses, opportunities, and threat ("SWOT") analysis of the Collaborators;
- Determination of near- and mid-term deliverables and targets to advance resilience investment in Connecticut;
- Identification of pathways to develop a resiliency project pipeline for financing; and
- Summary report to inform the Comprehensive Plan on financing climate adaptation and resiliency in Connecticut.

<sup>&</sup>lt;sup>14</sup> 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.

<sup>&</sup>lt;sup>15</sup> Taking Action on Climate Change and Building a More Resilient Connecticut for All – <u>click here</u>. See Recommendation #55 "Build the governance and inter-agency coordination necessary to allow for effective and efficient financing and funding" on Page 50, and Recommendation #57 "Support the creation of an Environmental Infrastructure Bank in Connecticut" on Page 52, for details.

<sup>&</sup>lt;sup>16</sup> DEEP and the Green Bank submitted a proposal under an RFP for technical assistance on April 30, 2021 to CFA. Funding for 51 of 82 technical assistance days is being provided. The Green Bank, working with DEEP and the CFA, will solicit funding to support 31 additional technical assistance days for the project.

This parallel effort will engage vulnerable community stakeholders.

Stakeholder Engagement – the Green Bank will consult with various stakeholders, and issue a report from the EU-USCA technical assistance on January 21, 2022, and a memo to the BOD on Earth Day 2022 (i.e., April 22, 2022) describing the nature of the feedback and its inclusion with the Comprehensive Plan.

## **Offsite Strategic Retreat**

In the past, the Green Bank has held several offsite strategic retreats<sup>17</sup> that have included a facilitator,<sup>18</sup> visual note-taker,<sup>19</sup> and stakeholders in a multiday program to layout a vision for the Green Bank's future products and programs, and sources of funding.<sup>20</sup> These retreats have taken place at the Pocantico Center of the Rockefeller Brothers Fund<sup>21</sup> ("Pocantico") providing attendees with an immersive experience of unrivaled beauty, with breathtaking gardens and grounds, historical architecture, and a renowned art collection all in which to find inspiration and respite. These strategic retreats have featured keynote speakers, including Gina McCarthy, former Administrator of the US EPA, Mary Evelyn Tucker, co-founder of the Forum on Religion and Ecology at Yale University, and Francis Beinecke, former President of NRDC to inspire participants to "think big and outside the box".

The Green Bank has applied to Pocantico to host the offsite strategic retreat, and is in the process of assembling the organizers (including facilitator and visual note-taker), and designing a productive and impactful agenda.

Offsite Strategic Retreat – the Green Bank will hold a strategic retreat in the Fall of 2021 including staff, members of the BOD, and stakeholders in an offsite strategic retreat, and issue a report<sup>22</sup> to the BOD on January 21, 2022 summarizing its findings.

# **Timeline and Deliverables**

The following is a breakdown of the timeline and deliverables that shape the process to develop a Comprehensive Plan that includes environmental infrastructure (with an emphasis on climate adaptation and resilience in vulnerable communities):

- <u>October 12, 2021</u> (Governance Amendments) ACG Committee review and recommendation for approval to the BOD of revisions to governance documents and accounting methods for the EIF.
- October 22, 2021 there are a number of deliverables for the BOD meeting, including:

<sup>&</sup>lt;sup>17</sup> November 7-8, 2011 and February 6-7, 2019

<sup>&</sup>lt;sup>18</sup> Dr. Jonathan Raab of Raab Associates

<sup>&</sup>lt;sup>19</sup> Monica Eager of Dpict

<sup>&</sup>lt;sup>20</sup> Connecticut Green Bank 2.0 – From 1 to 2 Orders of Magnitude (click here)

<sup>&</sup>lt;sup>21</sup> <u>https://www.rbf.org/pocantico</u>

<sup>&</sup>lt;sup>22</sup> For example, "Connecticut Green Bank 2.0 – From 1 to 2 Orders of Magnitude" – <u>click here</u>.

- <u>Governance Amendments</u> ACG Committee recommended approval of revised governance documents and accounting methods for the EIF to the BOD.
- <u>DEEP Engagement</u> discuss with the BOD the memo describing the engagement with DEEP to solicit their perspectives on the development of a Comprehensive Plan.
- <u>Bond Potential</u> discuss with the BOD the memo describing how the Green Bank's bonding abilities can be used to raise capital in support of clean energy and environmental infrastructure projects.
- <u>Position Description</u> if ready, the leadership of the Green Bank will provide a position description for a Director of Environmental Infrastructure Programs for review and approval by the BOD.
- January 21, 2022 (Technical Assistance and Offsite Strategic Retreat) discuss with BOD the findings from the EU-USCA technical assistance report, and report from the offsite strategic retreat held in the fall of2021, and how these findings will be incorporated into the Comprehensive Plan.
- <u>April 22, 2022</u> (Stakeholder Engagement) discuss with BOD the memo describing the nature of the feedback from stakeholders and how the findings will be incorporated into the Comprehensive Plan.
- June 17, 2022 (Comprehensive Plan) present and seek approval from the BOD of a Comprehensive Plan that incorporates environmental infrastructure, including targets, budget, and investments.

This is the FY 2022 timeline and deliverables to put Public Act 21-115 into full implementation by the start of FY 2023.

# Conclusions

As July 1, 2021 marks the 10<sup>th</sup> anniversary of the Green Bank, Public Act 21-115 increases the organization's mission to include environmental infrastructure. With the mission to "<u>confront</u> <u>climate change</u> and <u>provide all of society</u> a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy," the Green Bank sets out in FY 2022 to incorporate environmental infrastructure within its Comprehensive Plan. Given the ability to issue bonds, and the prospects of accessing federal resources, the Green Bank will need to raise capital within its EIF to support investments in environmental infrastructure projects. By leveraging limited public resources to scale-up and mobilize private capital investment in environmental infrastructure, the Green Bank will strengthen Connecticut's communities, especially vulnerable communities, by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses, while transforming markets for green investment.

#### Resolution

**WHEREAS,** in July of 2021, the Connecticut General Assembly passed Public Act 21-115 (the Act), "AN ACT CONCERNING CLIMATE CHANGE ADAPTATION," which expands the scope of the Green Bank to develop programs to finance and otherwise support environmental infrastructure investment per the definition of environmental infrastructure in Connecticut General Statutes Section 16-245n(a)(4);

**WHEREAS**, the Act directs the Green Bank to 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 memo dated July 23, 2021 entitled "Environmental Infrastructure – Comprehensive Plan Process," which provides an overview of the process to be undertaken in FY 2022 to incorporate environmental infrastructure within its comprehensive plan.

# Appendix I Public Sector Stakeholders

Agency	(A) Water	(B) Waste & Recycling	(C) Adaptation & Resiliency	(D) Agriculture	(E) Land Conservation	(F) Parks & Recreation	(G) Other	(H) In General
CEQ	х	х					х	
CHFA	х	х	х	х		х	х	
CI	х	х		х			х	
CIRCA	х		х		Х		х	
DECD								х
DEEP	х	х	х	х	Х	х	х	
DOAg	Х			х	Х	х	х	
DOB								х
DOH	х	х	х	х		х	х	
DOI	х		х		Х		х	
DPH	Х		х	Х	Х	х	х	
EMHS	Х		х				х	
MIRA		х						
OCC								х
OPM	х	х	х	х	Х	х	х	
OTT	х							
PURA	х		х					



Public Act No. 21-115

# AN ACT CONCERNING CLIMATE CHANGE ADAPTATION.

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

Section 1. Section 22a-498 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

(a) Any municipality [selected by the commissioner to participate in the pilot program established pursuant to section 22a-497] may, by ordinance adopted by its legislative body, designate any existing board or commission or establish a new board or commission as the stormwater authority for such municipality. If a new board or commission is created, such municipality shall, by ordinance, determine the number of members thereof, their compensation, if any, whether such members shall be elected or appointed, the method of their appointment, if appointed, and removal and their terms of office, which shall be so arranged that not more than one-half of such terms shall expire within any one year.

(b) The purposes of the stormwater authority shall be to: (1) Develop a stormwater management program, including, but not limited to, (A) a program for construction and post-construction site stormwater runoff control, including control detention and prevention of stormwater runoff from development sites; or (B) a program for control and

abatement of stormwater pollution from existing land uses, and the detection and elimination of connections to the stormwater system that threaten the public health, welfare or the environment; (2) provide public education and outreach in the municipality relating to stormwater management activities and to establish procedures for public participation; (3) provide for the administration of the stormwater management program; (4) establish geographic boundaries of the stormwater authority district; and (5) recommend to the legislative body of the municipality in which such district is located the imposition of a [levy] fee upon the [taxable] interests in real property within such district, subject to the fifteen per cent limitation on, or alternative election to exempt, properties owned by hospitals described in subdivision (3) of subsection (c) of this section, the revenues from which [may] shall be used in carrying out any of the powers of such district. In accomplishing the purposes of this section, the stormwater authority may plan, layout, acquire, construct, reconstruct, repair, maintain, supervise and manage stormwater control systems.

(c) (1) Any stormwater authority created by a municipality pursuant to subsection (a) of this section may levy fees, [from] <u>approved by the</u> <u>legislative body of the municipality in accordance with the provisions</u> <u>of subdivision (3) of this subsection, on</u> property owners of the municipality, except as specified in subdivision (2) of this subsection, for the purposes described in subsection (b) of this section. In establishing fees for [any property] properties in its district, the stormwater authority [may] shall consider criteria, including, but not limited to, the following: The area of the property containing impervious surfaces from which stormwater runoff is generated, land use types that result in higher <u>or lower</u> concentrations of stormwater pollution and the grand list valuation of the property. [The stormwater authority may reduce or defer such fees for land classified as, or consisting of, farm, forest or open space land.] In establishing fees for property in its district, the stormwater authority shall offer partial fee</u>

reduction, in the form of a credit for any property owner in its district who has installed and is operating and maintaining current stormwater best management practices that reduce, retain, or treat stormwater onsite and that are approved by the stormwater authority.

(2) In the case of land classified as, and consisting of, farm, forest or open space land, or property owned by the state government, or any of its political subdivisions or respective agencies, the stormwater authority may only levee such fees on areas of such land that contain impervious surfaces from which stormwater discharges to a municipal separate storm sewer system.

(3) Each stormwater authority shall present its budget annually to the legislative body of the municipality for approval. Such budget shall include the specific programs the authority proposes to undertake during the fiscal year for which the budget is presented, the projected expenditures for such programs for the fiscal year and the amount of the fee or fees the authority proposes to levy to pay for such expenditures. In no event shall the aggregate amount of the fees proposed for the fiscal year exceed the aggregate amount of such projected expenditures for the fiscal year and in no event shall more than fifteen per cent of the aggregate amount of the fees proposed for any fiscal year prior to July 1, 2026, be generated from properties located in the municipality that are owned by hospitals that are parties to the settlement agreement with the state approved pursuant to special act 19-1 of the December 2019 special session. The legislative body of the municipality shall ensure that the aggregate amount of the fees approved comply with such fifteen per cent limitation. For each such fiscal year prior to July 1, 2026, the authority shall, not later than thirty days after the conclusion of the fiscal year, (A) conduct a review to ensure that not more than fifteen per cent of the aggregate fees received for such fiscal year were generated from real property located in the municipality that is owned by one or more hospitals that are parties to the settlement agreement described in this

subdivision, (B) in the event that the fees received from all such hospitals together exceed fifteen per cent of the aggregate fees received for such fiscal year, the stormwater authority shall rebate any amounts received in excess of fifteen per cent, proportionately, to such hospitals, and (C) provide the results of the stormwater authority's review, in writing to each hospital, regardless of whether a rebate is due. As an alternative to imposing the fee on properties located in the municipality that are owned by hospitals that are parties to such settlement agreement described in this subdivision, the legislative body may approve exemption of such properties from the fee until July 1, 2026. The legislative body of the municipality may approve fee amounts that are less than the amounts proposed by the authority but in no event shall the legislative body of the municipality approve fee amounts that are greater than the amounts proposed by the authority.

(d) Any person aggrieved by the action of a stormwater authority under this section shall have the same rights and remedies for appeal and relief as are provided in the general statutes for taxpayers claiming to be aggrieved by the doings of the assessors or board of assessment appeals.

[(d)] (e) The authority may adopt municipal regulations to implement the stormwater management program.

[(e)] (<u>f</u>) The authority may, subject to the commissioner's approval, enter into contracts with any municipal or regional entity to accomplish the purposes of this section.

(g) For purposes of this section and sections 22a-498a and 22a-498b, as amended by this act, "municipality" means any town, city, borough, consolidated town and city or consolidated town or borough. "Municipality" does not include any local school district, regional school district, metropolitan district, district, as defined in section 7-324, or any other municipal corporation or authority authorized to issue bonds,

notes or other obligations under the provisions of the general statutes or any special act.

Sec. 2. Section 22a-498a of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

A municipal stormwater authority created pursuant to section 22a-498, as amended by this act, and located in a distressed municipality, as defined in subsection (b) of section 32-9p, having a population of not more than twenty-eight thousand shall constitute a body politic and corporate and the ordinance establishing such authority may confer upon such authority the following powers: (1) To sue and be sued; (2) to acquire, hold and convey any estate, real or personal; (3) to contract; (4) to borrow money, including by the issuance of bonds, provided the issuance of such bonds is approved by the legislative body of the municipality in which such authority district is located; (5) to recommend to the legislative body of such municipality the imposition of [a levy] fees upon the [taxable] interests in real property within such authority district, subject to the fifteen per cent limitation on, or alternative election to exempt, properties owned by hospitals described in subdivision (3) of subsection (c) of section 22a-498, as amended by this act, the revenues from which [may] shall be used in carrying out any of the powers of such authority; (6) to deposit and expend funds; and (7) to enter property to make surveys, soundings, borings and examinations to accomplish the purposes of section 22a-498, as amended by this act. Such stormwater authority and legislative body shall comply with the procedures set forth in subsection (c) of section 22a-498, as amended by this act, concerning the fifteen per cent limitation on fees imposed upon, and retrospective review and rebate procedures for fees generated from, properties owned by hospitals described in subdivision (3) of subsection (c) of said section except if such legislative body approves exemption of such properties from the fee until July 1, 2026.

Sec. 3. Section 22a-498b of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

Any charge due to a municipal stormwater authority <u>and any fee</u> <u>levied pursuant to section 22a-498, as amended by this act</u>, and not paid [within] <u>in full on or before</u> thirty days [of] <u>after</u> the due date shall thereupon be delinquent and shall bear interest from the due date at [the rate charged by the municipality's tax collector for] <u>such rates and in</u> <u>such manner as provided for</u> delinquent property taxes <u>under section</u> <u>12-146</u>. Any such unpaid charge <u>or fee</u>, <u>or portion thereof</u>, shall constitute a lien upon the [real estate] <u>property</u> against which such charge <u>or fee</u> was levied from the date it became delinquent. Each such lien may be continued, recorded and released in the manner provided by the general statutes for continuing, recording and releasing property tax liens.

Sec. 4. Section 25-84 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

(a) (1) Any municipality may, by vote of its legislative body, adopt the provisions of this section and sections 25-85 to 25-94, inclusive, <u>as</u> <u>amended by this act</u>, and exercise through a flood <u>prevention</u>, <u>climate</u> <u>resilience</u> and erosion control board the powers granted thereunder. In each town, except as otherwise provided by special act, the flood <u>prevention</u>, <u>climate resilience</u> and erosion control board shall consist of not less than five nor more than seven members, who shall be electors of such town and whose method of selection and terms of office shall be determined by local ordinance, except that in towns having a population of less than fifty thousand the selectmen may be empowered by such ordinance to act as such flood <u>prevention</u>, <u>climate resilience</u> and erosion control board. In each city or borough, except as otherwise provided by special act, the board of aldermen, council or other board or authority having power to adopt ordinances for the government of such city or borough may act as such <u>flood prevention</u>, <u>climate resilience</u> and

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<u>erosion control</u> board. The flood <u>prevention</u>, <u>climate resilience</u> and erosion control board of any town shall have jurisdiction over that part of the town outside any city or borough contained therein.

(2) Two or more municipalities may, by concurrent votes of their legislative bodies, enter into an agreement to jointly exercise through a joint flood prevention, climate resilience and erosion control board the powers granted under sections 25-85 to 25-94, inclusive, as amended by this act. The joint flood prevention, climate resilience and erosion control board shall have jurisdiction over each municipality subject to such agreement.

(b) Any town, city or borough shall have the power to provide by ordinance for the appointment or election of three alternate members to its flood <u>prevention, climate resilience</u> and erosion control board. Such alternate members shall, when seated as herein provided, have all the powers and duties set forth for such board and its members. Such alternate members shall be electors of such town, city or borough. If a regular member of any of said board is absent or is disqualified, the chairman of the board shall designate an alternate to so act, choosing alternates in rotation so that they shall act as nearly equal a number of times as possible. If any alternate is not available in accordance with such rotation, such fact shall be recorded in the minutes of the meeting.

(c) Each flood prevention, climate resilience and erosion control board shall publish a biannual report on the Internet web site of each municipality under the jurisdiction of such board. Such report shall include, but not be limited to, (1) a current inventory and description of the flood prevention, climate resilience and erosion control system managed by such board, (2) the extent and value of property, infrastructure and natural resources protected by such system, (3) an analysis of the manner in which vulnerable communities, as defined in subsection (a) of section 16-243y, are prioritized and protected by such system, and (4) the revenues and expenditures of such board.

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Sec. 5. Section 25-85 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

(a) Such board shall have authority, within the limits of appropriations from time to time made by the municipality or municipalities, as applicable, to plan, lay out, acquire, construct, reconstruct, repair, maintain, supervise, operate and manage a flood [or] prevention, climate resilience and erosion control system. As used in sections 25-84 to 25-94, inclusive, as amended by this act, ["flood or erosion control system"] "flood prevention, climate resilience and erosion control system" means any dike, berm, dam, piping, groin, jetty, sea wall, embankment, revetment, tide-gate, water storage area, ditch, drain or other structure or facility, and any nonstructural and naturebased measure, including, but not limited to, removal, relocation or modification of existing structures, restoration and maintenance of open floodplain or other water storage area and any feasible, less environmentally damaging alternative, as defined in section 22a-92, that is useful in preventing or ameliorating damage from floods or erosion, whether caused by fresh or salt water, [or] any dam forming a lake or pond that benefits abutting properties or any open space reserved for future accommodation or establishment of wetlands or watercourses, and shall include any easements, rights-of-way and riparian rights which may be required in furtherance of any such system.

(b) In planning for and conducting its activities, such board (1) shall consider all applicable regional and municipal hazard mitigation plans, resilience plans and identifications of vulnerable communities, as defined in subsection (a) of section 16-243y, as well as all applicable municipal plans of conservation and development adopted pursuant to section 8-23, and (2) may consult with the Connecticut Institute for Resilience and Climate Adaptation.

Sec. 6. Section 25-86 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

Such board is authorized to enter upon and to take and hold, by purchase, condemnation or otherwise, any real property or interest therein which it determines is necessary for use in connection with the flood [or] <u>prevention, climate resilience and</u> erosion control system. Whenever the board is unable to agree with the owner of any such property as to the compensation to be paid for the taking thereof, the board, in the name of the municipality, may bring condemnation proceedings in accordance with the procedure provided by part I of chapter 835 for condemnation by municipal corporations generally. In such case, the court or judge may permit immediate possession of such property by the board in accordance with the procedure provided by said chapter.

Sec. 7. Section 25-87 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

At any time after voting to acquire, construct [or] reconstruct operate or maintain any flood [or] prevention, climate resilience and erosion control system or portion thereof, the board in its discretion may elect to defray the cost thereof by issuing bonds or other evidences of debt, [or] from general taxation, special assessment, federal, state or private grant funds or any combination thereof or by drawing upon a municipal Climate Change and Coastal Resiliency Reserve Fund created pursuant to section 7-159d, as amended by this act. If it elects to defray any part of such cost from special assessment, it may apportion and assess such part upon the lands and buildings in the municipality which, in its judgment, are especially benefited thereby, whether they abut on such flood [or] prevention, climate resilience and erosion control system or not, and upon the owners of such lands and buildings, subject to the right of appeal as hereinafter provided. Such assessment may include a proportionate share of any expenses incidental to the completion of such flood [or] prevention, climate resilience and erosion control system, such as fees and expenses of attorneys, engineers,

surveyors, superintendents or inspectors, the cost of any property purchased or acquired for such work, interest on securities, the cost of preparing maps, plans and specifications, <u>the cost to reconstruct, repair,</u> <u>maintain, supervise, operate and manage such system</u> and the cost of printing, publishing or serving advertisements or notices incidental thereto. The board may divide the total territory to be benefited by any flood [or] <u>prevention, climate resilience and</u> erosion control system into sections and may levy assessments against the property benefited in each section separately. In assessing benefits against the property in any section, the board may add to the cost of the part of the flood [or] <u>prevention, climate resilience and</u> erosion control system located in such section a proportionate share of the cost of any part of such system located outside the section which is useful for the operation or effectiveness of that part of such system within the section and of any of the other items of cost or expense above enumerated.

Sec. 8. Section 25-92 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

The proceeds of such assessments, whether or not pledged for the payment of securities, shall be segregated from other funds of the municipality and shall be used only to pay for the construction, [or] reconstruction, repair, maintenance, supervision, operation or management of the flood [or] prevention, climate resilience and erosion control system or particular portion thereof in respect to which such assessments are made or, as the case may be, for the payment of the interest on or principal of any securities issued to pay for such system or particular portion thereof.

Sec. 9. Section 25-94 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

Any flood <u>prevention</u>, <u>climate resilience</u> and erosion control board established under section 25-84, any such board or commission

established by special act or any district having as one of its powers and purposes the right to construct or maintain a flood <u>prevention, climate</u> <u>resilience</u> and erosion control system under chapter 105, acting through its officers, is authorized to negotiate, cooperate and enter into agreements with (1) the United States, (2) the United States and the state of Connecticut, [or] (3) the state of Connecticut, or (4) one or more <u>municipalities in the state of Connecticut</u>, in order to satisfy the conditions imposed by the United States or the state of Connecticut in authorizing any system for the improvement of navigation of any harbor or river and for [protection of property against damage by floods or by erosion] <u>constructing</u>, reconstructing, operating or maintaining <u>any flood prevention</u>, climate resilience and erosion control system, provided such system shall have been approved by the Commissioner of Energy and Environmental Protection.

Sec. 10. Section 25-95 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

The state, acting through the Commissioner of Energy and Environmental Protection, may enter into agreements with such local authority authorized to contract under section 25-94, as amended by this act, for the purpose of constructing projects or systems to prevent, correct and arrest [erosion and] flood damage and impacts of climate change within the boundaries of the state. The plans, specifications, system and construction shall be under the direct control and supervision of the commissioner. The contract shall describe (1) the nature and extent of the system, (2) the amount of the cost to the state, (3) the share to be paid by the district or board, and (4) the method of financing the payment by such local authority, all of which shall be subject to the approval of the commissioner.

Sec. 11. Section 25-97 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

When any such improvement or protection project or system is located within two or more municipalities, such municipalities, acting by their <u>individual or joint</u> flood <u>prevention</u>, <u>climate resilience</u> and erosion control boards, <u>as applicable</u>, are authorized to undertake jointly any such action as is authorized by sections 25-94 and 25-95, <u>as</u> <u>amended by this act</u>, and the cost to each board shall be determined by [the Commissioner of Energy and Environmental Protection] <u>mutual</u> <u>agreement of the municipalities involved</u>.

Sec. 12. Section 25-98 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

In carrying out the purposes for which it was established, any local authority authorized to contract under section 25-94, as amended by this <u>act</u>, may (1) accept, receive and expend gifts, devises or bequests of money, lands or other properties to be applied and expended in the manner provided herein, and (2) apply for and receive grants from state, federal and private sources.

Sec. 13. Section 7-326 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

At such meeting, the voters may establish a district for any or all of the following purposes: To extinguish fires, to light streets, to plant and care for shade and ornamental trees, to construct and maintain roads, sidewalks, crosswalks, drains and sewers, to appoint and employ watchmen or police officers, to acquire, construct, maintain and regulate the use of recreational facilities, to plan, lay out, acquire, construct, reconstruct, repair, maintain, supervise and manage a flood [or] <u>prevention, climate resilience and</u> erosion control system, to plan, lay out, acquire, construct, maintain, operate and regulate the use of a community water system, to collect garbage, ashes and all other refuse matter in any portion of such district and provide for the disposal of such matter, to implement tick control measures, to install highway

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sound barriers, to maintain water quality in lakes that are located solely in one town in this state, to establish a zoning commission and a zoning board of appeals or a planning commission, or both, by adoption of chapter 124 or chapter 126, excluding section 8-29, or both chapters, as the case may be, which commissions or board shall be dissolved upon adoption by the town of subdivision or zoning regulations by the town planning or zoning commission, to adopt building regulations, which regulations shall be superseded upon adoption by the town of building regulations, and to provide ferry service. Any district may contract with a town, city, borough or other district for carrying out any of the purposes for which such district was established.

Sec. 14. Subsection (a) of section 7-328 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1*, 2021):

(a) The territorial limits of the district shall constitute a separate taxing district, and the assessor or assessors of the town shall separate the property within the district from the other property in the town and shall annually furnish the clerk of the district with a copy of the grand list of all property in the district after it has been completed by the board of assessment appeals of the town. If the legislative body of the town elects, pursuant to section 12-62c, to defer all or any part of the amount of the increase in the assessed value of real property in the year a revaluation becomes effective and in any succeeding year in which such deferment is allowed, the grand list furnished to the clerk of the district for each such year shall reflect assessments based upon such deferment. When the district meeting has fixed the tax rate, the clerk shall prepare a rate bill, apportioning to each owner of property his proportionate share of the taxes, which rate bill, when prepared, shall be delivered to the treasurer; and the district and the treasurer thereof shall have the same powers as towns and collectors of taxes to collect and enforce payment of such taxes, and such taxes when laid shall be a lien upon the

property in the same manner as town taxes, and such liens may be continued by certificates recorded in the land record office of the town, and foreclosed in the same manner as liens for town taxes or enforced in accordance with any provision of the general statutes for the collection of property taxes. The assessor or board of assessment appeals shall promptly forward to the clerk of the district any certificate of correction or notice of any other lawful change to the grand list of the district. The district clerk shall, within ten days of receipt of any such certificate or notice, forward a copy thereof to the treasurer, and the assessment of the property for which such certificate or notice was issued and the rate bill related thereto shall be corrected accordingly. If the district constructs any drain, sewer, sidewalk, curb or gutter, such proportion of the cost thereof as such district determines may be assessed by the board of directors, in the manner prescribed by such district, upon the property specially benefited by such drain, sewer, sidewalk, curb or gutter, and the balance of such costs shall be paid from the general funds of the district. In the construction of any flood [or] prevention, climate resilience and erosion control system, the cost to such district may be assessed and shall be payable in accordance with sections 25-87 to 25-93, inclusive, as amended by this act. The cost for the maintenance of water quality in a lake shall be assessed on the land in a district and payment shall be apportioned equally among the owners of parcels of property. Subject to the provisions of the general statutes, the district may issue bonds and the board of directors may pledge the credit of the district for any money borrowed for the construction of any public works or the acquisition of recreational facilities authorized by sections 7-324 to 7-329, inclusive, and such board shall keep a record of all notes, bonds and certificates of indebtedness issued, disposed of or pledged by the district. All moneys received by the directors on behalf of the district shall be paid to the treasurer. No contract or obligation which involves an expenditure in the amount of (1) ten thousand dollars or more in districts where the grand list is less than or equal to twenty million dollars, or (2) twenty thousand dollars

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or more in districts where the grand list is greater than twenty million dollars, in any one year shall be made by the board of directors, unless the same is specially authorized by a vote of the district, nor shall the directors borrow money without like authority. The clerk of the district shall give written notice to the treasurer of the town in which the district is located of any final decision of the board of directors to borrow money, not later than thirty days after the date of such decision. The district may adopt ordinances, with penalties to secure their enforcement, for the purpose of regulating the carrying out of the provisions of sections 7-324 to 7-329, inclusive, and defining the duties and compensation of its officers and the manner in which their duties shall be carried out.

Sec. 15. Section 22a-113p of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

The commission may review and make recommendations, consistent with the plan, on any proposal affecting the real property on, in or contiguous to the harbor that is received by any zoning commission, planning commission or combined planning and zoning commission, zoning board of appeals, historic district commissions, flood prevention, climate resilience and erosion control board, harbor improvement agency, port authority, redevelopment agency, shellfish commission, sewer commission, water pollution control authority or special district with zoning or other land use authority. Such agencies shall send a copy of any such proposal to the commission upon the request of such commission. The commission shall be notified of any such proposal at least thirty-five days prior to the commencement of the hearing thereon or where no hearing is held, at least thirty-five days prior to the taking of any final action on the proposal. The local agency authorized to act on the proposal shall consider the recommendations of the commission. A two-thirds vote of all the members of the local agency having authority to act on the proposal shall be required to

approve a proposal which has not received a favorable recommendation from the commission, provided that the provisions of this section shall not be deemed to alter the authority of the agency having primary jurisdiction over the proposal to deny, modify or condition the proposal. Failure of the commission to submit a recommendation shall be deemed to be approval of the proposal.

Sec. 16. Subdivision (2) of subsection (e) of section 22a-361 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

(2) The commissioner may require that any person, firm or corporation, public, municipal or private, who removes sand, gravel or other material lying waterward of the mean high water mark of the tidal, coastal or navigable waters shall make available such sand, gravel or other material of appropriate grain size and composition to any coastal municipality or to any district established pursuant to chapter 105 or by special act to plan, lay out, acquire, construct, reconstruct, repair, maintain, supervise and manage a flood [or] <u>prevention, climate resilience and</u> erosion control system. Such sand, gravel or other material shall be offered for the purposes of an appropriately authorized beach nourishment or habitat restoration project and shall be available (A) to municipalities for the cost of transporting such sand, gravel or other material, and (B) to districts for a reasonable fee.

Sec. 17. Section 25-76 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

The Commissioner of Energy and Environmental Protection is authorized to negotiate, cooperate and enter into agreements with the federal government and with any municipality through its flood <u>prevention, climate resilience</u> and erosion control board for the purpose of constructing small flood control systems or tidal and hurricane protection and navigation projects including dams, dikes, flood walls,

reservoirs, river channel improvements and such other works as are necessary to reduce or prevent damages due to floods, including projects constructed under the provisions of Title 33, Chapter 15, Section 701s, of the United States Code, as amended. The commissioner is authorized to use nonstructural measures of flood control, including but not limited to, acquisition of real property which the commissioner determines is reasonably necessary for use in connection with such systems or projects, by purchase, lease or gift or by condemnation in the manner provided by part I of chapter 835. The commissioner is authorized to give assurances to the federal government that the state will hold and save the United States free from damages due to the construction works and that the state will pay cash contributions as may be required as a local contribution for any flood control system or project undertaken by the federal government or by the state, subject to reimbursement as provided in sections 25-71 and 25-72, except that, for tidal and hurricane protection and navigation projects, such reimbursement shall be not less than fifty per cent.

Sec. 18. Subsection (c) of section 7-159d of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

(c) The budget-making authority of such municipality may, from time to time, direct the treasurer to invest a portion of such Climate Change and Coastal <u>Resiliency</u> Reserve Fund as in the opinion of such authority is advisable, provided: (1) Not more than forty per cent, or with respect to such a reserve fund for which the budget-making authority has adopted an asset allocation and investment policy, fifty per cent, of the total amount of such reserve fund shall be invested in equity securities, and (2) any portion of such reserve fund not invested pursuant to subdivision (1) of this subsection may be invested in: (A) Bonds or obligations of, or guaranteed by, the state or the United States, or agencies or instrumentalities of the United States, (B) certificates of

deposit, commercial paper, savings accounts and bank acceptances, (C) the obligations of any state of the United States or any political subdivision thereof or the obligations of any instrumentality, authority or agency of any state or political subdivision thereof, if, at the time of investment, such obligations are rated in the top rating categories of any nationally recognized rating service or of any rating service recognized by the Banking Commissioner, and applicable to such obligations, (D) the obligations of any regional school district in this state, of any municipality in this state or any metropolitan district in this state, if, at the time of investment, such obligations of such government entity are rated in one of the top two rating categories of any nationally recognized rating service or of any rating service recognized by the Banking Commissioner, and applicable to such obligations, (E) in any fund in which a trustee may invest pursuant to section 36a-353, (F) investment agreements with financial institutions whose long-term obligations are rated in the top two rating categories of any nationally recognized rating service or of any rating service recognized by the Banking Commissioner or whose short-term obligations are rated in the top rating category of any nationally recognized rating service or of any rating service recognized by the Banking Commissioner, or (G) investment agreements fully secured by obligations of, or guaranteed by, the United States or agencies or instrumentalities of the United States.

Sec. 19. Subsections (a) to (d), inclusive, of section 16-245n of the general statutes are repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

(a) For purposes of this section: [, "clean energy"]

(1) "Carbon offsets" means any activity that compensates for the emission of carbon dioxide or other greenhouse gases by providing for an emission reduction elsewhere;

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

(3) "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 regulation of floods, drought, land degradation and disease, and (C) supporting services such as soil formation and nutrient cycling; and

(4) "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 offsets and

#### ecosystem services.

(b) On and after July 1, 2004, the Public Utilities Regulatory Authority shall assess or cause to be assessed a charge of not less than one mill per kilowatt hour charged to each end use customer of electric services in this state which shall be deposited into the Clean Energy Fund established under subsection (c) of this section.

(c) (1) There is hereby created a Clean Energy Fund which shall be within the Connecticut Green Bank. The fund may receive any amount required by law to be deposited into the fund and may receive any federal funds as may become available to the state for clean energy investments. Upon authorization of the Connecticut Green Bank established pursuant to subsection (d) of this section, any amount in said fund may be used for expenditures that promote investment in clean energy in accordance with a comprehensive plan developed by it to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand for clean energy and deployment of clean energy sources that serve end use customers in this state and for the further purpose of supporting operational demonstration projects for advanced technologies that reduce energy use from traditional sources. Such expenditures may include, but not be limited to, providing low-cost financing and credit enhancement mechanisms for clean energy projects and technologies, reimbursement of the operating expenses, including administrative expenses incurred by the Connecticut Green Bank [and Connecticut Innovations, Incorporated,] and capital costs incurred by the Connecticut Green Bank in connection with the operation of the fund, the implementation of the plan developed pursuant to subsection (d) of this section or the other permitted activities of the Connecticut Green Bank, disbursements from the fund to develop and carry out the plan developed pursuant to subsection (d) of this section, grants, direct or equity investments, contracts or other actions which support research, development,

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manufacture, commercialization, deployment and installation of clean energy technologies, and actions which expand the expertise of individuals, businesses and lending institutions with regard to clean energy technologies.

(2) (A) There is hereby created an Environmental Infrastructure Fund which shall be within the Connecticut Green Bank. The fund may receive any amount required by law to be deposited into the fund and may receive any federal funds as may become available to the state for environmental infrastructure investments, except that the fund shall not receive: (i) Ratepayer or Regional Greenhouse Gas Initiative funds, (ii) funds that have been deposited in, or are required to be deposited in, an account of the Clean Water Fund pursuant to sections 22a-475 to 22a-438f, inclusive, or (iii) funds collected from a water company, as defined in section 25-32a.

(B) Upon authorization of the Connecticut Green Bank established pursuant to subsection (d) of this section, any amount in said fund may be used for expenditures that promote investment in environmental infrastructure in accordance with a comprehensive plan developed by it to foster the growth, development, commercialization and, where applicable, preservation of environmental infrastructure and related enterprises, except any project or purpose eligible for funding pursuant to sections 22a-475 to 22a-483f, inclusive. Such expenditures may include, but not be limited to, providing low-cost financing and credit enhancement mechanisms for projects and technologies, reimbursement of the operating expenses, including administrative expenses incurred by the Connecticut Green Bank, and capital costs incurred by the Connecticut Green Bank in connection with the operation of the fund, the implementation of the plan developed pursuant to subsection (d) of this section or the other permitted activities of the Connecticut Green Bank, disbursements from the fund to develop and carry out the plan developed pursuant to subsection (d) of this

section, grants, direct or equity investments, contracts or other actions which support research, development, manufacture, commercialization, deployment and installation of environmental infrastructure and actions which expand the expertise of individuals, businesses and lending institutions with regard to environmental infrastructure.

(d) (1) (A) The Connecticut Green Bank is hereby established and created as a body politic and corporate, constituting a public instrumentality and political subdivision of the state of Connecticut established and created for the performance of an essential public and governmental function. The Connecticut Green Bank shall not be construed to be a department, institution or agency of the state.

(B) The Connecticut Green Bank shall (i) develop separate programs to finance and otherwise support clean energy <u>and environmental infrastructure</u> investment in residential, municipal, small business and larger commercial projects and such others as the Connecticut Green Bank may determine; (ii) support financing or other expenditures that promote investment in clean energy sources <u>and environmental infrastructure</u> in accordance with a comprehensive plan developed by it to foster the growth, development and commercialization of clean energy sources, <u>environmental infrastructure</u> and related enterprises; and (iii) stimulate demand for clean energy and the deployment of clean energy sources within the state that serve end use customers in the state.

(C) The Clean Energy Finance and Investment Authority shall constitute a successor agency to Connecticut Innovations, Incorporated, for the purposes of administering the Clean Energy Fund in accordance with section 4-38d. The Connecticut Green Bank shall constitute a successor agency to the Clean Energy Finance and Investment Authority for purposes of administering the Clean Energy Fund in accordance with section 4-38d. The Connecticut Green Bank shall have all the privileges, immunities, tax exemptions and other exemptions of

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Connecticut Innovations, Incorporated, with respect to said fund. The Connecticut Green Bank shall administer the Environmental Infrastructure Fund. The Connecticut Green Bank shall be subject to suit and liability solely from the assets, revenues and resources of said bank and without recourse to the general funds, revenues, resources or other assets of Connecticut Innovations, Incorporated. The Connecticut Green Bank may provide financial assistance in the form of grants, loans, loan guarantees or debt and equity investments, as approved in accordance with written procedures adopted pursuant to section 1-121. The Connecticut Green Bank may assume or take title to any real property, convey or dispose of its assets and pledge its revenues to secure any borrowing, convey or dispose of its assets and pledge its revenues to secure any borrowing, for the purpose of developing, acquiring, constructing, refinancing, rehabilitating or improving its assets or supporting its programs, provided each such borrowing or mortgage, unless otherwise provided by the board or said bank, shall be a special obligation of said bank, which obligation may be in the form of bonds, bond anticipation notes or other obligations which evidence an indebtedness to the extent permitted under this chapter to fund, refinance and refund the same and provide for the rights of holders thereof, and to secure the same by pledge of revenues, notes and mortgages of others, and which shall be payable solely from the assets, revenues and other resources of said bank and such bonds may be secured by a special capital reserve fund contributed to by the state, provided that any bond secured by such special capital reserve fund shall have a maturity not exceeding twenty-five years. The Connecticut Green Bank shall have the purposes as provided by resolution of said bank's board of directors, which purposes shall be consistent with this section. No further action is required for the establishment of the Connecticut Green Bank, except the adoption of a resolution for said bank.

(D) In addition to, and not in limitation of, any other power of the

Connecticut Green Bank set forth in this section or any other provision of the general statutes, said bank shall have and may exercise the following powers in furtherance of or in carrying out its purposes:

(i) To have perpetual succession as a body corporate and to adopt bylaws, policies and procedures for the regulation of its affairs and the conduct of its business;

(ii) To make and enter into all contracts and agreements that are necessary or incidental to the conduct of its business;

(iii) To invest in, acquire, lease, purchase, own, manage, hold, sell and dispose of real or personal property or any interest therein;

(iv) To borrow money or guarantee a return to investors or lenders;

(v) To hold patents, copyrights, trademarks, marketing rights, licenses or other rights in intellectual property;

(vi) To employ such assistants, agents and employees as may be necessary or desirable, who shall be exempt from the classified service and shall not be employees, as defined in subsection (b) of section 5-270; establish all necessary or appropriate personnel practices and policies, including those relating to hiring, promotion, compensation and retirement, and said bank shall not be an employer, as defined in subsection (a) of section 5-270; and engage consultants, attorneys, financial advisers, appraisers and other professional advisers as may be necessary or desirable;

(vii) To invest any funds not needed for immediate use or disbursement pursuant to investment policies adopted by said bank's board of directors;

(viii) To procure insurance against any loss or liability with respect to its property or business of such types, in such amounts and from such

insurers as it deems desirable;

(ix) To enter into joint ventures and invest in, and participate with any person, including, without limitation, government entities and private corporations, in the formation, ownership, management and operation of business entities, including stock and nonstock corporations, limited liability companies and general or limited partnerships, formed to advance the purposes of said bank, provided members of the board of directors or officers or employees of said bank may serve as directors, members or officers of any such business entity, and such service shall be deemed to be in the discharge of the duties or within the scope of the employment of any such director, officer or employee, as the case may be, so long as such director, officer or employee does not receive any compensation or financial benefit as a result of serving in such role;

(x) To enter into a memorandum of understanding or other arrangements with Connecticut Innovations, Incorporated, with respect to the provision or sharing of space, office systems or staff administrative support, on such terms as may be agreed to between said bank and Connecticut Innovations, Incorporated; and

(xi) To do all other acts and things necessary or convenient to carry out the purposes of said bank.

(E) (i) The Connecticut Green Bank may form one or more subsidiaries to carry out the purposes of said bank, as described in subparagraph (B) of subdivision (1) of this subsection, and may transfer to any such subsidiary any moneys and real or personal property of any kind or nature. Any subsidiary may be organized as a stock or nonstock corporation or a limited liability company. Each such subsidiary shall have and may exercise such powers of said bank, as set forth in the resolution of the board of directors of said bank prescribing the purposes for which such subsidiary is formed, and such other powers

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provided to it by law.

(ii) No such subsidiary of said bank shall be deemed a quasi-public agency for purposes of chapter 12. [and no such subsidiary shall] No such subsidiary of said bank shall have all the privileges, immunities, tax exemptions and other exemptions of said bank, unless such subsidiary is a single member limited liability company that is disregarded as an entity separate from its owner. In no event shall any such subsidiary have the power to hire or otherwise retain employees. The governing documents of any such subsidiary shall provide for the dissolution of such subsidiary upon the completion of the purpose for which such subsidiary was formed. Each such subsidiary may sue and shall be subject to suit, provided its liability shall be limited solely to the assets, revenues and resources of the subsidiary and without recourse to the general funds, revenues, resources or any other assets of said bank. Each such subsidiary is authorized to assume or take title to property subject to any existing lien, encumbrance or mortgage and to mortgage, convey or dispose of its assets and pledge its revenues to secure any borrowing, provided each such borrowing or mortgage shall be a special obligation of the subsidiary, which obligation may be in the form of bonds, bond anticipation notes and other obligations, to fund and refund the same and provide for the rights of the holders thereof, and to secure the same by a pledge of revenues, notes and other assets and which shall be payable solely from the revenues, assets and other resources of the subsidiary. The Connecticut Green Bank may assign to a subsidiary any rights, moneys or other assets it has under any governmental program. No subsidiary of said bank shall borrow without the approval of the board of directors of said bank.

(iii) Each such subsidiary shall act through its board of directors or managing members, at least one-half of which shall be members of the board of directors of said bank or their designees or officers or employees of said bank.

(iv) The provisions of section 1-125 and this subsection shall apply to any officer, director, designee or employee appointed as a member, director or officer of any such subsidiary. Any such person so appointed shall not be personally liable for the debts, obligations or liabilities of any such subsidiary as provided in section 1-125. The subsidiary shall, and said bank may, save harmless and indemnify such officer, director, designee or employee as provided by section 1-125.

(v) The Connecticut Green Bank, or such subsidiary, may take such actions as are necessary to comply with the provisions of the Internal Revenue Code of 1986, or any subsequent corresponding internal revenue code of the United States, as amended from time to time, to qualify and maintain any such subsidiary as a corporation exempt from taxation under said code.

(vi) The Connecticut Green Bank may make loans to each such subsidiary from its assets and the proceeds of its bonds, notes and other obligations, provided the source and security for the repayment of such loans is derived from the assets, revenues and resources of the subsidiary.

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

(B) Before making any loan, loan guarantee, or such other form of financing support or risk management for a clean energy <u>or</u> <u>environmental infrastructure</u> project, the Connecticut Green Bank shall develop standards to govern the administration of said bank through rules, policies and procedures that specify borrower eligibility, terms and conditions of support, and other relevant criteria, standards or

procedures.

(C) Funding sources specifically authorized include, but are not limited to:

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

(ii) Any federal funds that can be used for the purposes specified in subsection (c) of this section, provided such funds are not required to be deposited in the accounts of the Clean Water Fund pursuant to sections 22a-475 to 22a-483f, inclusive;

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

(iv) Earnings and interest derived from financing support activities for clean energy <u>and environmental infrastructure</u> projects backed by the Connecticut Green Bank;

(v) If and to the extent that the Connecticut Green Bank qualifies as a Community Development Financial Institution under Section 4702 of the United States Code, funding from the Community Development Financial Institution Fund administered by the United States Department of Treasury, as well as loans from and investments by depository institutions seeking to comply with their obligations under the United States Community Reinvestment Act of 1977; and

(vi) The Connecticut Green Bank may enter into contracts with private sources to raise capital. The average rate of return on such debt or equity shall be set by the board of directors of said bank.

(D) The Connecticut Green Bank may provide financing support under this subsection if said bank determines that the amount to be financed by said bank and other nonequity financing sources do not exceed [eighty] <u>one hundred</u> per cent of the cost to develop and deploy a clean energy project or [up to one hundred per cent of the cost of financing an energy efficiency] <u>an environmental infrastructure</u> project.

(E) The Connecticut Green Bank may assess reasonable fees on its financing activities to cover its reasonable costs and expenses, as determined by the board.

(F) The Connecticut Green Bank shall make information regarding the rates, terms and conditions for all of its financing support transactions available to the public for inspection, including formal annual reviews by both a private auditor conducted pursuant to subdivision (2) of subsection (f) of this section and the Comptroller, and providing details to the public on the Internet, provided public disclosure shall be restricted for patentable ideas, trade secrets, proprietary or confidential commercial or financial information, disclosure of which may cause commercial harm to a nongovernmental recipient of such financing support and for other information exempt from public records disclosure pursuant to section 1-210.

(G) The Connecticut Green Bank shall not apply, directly or through a subsidiary, to be eligible for grants under (i) the Clean Water Act, 33 USC 1251 et seq., as amended from time to time, without the approval of the State Treasurer and the Commissioner of Energy and Environmental Protection, or (ii) the Safe Drinking Water Act, 42 USC 300f et seq., as amended from time to time, without the approval of the State Treasurer and the Commissioner of Public Health.

(3) No director, officer, employee or agent of the Connecticut Green Bank, while acting within the scope of his or her authority, shall be subject to any personal liability resulting from exercising or carrying out

any of the Connecticut Green Bank's purposes or powers.

Sec. 20. Subsection (f) of section 16-245n of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1*, 2021):

(f) (1) The board shall issue annually a report to the Department of Energy and Environmental Protection reviewing the activities of the Connecticut Green Bank in detail and shall provide a copy of such report, in accordance with the provisions of section 11-4a, to the joint standing committees of the General Assembly having cognizance of matters relating to energy, the environment, banking and commerce. The report shall include a description of the programs and activities undertaken during the reporting period jointly or in collaboration with the Conservation and Load Management Plan established pursuant to section 16-245m.

(2) The Clean Energy Fund <u>and the Environmental Infrastructure</u> <u>Fund</u> shall be audited annually. Such audits shall be conducted with generally accepted auditing standards by independent certified public accountants certified by the State Board of Accountancy. Such accountants may be the accountants for the Connecticut Green Bank.

(3) Any entity that receives financing for a clean energy <u>or</u> <u>environmental infrastructure</u> project from the [fund] <u>Clean Energy</u> <u>Fund or the Environmental Infrastructure Fund</u> shall provide the board an annual statement, certified as correct by the chief financial officer of the recipient of such financing, setting forth all sources and uses of funds in such detail as may be required by the bank for such project. The Connecticut Green Bank shall maintain any such audits for not less than five years. Residential projects for buildings with one to four dwelling units are exempt from this and any other annual auditing requirements, except that residential projects may be required to grant their utility companies' permission to release their usage data to the Connecticut

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Green Bank.

Sec. 21. Subdivision (1) of subsection (e) of section 16-245n of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2021*):

(e) (1) The powers of the Connecticut Green Bank shall be vested in and exercised by a board of directors, which shall consist of [eleven] twelve voting members and [two] one nonvoting [members] member each with knowledge and expertise in matters related to the purpose and activities of said bank appointed as follows: The Treasurer or the Treasurer's designee, the Commissioner of Energy and Environmental Protection or the commissioner's designee, [and] the Commissioner of Economic and Community Development or the commissioner's designee, and the Secretary of the Office of Policy and Management or the secretary's designee, each serving ex officio, one member who shall represent a residential or low-income group appointed by the speaker of the House of Representatives for a term of four years, one member who shall have experience in investment fund management appointed by the minority leader of the House of Representatives for a term of three years, one member who shall represent an environmental organization appointed by the president pro tempore of the Senate for a term of four years, and one member who shall have experience in the finance or deployment of renewable energy appointed by the minority leader of the Senate for a term of four years. Thereafter, such members of the General Assembly shall appoint members of the board to succeed such appointees whose terms expire and each member so appointed shall hold office for a period of four years from the first day of July in the year of his or her appointment. The Governor shall appoint four members to the board as follows: Two for two years who shall have experience in the finance of renewable energy; one for four years who shall be a representative of a labor organization; and one for four years shall have experience in research and development or who

manufacturing of clean energy. Thereafter, the Governor shall appoint members of the board to succeed such appointees whose terms expire and each member so appointed shall hold office for a period of four years from the first day of July in the year of his or her appointment. The president of the Connecticut Green Bank shall be elected by the members of the board. The president of the Connecticut Green Bank shall serve on the board in an ex-officio, nonvoting capacity. The Governor shall appoint the chairperson of the board. The board shall elect from its members a vice chairperson and such other officers as it deems necessary and shall adopt such bylaws and procedures it deems necessary to carry out its functions. The board may establish committees and subcommittees as necessary to conduct its business.

Sec. 22. Subsection (g) of section 16-245mm of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1*, 2021):

(g) Notwithstanding any other provision contained in this section, the aggregate amount of bonds secured by such special capital reserve fund authorized to be created and established by this section shall not exceed [one hundred] two hundred fifty million dollars.

Sec. 23. Subsection (c) of section 16-245kk of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1*, 2021):

(c) The bonds may be issued as serial bonds or as term bonds, or the Connecticut Green Bank, in its discretion, may issue bonds of both types. The bonds shall be authorized by resolution of the members of the board of directors of said bank and shall bear such date or dates, mature at such time or times, not exceeding [twenty] twenty-five years for bonds issued for clean energy and fifty years for bonds issued for environmental infrastructure from their respective dates and in each case not to exceed the expected useful life of the underlying project or

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projects, bear interest at such rate or rates, be payable at such time or times, be in such denominations, be in such form, either coupon or registered, carry such registration privileges, be executed in such manner, be payable in lawful money of the United States at such place or places, and be subject to such terms of redemption, as such resolution or resolutions may provide. The bonds or notes may be sold at public or private sale for such price or prices as said bank shall determine. The power to fix the date of sale of bonds, to receive bids or proposals, to award and sell bonds, and to take all other necessary action to sell and deliver bonds may be delegated to the chairperson or vice-chairperson of the board, a subcommittee of the board or other officers of said bank by resolution of the board. The exercise of such delegated powers may be made subject to the approval of a majority of the members of the board which approval may be given in the manner provided in the bylaws of said bank. Pending preparation of the definitive bonds, said bank may issue interim receipts or certificates which shall be exchanged for such definitive bonds.



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## **105 Alton Brooks Way**

## C-PACE Project in New Britain, CT

## COVID-19 Repayment Modification Board Approval Request

# 07/19/2021



**Document Purpose:** This document contains background information and due diligence on the 105 Alton Brooks Way facility and the stakeholders involved, including Mario Gioco (CFO), Polamer Realty NB LLC, and the town of New Britain, CT, as pertaining to the Borrower's request to modify their C-PACE repayment in light of the COVID-19 outbreak. This information is provided to the Connecticut Green Bank's Financing Programs and Accounting teams for the purposes of reporting out their review of the Borrower's current financial condition and likelihood of default.

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

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# **COVID-19 Repayment Modification Request**

- To: Connecticut Green Bank Board of Directors
- From: David Beech, Associate Manager, Clean Energy Finance; Bert Hunter, EVP & CIO, Connecticut Green Bank; Mackey Dykes, Vice President, Financing Programs
- **CC:** Bryan Garcia, President and CEO; Jane Murphy, Executive Vice President of Finance and Administration; Brian Farnen, General Counsel and CLO; Eric Shrago, Managing Director of Operations; and Catherine Duncan, Senior Loan Administrator, Accounting

#### **Date:** 7/19/2021

#### Re: C-PACE COVID-19 Repayment Modification for 105 Alton Brooks Way (Polamer Precision)

#### **Background & Request**

At the April 23, 2021 meeting of the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board"), staff presented to the Board a request for a restructuring of a C-PACE financing outstanding to Polamer Precision Inc. ("Polamer"), a New Britain CT-based global aerospace manufacturing company specializing in complex aerospace engine components for commercial and military aircraft. The Board deferred action on this request pending additional diligence by staff in respect of the request and staff returns to the Board having completed additional diligence and to recommend to the Board positive consideration of the borrower's request which is for an additional deferral of payments as summarized immediately below:



#### **COVID-19 and C-PACE Repayment Modification Summary**

As mentioned, Polamer is a manufacturer of aerospace parts for commercial and military aircraft. Due to ramifications of the COVID-19 pandemic, the airline industry suffered the sharpest demand shock in history, forcing airlines to reduce most of their capacity. Consequently, aircraft manufacturers have continued production but have significantly cut their run-rate inventories. As a result, Polamer saw a 2020 sales reduction

of		1
	. In terms of liquidity/cashflow,	

# To help ease the burden of this sales reduction on capital resources, Polamer asked the Green Bank for repayment modification. Ordinarily, pursuant to the Board's approval in June 2018 of the Loan Loss Decision Framework and Process for managing assets requiring restructuring or write-off from the Green Bank's balance sheet which was further updated in April 2020 in response to the COVID-19 pandemic, staff would have approved a restructuring of Polamer's obligations by deferring one C-PACE payment. However, at that time, Polamer's C-PACE lien was jointly held by CleanFund and Green Bank in our C-PACE securitization. As CleanFund could not approve a modification of the lien (due to the lien being further involved in a CleanFund securitization).

could not approve a modification of the lien (due to the lien being further involved in a CleanFund securitization unrelated to our own), the "one payment" modification had to wait until Green Bank acquired the Polamer lien from CleanFund, which was approved by the Board and completed earlier this year (more below).

As the COVID-19 crisis became more drawn out, particularly for the aircraft manufacturing and maintenance businesses, Polamer asked for an additional accommodation beyond the standard "one payment deferral."



**Property Details and C-PACE Financing Summary** 



. The original underwriting memo is found in

Exhibit B.

Project Background and DECD/CI and	Financing
The completed project (a 150,000 square foot build	ling) is the new corporate and manufacturing headquarters
for Polamer which relocated their corporate headq	uarters and manufacturing facilities from Newington to New
Britain. The relocation was financed in part by	together with additional financing support from
Connecticut Innovations / Connecticut Department	of Economic and Community Development (CI/DECD). At the
time. Green Bank, CI/DECD staff and	collaborated on the overall financing package
being proposed (i.e., the C-PACE financing – which	required the consent of CI/DECD and
CI/DECD holds a subordinated	mortgage on the property as well as a second term loan

CI/DECD holds a subordinated **and the second and the property as well as a second term loan** that is 50% forgivable upon Polamer meeting certain job creation requirements, as well as **a second term loan** loans. CI/DECD staff reports to Green Bank staff that Polamer is <u>not</u> in default under their loans, **a second** 

holds the senior mortgage position with approximately **control** in principal outstanding on similar terms to CI (excepting the forgivable portion, of course). Both lenders provided mortgage holder consent to the C-PACE assessment in order to allow Polamer's solar project financed with C-PACE and installed.

As part of the proposed solar installation on this new building, **second** and CI/DECD required a new, "as-complete" appraisal which, due to the significant energy savings and long-term ZREC payments associated with the solar installation, helped support a property valuation of **second** million.

In addition to the $1^{\mbox{\scriptsize st}}$	mortgage, also has a working ca	apital line of credit
as well as	million in equipment financing.	

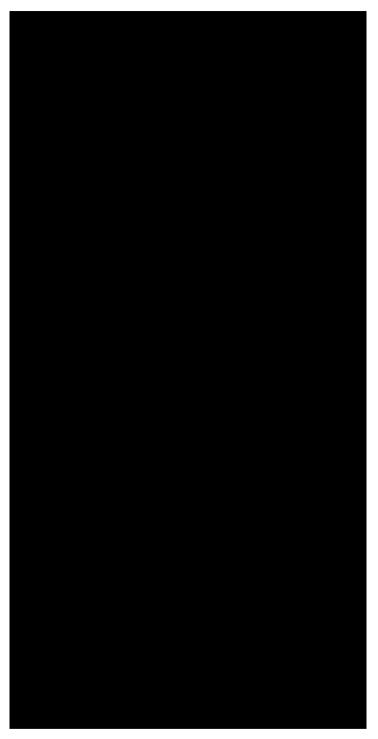
Obligations outstanding as of the Dec 31, 2020 audit report (which is substantially similar to Polamer's current position) is represented here:



#### Savings to Investment Ratio (SIR) and Effective Useful Life (EUL) Analysis

The SIR, EUL, and repayment terms are analyzed in the table below:

Repayment Structure	Savings	Investment	SIR	EUL	Financing Term
Original Structure					
Modified Structure					



**2020 Financial Review Analysis** 



2021 Financial Review & Discussion with Management



#### Resolutions

WHEREAS, pursuant to Connecticut General Statutes Section 16a-40g, 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 Board of Directors ("Board") of the Green Bank approved in April 2014 a construction and term loan secured by a C-PACE benefit assessment for Polamer Precision Inc. ("Polamer") New Britain,

Connecticut, to finance the construction of specified clean energy and energy conservation measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan; and

WHEREAS, as a result of COVID-19, Polamer has requested repayment modification (the "C-PACE Modification") and staff has recommended to the Board approval of Polamer's requested modification, pursuant to the Board approved Loan Loss Decision Framework and Process for managing assets requiring restructuring or write-off from the Green Bank's balance sheet as modified by the Board's approval of a COVID-19 pandemic response to enable restructuring of transactions.

#### 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 documentation to effect the C-PACE Modification consistent with the memorandum submitted to the Board dated July 19, 2021; and

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

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Mackey Dykes, VP Financing Programs; David Beech, Associate Manager, Clean Energy Finance

## Exhibit A

#### 2020 & 2019 Balance Sheet

## 2020 & 2019 Statements of Operations



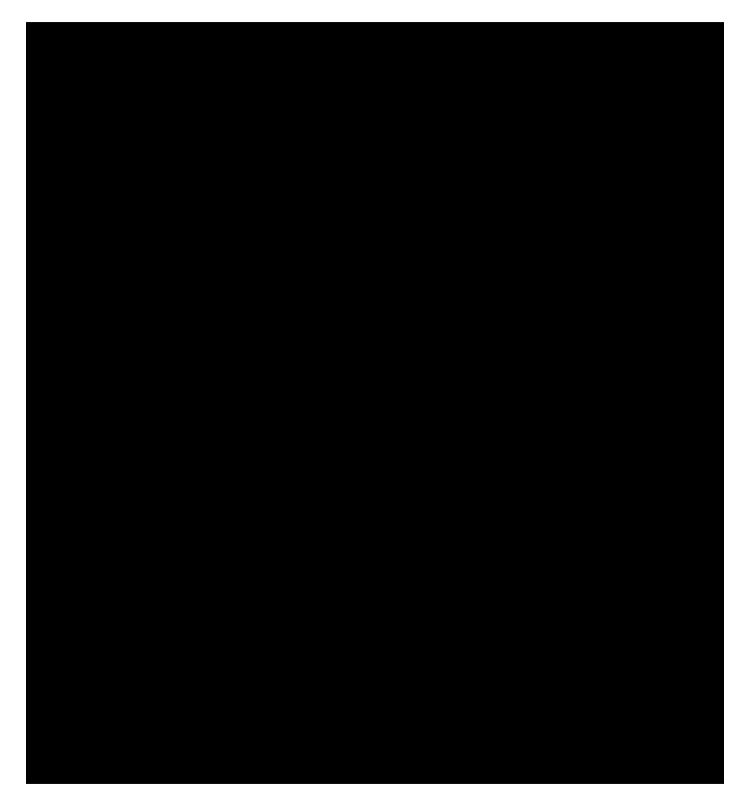
#### 2020 & 2019 Statement of Cash Flows

#### 6/30/2021 Unaudited Balance Sheet

## 1/1/2021 - 6/30/2021 Statement of Operations



#### 1/1/2021 – 6/30/2021 Statement of Cash Flows



#### **Underwriting Analysis**



## Exhibit B



## Polamer Precision: A C-PACE Project in New Britain, CT

Address	105 Alton Brooks Way, New Britain, CT
Owner	Polamer Realty NB, LLC
Proposed Assessment	
Term (years)	
Term Remaining (months)	
Annual Interest Rate	
Annual C-PACE Assessment	
Savings-to-Investment Ratio	
Average Debt-Service Coverage Ratio	
Total Loan-to-Value Ratio	
Projected Energy Savings	
Estimated Cost Savings	
(incl. ZRECs)	
Location	
Type of Building	
Year of Build	
Building Size (s/)	
Year Acquired by Current Owner	
As-Complete Appraised Value	
Status of Mortgage Lender Consent	
<b>Proposed Project Description</b>	
Est. Date of Construction Completion	
Current Status	
Energy Contractors	
Additional Comments	

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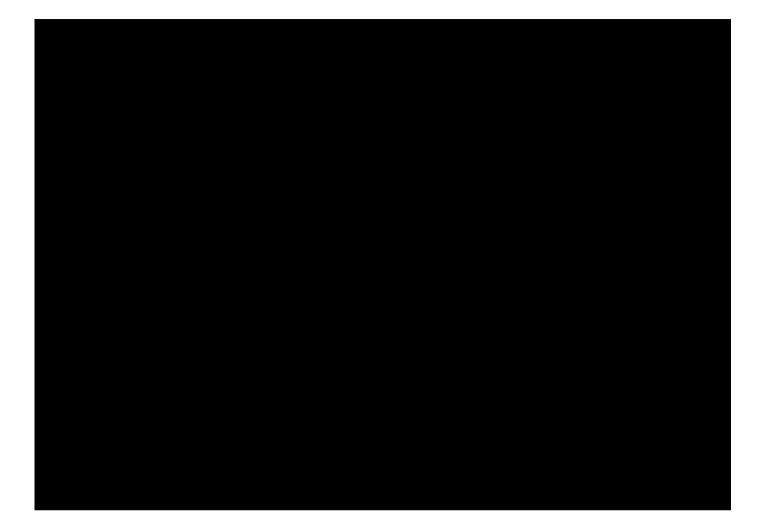


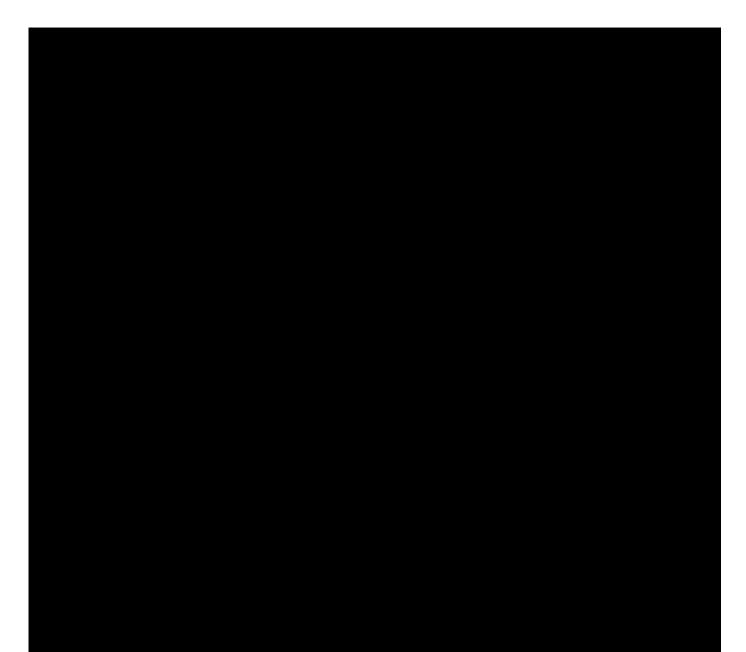
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# **Project Qualification Memo**

- To: CEFIA Board of Directors
- From: Ben Healey, Senior Manager, Clean Energy Finance
- **CC:** Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Mackey Dykes, Chief of Staff; Brian Farnen, General Counsel and CLO; Jessica Bailey and Genevieve Sherman, C-PACE
- Date: April 17, 2014
- **Re:** C-PACE Transaction Construction and Term Loan for Solar PV Installation at 105 Alton Brooks Way, New Britain, CT

#### Summary





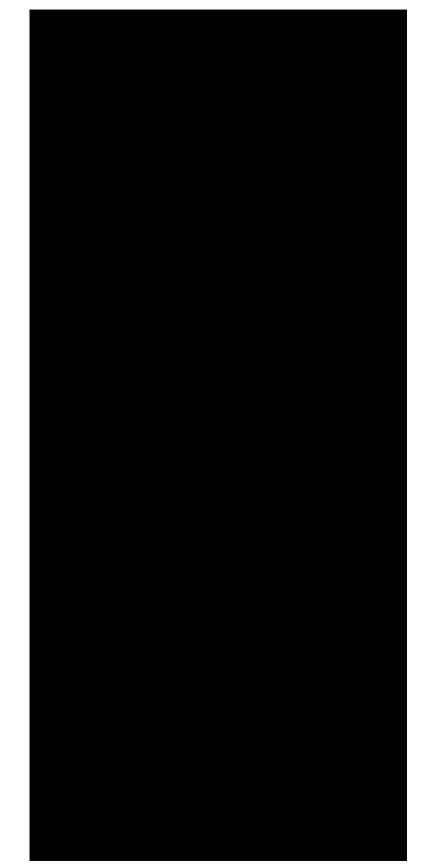


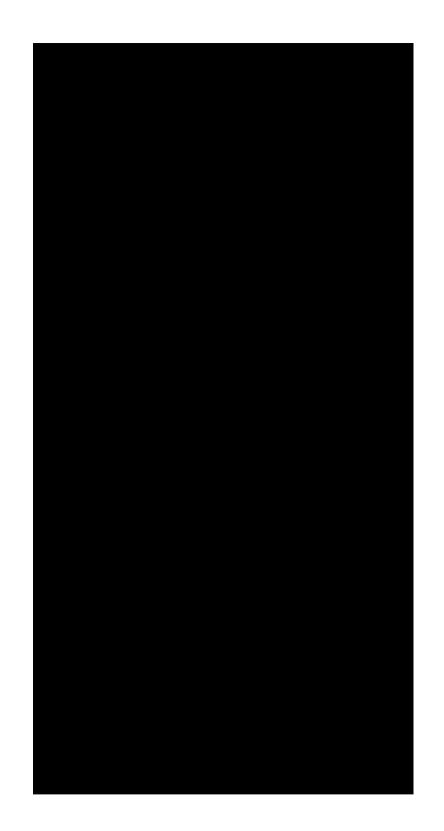




## **Risks and Mitigation Strategies**

#### **Underwriting Metrics**





Key Financial Metrics from Project Scenario Report

#### **Pro Forma**

Project-specific projections presented first; pro forma of CEFIA cash flows follow after.





Note that these numbers may change based on final deal terms, including the potential capitalization of the construction interest payment into the final C-PACE benefit assessment amount.

#### Resolutions

WHEREAS, Pursuant to Section 157 of Public Act No. 12-2 of the June 12, 2012 Special Session of the Connecticut General Assembly and as amended (the "Act"), CEFIA 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 CEFIA Board of Directors has approved a \$40,000,000 C-PACE construction and term loan program.

WHEREAS, CEFIA seeks to provide a \$2,502,975 construction and (potentially) term loan under the C-PACE program to Polamer Realty NB, LLC, the property owner of 105 Alton Brooks Way, New Britain, CT (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and CEFIA's Strategic Plan;

**NOW**, therefore be it:

**RESOLVED**, that the President of CEFIA and any other duly authorized officer of CEFIA, is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board of Directors dated April 17, 2014, and as he or she shall deem to be in the interests of CEFIA and the ratepayers no later than 90 days from April 25, 2014; and

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

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

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Genevieve Sherman, Senior Manager of Commercial and Industrial Programs; and Ben Healey, Senior Manager of Clean Energy Finance

## **Due Diligence Questions**







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